

**DEPARTMENT OF DEFENSE AUTHORIZATION FOR
APPROPRIATIONS FOR FISCAL YEAR 2003**

HEARINGS

BEFORE THE

COMMITTEE ON ARMED SERVICES

UNITED STATES SENATE

ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

ON

S. 2225

AUTHORIZING APPROPRIATIONS FOR FISCAL YEAR 2003 FOR MILITARY
ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CON-
STRUCTION, AND FOR DEFENSE ACTIVITIES OF THE DEPARTMENT OF
ENERGY, TO PRESCRIBE PERSONNEL STRENGTHS FOR SUCH FISCAL
YEAR FOR THE ARMED FORCES, AND FOR OTHER PURPOSES

PART 1

MILITARY POSTURE

SERVICE SECRETARIES

NUCLEAR POSTURE REVIEW

UNIFIED AND REGIONAL COMMANDERS

SERVICE CHIEFS

**ATOMIC ENERGY DEFENSE ACTIVITIES OF THE DEPARTMENT OF
ENERGY**

FEBRUARY 5, 12, 14; MARCH 5, 7, 14, 2002



**DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2003—Part 1
MILITARY POSTURE ● SERVICE SECRETARIES ● NUCLEAR POSTURE REVIEW ● UNIFIED AND
REGIONAL COMMANDERS ● SERVICE CHIEFS ● ATOMIC ENERGY DEFENSE ACTIVITIES OF
THE DEPARTMENT OF ENERGY**

**DEPARTMENT OF DEFENSE AUTHORIZATION FOR
APPROPRIATIONS FOR FISCAL YEAR 2003**

HEARINGS

BEFORE THE

COMMITTEE ON ARMED SERVICES

UNITED STATES SENATE

ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

ON

S. 2225

AUTHORIZING APPROPRIATIONS FOR FISCAL YEAR 2003 FOR MILITARY
ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CON-
STRUCTION, AND FOR DEFENSE ACTIVITIES OF THE DEPARTMENT OF
ENERGY, TO PRESCRIBE PERSONNEL STRENGTHS FOR SUCH FISCAL
YEAR FOR THE ARMED FORCES, AND FOR OTHER PURPOSES

PART 1

MILITARY POSTURE

SERVICE SECRETARIES

NUCLEAR POSTURE REVIEW

UNIFIED AND REGIONAL COMMANDERS

SERVICE CHIEFS

**ATOMIC ENERGY DEFENSE ACTIVITIES OF THE DEPARTMENT OF
ENERGY**

FEBRUARY 5, 12, 14; MARCH 5, 7, 14, 2002



Printed for the use of the Committee on Armed Services

U.S. GOVERNMENT PRINTING OFFICE

81-922 PDF

WASHINGTON : 2003

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2250 Mail: Stop SSOP, Washington, DC 20402-0001

CARL LEVIN, Michigan, *Chairman*

EDWARD M. KENNEDY, Massachusetts	JOHN WARNER, Virginia
ROBERT C. BYRD, West Virginia	STROM THURMOND, South Carolina
JOSEPH I. LIEBERMAN, Connecticut	JOHN McCAIN, Arizona
MAX CLELAND, Georgia	BOB SMITH, New Hampshire
MARY L. LANDRIEU, Louisiana	JAMES M. INHOFE, Oklahoma
JACK REED, Rhode Island	RICK SANTORUM, Pennsylvania
DANIEL K. AKAKA, Hawaii	PAT ROBERTS, Kansas
BILL NELSON, Florida	WAYNE ALLARD, Colorado
E. BENJAMIN NELSON, Nebraska	TIM HUTCHINSON, Arkansas
JEAN CARNAHAN, Missouri	JEFF SESSIONS, Alabama
MARK DAYTON, Minnesota	SUSAN COLLINS, Maine
JEFF BINGAMAN, New Mexico	JIM BUNNING, Kentucky

DAVID S. LYLES, *Staff Director*

JUDITH A. ANSLEY, *Republican Staff Director*

CONTENTS

CHRONOLOGICAL LIST OF WITNESSES

MILITARY POSTURE

FEBRUARY 5, 2002

	Page
Rumsfeld, Hon. Donald H., Secretary of Defense; Accompanied by Hon. Dov S. Zakheim, Comptroller, Department of Defense	10
Myers, Gen. Richard B., USAF, Chairman, Joint Chiefs of Staff	27

SERVICE SECRETARIES

FEBRUARY 12, 2002

White, Hon. Thomas E., Secretary of the Army	109
England, Hon. Gordon R., Secretary of the Navy	119
Roche, Hon. James G., Secretary of the Air Force	136

RESULTS OF THE NUCLEAR POSTURE REVIEW

FEBRUARY 14, 2002

Feith, Hon. Douglas J., Under Secretary of Defense for Policy	320
Gordon, Gen. John A., USAF (Ret.), Administrator, National Nuclear Security Administration	330
Ellis, Adm. James O., Jr., USN, Commander in Chief, United States Strategic Command	341

UNIFIED AND REGIONAL COMMANDERS ON THEIR MILITARY STRATEGY AND OPERATIONAL REQUIREMENTS

MARCH 5, 2002

Blair, Adm. Dennis C., USN, Commander in Chief, United States Pacific Command	399
Schwartz, Gen. Thomas A., USA, Commander in Chief, United Nations Command, U.S. Forces Korea, Combined Forces Command Korea	421
Speer, Maj. Gen. Gary D., USA, Acting Commander in Chief, United States Southern Command	441

SERVICE CHIEFS

MARCH 7, 2002

Shinseki, Gen. Eric K., USA, Chief of Staff, United States Army	509
Clark, Adm. Vernon E., USN, Chief of Naval Operations	520
Jones, Gen. James L., USMC, Commandant of the Marine Corps	529
Jumper, Gen. John P., USAF, Chief of Staff, United States Air Force	544

IV

ATOMIC ENERGY DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY

Page

MARCH 14, 2002

Abraham, Hon. Spencer, Secretary of Energy; Accompanied by Dr. Everett Beckner, Deputy Administrator for Defense Programs, National Nuclear Security Administration; and Ambassador Linton F. Brooks, Deputy Administrator for Defense Nuclear Non-Proliferation, National Nuclear Security Administration	688
--	-----

**DEPARTMENT OF DEFENSE AUTHORIZATION
FOR APPROPRIATIONS FOR FISCAL YEAR
2003**

TUESDAY, FEBRUARY 5, 2002

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

MILITARY POSTURE

The committee met, pursuant to notice, at 9:32 a.m. in room SH-216, Hart Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Kennedy, Byrd, Cleland, Landrieu, Reed, Akaka, Bill Nelson, E. Benjamin Nelson, Carnahan, Dayton, Bingaman, Warner, Inhofe, Santorum, Roberts, Allard, Hutchinson, Sessions, Collins, and Bunning.

Committee staff members present: David S. Lyles, staff director; Christine E. Cowart, chief clerk; and Gabriella Eisen, nominations clerk.

Majority staff members present: Daniel J. Cox, Jr., professional staff member; Madelyn R. Creedon, counsel; Kenneth M. Crosswait, professional staff member; Richard D. DeBobes, counsel; Evelyn N. Farkas, professional staff member; Richard W. Fieldhouse, professional staff member; Creighton Greene, professional staff member; Gerald J. Leeling, counsel; Peter K. Levine, general counsel; Michael J. McCord, professional staff member; Arun A. Seraphin, professional staff member; and Terence P. Szuplat, professional staff member.

Minority staff members present: Judith A. Ansley, Republican staff director; Charles W. Alsup, professional staff member; L. David Cherington, minority counsel; Edward H. Edens IV, professional staff member; Brian R. Green, professional staff member; William C. Greenwalt, professional staff member; Gary M. Hall, professional staff member; Carolyn M. Hanna, professional staff member; Mary Alice A. Hayward, professional staff member; Ambrose R. Hock, professional staff member; George W. Lauffer, professional staff member; Patricia L. Lewis, professional staff member; Thomas L. MacKenzie, professional staff member; Ann M. Mittermeyer, minority counsel; Suzanne K.L. Ross, research assistant; Joseph T. Sixeas, professional staff member; Carmen Leslie Stone, special assistant; Scott W. Stucky, minority counsel; and Richard F. Walsh, minority counsel.

Staff assistants present: Dara R. Alpert, Daniel K. Goldsmith, and Thomas C. Moore.

Committee members' assistants present: B.G. Wright, assistant to Senator Byrd; Frederick M. Downey, assistant to Senator Lieberman; Andrew Vanlandingham, assistant to Senator Cleland; Jeffrey S. Wiener, assistant to Senator Landrieu; Elizabeth King, assistant to Senator Reed; Davelyn Noelani Kalipi, assistant to Senator Akaka; William K. Sutey, assistant to Senator Bill Nelson; Eric Pierce, assistant to Senator Ben Nelson; Neal Orringer, assistant to Senator Carnahan; Brady King, assistant to Senator Dayton; Benjamin L. Cassidy, assistant to Senator Warner; Christopher J. Paul, assistant to Senator McCain; J. Mark Powers, assistant to Senator Inhofe; George M. Bernier III, assistant to Senator Santorum; Robert Alan McCurry and James Beauchamp, assistants to Senator Roberts; Michele A. Traficante, assistant to Senator Hutchinson; Arch Galloway II, assistant to Senator Sessions; Kristine Fauser, assistant to Senator Collins; and Derek Maurer, assistant to Senator Bunning.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning. The committee meets this morning to receive testimony from Secretary of Defense Donald Rumsfeld and Chairman of the Joint Chiefs of Staff General Richard Myers on the posture of United States Armed Forces and on the President's proposed defense program for fiscal years 2003 to 2007.

We all have known General Myers for many years, but this is his first opportunity to testify before the committee as Chairman of the Joint Chiefs of Staff. We give him a special welcome, and we welcome all of our witnesses today on this very important subject.

As we meet today, America's Armed Forces continue to risk their lives in and around Afghanistan and, of course, in other places around the world. Some have been injured in Afghanistan, others have given their lives. This Nation is forever indebted to them and their families for their sacrifice.

Senator Warner and I traveled to the Afghan theater to visit with our forces over Thanksgiving. Other members of the committee have since traveled to the region, and I know that my colleagues join me when I say that these men and women are nothing short of inspiring. They are performing a complex, challenging mission with extraordinary courage, skill, and determination. They know their mission and they know that America appreciates and supports them.

The success of our forces has been remarkable. Osama bin Laden, if alive, is on the run and hiding. Many of his al Qaeda terrorists have been captured or killed. The Taliban regime that harbored them is no more. The Afghan people have been liberated from tyranny and an interim government is in place in Kabul. Nations around the world have been put on notice America is determined to protect itself from more attacks and to bring terrorists to justice.

The excellence behind that success was not built in months. The success of our forces in Afghanistan is a tribute to our recruitment, training, and investments over many years, and it is a tribute to

the leadership of the two witnesses that we have here today. Secretary Rumsfeld and General Myers, the country is grateful for your leadership of our Armed Forces during this dangerous time for our Nation.

This committee will look carefully at the conduct of the operations in Afghanistan as we work with the Department of Defense to shape our forces for the future. On Thursday, the committee will receive testimony from the commander of Operation Enduring Freedom, General Tommy Franks, in both open and closed session.

One of the lessons of this operation is that we enhance our security when we make common cause with other nations in pursuit of common goals. The path to a safer world and a more secure America rarely comes from a go-it-alone approach, but rather from working with allies, partners, and other nations, and from remaining engaged in critical regions of the world.

Future success on the battlefield will also depend on success in managing the Department of Defense and in preparing our military for tomorrow's missions. The Department's budget request provides important funding for the war against terrorism and improves the quality of life of our forces and their families by increasing pay and benefits, especially health care. It includes funding for increased purchases of precision munitions and for unmanned aircraft, which proved so critical to the success of our military operations in Afghanistan.

The administration is proposing the largest increase in military spending in two decades. This proposed increase comes without a comprehensive strategy or a detailed plan to guide that spending. The administration has not yet issued a national security strategy, a national military strategy, or a detailed plan for the size, structure, shape, and transformation of our military.

We all appreciate the pressures on the Department while it conducts a war. At the same time, I trust that Secretary Rumsfeld agrees that an overall strategy and clear plans are essential if we are to make wise decisions on the future of our Armed Forces.

We also continue to await a report on the steps that the Department plans to take to ensure that taxpayers' money is spent wisely. The administration is requesting \$48 billion above the fiscal year 2002 level. In his last testimony before this committee 7 months ago, Secretary Rumsfeld candidly stated: "I have never seen an organization that could not operate at something like 5 percent more efficiency if it had the freedom to do so." He went on to say that the taxpayers have a right to demand that we spend their money wisely, and further said that he could not tell the American people that we are doing that.

The committee will be interested to hear how much progress has been made on this front. I know that the Secretary is active on many fronts. Waging a war is number one, and some of these other needs and considerations have to be delayed. But I know as soon as the Secretary is able to address these issues that he is going to do so while carrying on the other more pressing and more comprehensive responsibilities.

Finally, we look forward to the Department's plan for carrying out what the Quadrennial Defense Review (QDR) called the military's highest priority: homeland security. A new combatant com-

mand will apparently coordinate the Department's role in homeland security. Congress awaits the decision on how the Pentagon intends to organize itself to oversee this mission. General Myers testified at his confirmation hearing in September that "this whole issue of homeland defense or homeland security needs a lot more thought." The committee looks forward to the specifics which Secretary Rumsfeld and General Myers could share with us this morning on that important mission.

America's Armed Forces are performing admirably in their fight against al Qaeda. This committee will do all in its power, as it has done in years before, to ensure that our forces have the resources, tools, and technology they need to prevail in their fights. We are determined to preserve a high quality of life for our forces and their families, sustain readiness, and transform the Armed Forces to meet the threats and challenges of tomorrow. At this point, I would like to submit the statements of Senators Akaka and Landrieu.

[The prepared statements of Senators Landrieu and Akaka follow:]

PREPARED STATEMENT BY SENATOR MARY L. LANDRIEU

Mr. Chairman, thank you for holding this invaluable hearing to discuss the Department of Defense's budget posture for fiscal year 2003, the future spending priorities for our Armed Forces beyond 2003, and, of course, America's response to the terrorist attacks on U.S. soil.

Since September 11, Secretary Donald Rumsfeld has shown deft leadership in guiding his department in the war efforts against those who made a poor decision when they targeted America for their misguided wrath. Secretary Rumsfeld's response to the terrorist attacks has been measured and wholly appropriate. He moved deliberately and with great scrutiny to develop a plan that would increase security. The Secretary has crafted a mission for our Armed Forces and the Nation that will root out terrorist cells around the world and bring them to justice.

General Myers, you are the embodiment of the fact that those who serve in our Nation's military are America's best and brightest. Your guidance and confidence lead every soldier, sailor, airman, and marine to be expertly trained, confident in themselves, and confident in the person next to them. Americans can sleep better tonight knowing that the Joint Chiefs, the commanders in chiefs (CINCs), and other uniformed leaders, with you in the cockpit, are working in unison to create the best methods to defend our shores, ensure liberty, and defeat our enemies.

I want to paraphrase Winston Churchill's words of caution, as we are only at the end of the beginning of this war, but the war is progressing well. In 4 short months since we attacked al Qaeda and Taliban forces in Afghanistan, those forces have fled and are now in disarray. In a formerly lawless land, an interim government has been established, music is playing in the streets, and despair and destitution have been replaced with hope. Again, our mission is far from over, as Osama bin Laden's presence is unknown and al Qaeda cells exist in 30 or more other countries. But, we will provide justice for those who died as a result of September 11 bombings, and we will win the war on terrorism.

Yesterday, President Bush officially released his budget for fiscal year 2003. I support the President's call for an expanded and more robust defense budget. America is at war, and we must spend whatever is necessary, yet prudent, to protect and secure our citizens and allies and thwart our enemies. As I stated previously, I concur with the President that the war on terrorism will be a long war. It will not end in Afghanistan. Rather, America must be prepared to fight this war for years to come in new and different ways.

Nevertheless, while I applaud the President's goals and his tremendous determination and perseverance as our commander in chief, I am concerned that the President's budget does not most effectively and efficiently provide for the defense of our Nation, our Constitution, and those in uniform who defend our Nation and constitution.

(1) Quality of life and military construction: While the President's budget makes important strides to improve housing on our military bases and gives military per-

sonnel a 4.1 percent pay raise, the military construction budget actually represents a \$1.6 billion decrease in funding in fiscal year 2003 versus fiscal year 2002. This decrease from \$10.6 billion to \$9 billion is disheartening in light of the major increases President Bush has endorsed. The budget proposal cautions against widespread repairs to bases that could be closed in the next Base Realignment and Closure (BRAC) round in fiscal year 2005. There is value in that statement. Yet, we must make necessary repairs to best provide for the men and women in our Armed Forces. We cannot jeopardize the quality of life of our troops.

Despite our superior technology, wars are and always will be won with people. The men and women in our Armed Forces are our most vital asset, and we must dedicate critical resources to them. In fighting a war, a military is only as strong as its weakest link. Soldiers with low morale are poor soldiers. The first step toward creating a sound and lethal fighter is to provide him or her with the necessary tools and support to grow, flourish, and be confident. Those tools include training facilities that are modern, providing a sound education and opportunity for the service man or woman's spouse and children, providing comfortable housing, and providing quality healthcare to the service member and his or her family.

We cannot maintain our greatness if we are not committed to the upkeep of our base communities and robust investment in infrastructure. As General Myers has stated, it would currently take 100 years to make the necessary re-investments in infrastructure to rehabilitate our bases. To wait a century is unfathomable and unacceptable. We cannot house our troops in quonset huts for another 100 years. If we do, our superiority as the pre-eminent military in the world will be jeopardized and our retention and recruitment rates will suffer mightily. It is inexcusable for the administration's commitment to quality of life to decrease at a time when our troops should know that their government places them in high esteem.

(2) DOD must commit to defending the homeland. Prior to World War II, America rarely involved itself in international affairs, and the military was primarily concerned with defending our borders from enemy attack. Since World War II, our military has expanded abroad, and our military now has a reach on every continent. Along the way, the focus became not to defend America at home, but to defend her abroad. I support DOD's need for a global reach and presence, but I fear that along the way, DOD has grown less concerned with the defense of a direct attack on American soil and less concerned about actively participating in homeland defense.

As this reluctance has grown, the American people are more desirous than ever to see the Department of Defense re-establish itself as America's guardian at home, not within Europe or Asia. Since September 11, DOD has grappled with how to best defend the 50 states, but what seems best to DOD as a matter of ease and status quo does not seem best to providing a definitive defense and counter-attack to future invasions at home.

In furtherance, I am pleased to see President Bush commits \$9.3 billion for anti-terrorism efforts, but the meager \$700 million for counter-terrorism only indicates that DOD is not interested in involving our military at home. National Guard units are well-trained and can respond to an attack, but they cannot provide the muscle or the sense of security that the Army, Air Force, Navy, and Marines can deliver. Our ultimate responsibility is at home. DOD must not be constrained by the notions of "Posse Comitatus." This antiquated law must not stand in the way of providing our Nation with the best self-defense.

I recognize that plans and reforms to the way our military positions itself within the United States cannot materialize overnight. However, such plans must materialize and not fall prey to the status quo. I maintain hope that modifications of the Unified Command Plan will establish a definitive chain of command responsible for homeland security and defense. No idea should be dismissed, including the creation of a CINC for homeland defense. Any new command or revised chain of command must have all the necessary resources and manpower required to defend against and defeat invaders. American citizens expect and deserve such protections.

(3) We must make a commitment to science and technology. The Department's science and technology programs play a key role in our efforts to transform our military to meet the emerging threats of the 21st century. The Quadrennial Defense Review, which was published last year, stated that DOD must invest 3 percent of its funding toward science in technology. The fiscal year 2003 defense budget calls for an 11 percent increase in expenditures, yet the science and technology budget did not receive the funding supported by the QDR. Rather, the science and technology budget was cut by nearly \$200 million. In fact, this year's budget falls \$1.4 billion short of the 3 percent goal. If the QDR is meant to be a roadmap for the Department of Defense, it should not be so quickly dismissed by those who authored it.

True transformation—a stated goal in the QDR and in the President's budget—will come through the advancement of DOD science and technology programs, so,

in essence, transformation has been dealt a blow by the very same budget proposal. The research and industry supported by the science and technology budget enable Americans to quickly bring their innovations into the battlefield. Such innovations save lives. In the past, science and technology funding has advanced warfighting and peacemaking at break-neck speed. As a result, our troops now have biological sensors, precision weapons, unmanned aerial vehicles (UAVs) and more at their disposal in Afghanistan. Surely our casualties would have mounted without them. Yet, the dedication to science and technology is absent from the President's budget. I hope this departure from the goal of transformation within the President's budget proposal does not pervade the congressional review process of the budget or harm our service members.

I am proud of our the men and women of our Armed Forces for their response to September 11 and the vigor in which they have fought the war on terrorism. No one would have expected any less because they have such a fine leader in General Myers. I am also grateful for the leadership shown by President Bush, Secretary Rumsfeld, and the entire Cabinet. President Bush's budget proposal is a good basis from which to fight the war on terrorism, and I agree with the document in large part, including a call to increase spending for fiscal year 2003. Nevertheless, I think there are some fundamental areas of our Nation's defense that are not adequately addressed in this budget proposal. I look forward to working with the President, Secretary Rumsfeld, and General Myers to best provide for our Nation's defense during the coming year.

PREPARED STATEMENT BY SENATOR DANIEL K. AKAKA

Thank you, Mr. Chairman. I add my welcome to Secretary Rumsfeld and Chairman Myers this morning, and thank them for taking the time to discuss the fiscal year 2003 budget request with this committee. I am pleased to see the continued emphasis on quality of life for military members as reflected in the military construction amounts in the budget request.

I support the administration's priority on improving the warfighting readiness of our forces through increased training resources and the enhancement of joint training.

I remain concerned, however, about our ability to maintain the superior readiness of the United States military in light of the increased Operations Tempo (OPTEMPO) and potential expansion of the war on terrorism.

I am also concerned about the administration's decision to eliminate pay parity between the Federal workforce and the military. As we are reminded of how indistinguishable personal safety is from national security, it is critical to remember that human expertise is the most important national security resource we have. This expertise is important to the homeland security functions of both the military and the Federal Government.

I look forward to working with the administration to dedicate the necessary resources to ensure national security, maintain the United States military superiority and readiness, and enhance our homeland security.

Chairman LEVIN. I will now turn to my partner, Secretary—"Secretary"—Senator Warner.

Senator WARNER. Years ago.

Chairman LEVIN. And proud of it.

STATEMENT OF SENATOR JOHN WARNER

Senator WARNER. Mr. Chairman, that was an excellent opening statement and it parallels in large measure the statement that I was going to deliver. Therefore, to save time, I will ask to put my statement in the record and just make a few heartfelt remarks.

First, Mr. Secretary, we are privileged to have your lovely wife with us this morning. I know she does not wish to be singled out, but she does exemplify the spouses who stand behind the men and women of the Armed Forces and indeed those in the civilian service throughout the Department. It has been a tremendous and arduous task for all of you here, particularly since September 11, and I wish to commend her and all in like positions.

Mr. Secretary, as you and I reflected the other day, we go back a few years together and have seen quite a few incidents in this country. But in my judgment, not since World War II, when this Nation was united like never before in its history, has this Nation been more strongly united behind its President and most particularly, those who proudly wear the uniform of our Nation. In large measure that is because of the leadership of the President, yourselves, Mr. Secretary and General Myers, and those in uniform under your supervision.

This country is going to move forward and carry out both here at home and abroad, the orders of the President to do everything we can to eliminate the threat posed by terrorism, not only for the United States, but the whole world.

I wish to commend you, Mr. Secretary, for the manner in which you have made yourself available to the Nation's public, largely through the press, and your visits, both abroad to the troops and here at home to military installations.

No matter how much we read and observe on television, your own means to communicate frankly, honestly, and bluntly, with a sense of humor here and there, is terribly important. Those of us who remember Vietnam recall that the home front, for some very valid reasons, was not unified behind the servicemen and women, and it was exceedingly difficult for those in uniform to carry out their missions.

The chairman mentioned the budget and we shall review the budget request. I talked yesterday at lunch with you about it in some detail. It is the largest increase in defense spending since the early 1980s, and as I said yesterday, it is crucial to preserve our democracy. We have no choice as a Nation but to move forward and support our President.

I frankly think, Mr. Secretary, you are going to see strong bipartisan support for this budget. We have to make certain that, as you have allocated to your colleague Tom Ridge the responsibilities of homeland defense, that budget items are properly allocated between the two accounts. As you told us yesterday at lunch, you, together with the Director of the Central Intelligence Agency, have worked together as partners in putting this budget together.

We also have the item of some \$10 billion in the budget, which I think is a wise insertion because it gives the President and yourself the flexibility to move expeditiously if new challenges or new threats face our Nation. Congress has, and will, continue its oversight. As I said yesterday, I think we will have to fine-tune some means by which Congress reviews, perhaps contemporaneously, how you are going to make those particular expenditures in that budget item.

Also, I go back to a quote by our President from September 1999 at the Citadel: "We must as a Nation renew the bond of trust between the American people and the American military, . . . defend the American people against missiles and terror; and . . . begin creating the military of the next century."

In my judgment, the budget request before us carries out that commitment he made to this Nation well before September 11. It shows he was looking into the future and making plans for what

none of us at that time or even now can fully comprehend—the type of threat that struck this Nation on September 11.

I again commend the President for his leadership. Yes, his polls are strong now, but situations change. But what will not change, and he has repeatedly told this Congress, is his strong commitment to carry forward this mission and deter terrorism against this country. There is no timetable in this war on terrorism. Both of you have repeatedly reminded the American people of that and I think they are prepared to accept that as we move forward.

Lastly, Mr. Secretary, as I look at this budget and as I look at military budgets worldwide, particularly those of our valued allies in NATO, they simply are not moving apace with their expenditures, calling on their citizens to reach into their pockets and providing for their respective Armed Forces in the same way that our President and I think this Congress will call on the citizens of this country.

I am not sure what the solution is, but you and I and others have the burden to explain to the American people: Yes, we are the world leader, but terrorism is common to all of us, and there should be a greater sharing of the financial burdens and the hardships as we move forward in this unified battle against terrorism. I hope you will touch on that in your comments to this committee.

With that, I conclude my brief remarks, and also saying that I strongly support the concept that we need a CINC for homeland defense, General. I am not sure just how and when you will go about formalizing that. You have the authority under existing law, but it may be well advised to involve Congress, because in my consultation with the governors they want to fully support our President on homeland defense, but they are concerned as to exactly how these funds, considerable sums, are to be expended and also the relationship between their guard and the active forces that will be augmented to bring about this Homeland Defense Command, the CINC for America, referred to now as CINC NORTH.

I think the greater involvement in Congress is going to strengthen and also, frankly, showcase the importance of how the President and yourselves are moving out to defend us here at home. He mentioned in his Citadel speech in September 1999 the need to strengthen homeland defense, again showing our President's wisdom in looking into the future and to the threats.

Good luck, and my very best to the men and women of the Armed Forces under your command.

[The prepared statement of Senator Warner follows:]

PREPARED STATEMENT BY SENATOR JOHN WARNER

Thank you, Mr. Chairman. I join you in welcoming Secretary Rumsfeld and General Myers.

Secretary Rumsfeld, we had great confidence in confirming you as Secretary of Defense. I want to add my personal thanks for your remarkable performance as our "secretary of war" in this important, all-out global war on terrorism.

General Myers, I welcome you to your first posture hearing. You are no stranger to this committee, and we look forward to working with you to win this war, further improve our Armed Forces, and prepare them for the future.

I commend President Bush for submitting a budget that continues the commitment he made to our service men and women, past and present, to their families, and to all American citizens to have the best trained, best equipped, and most respected military in the world. As then Governor Bush stated at the Citadel in September 1999, we must, ". . . renew the bond of trust between the American people

and the American military; . . . defend the American people against missiles and terror; and, . . . begin creating the military of the next century.” The budget request before us advances these worthy goals.

The \$48 billion increase in defense spending contained in the request represents the largest increase in defense spending since the early years of the Reagan administration. Those increases in the early 1980s were crucial to winning the Cold War. The increases now will be crucial to winning the war on terrorism and preventing such evil forces from threatening us again.

President Bush has properly focused this budget on protecting the United States, our forces deployed overseas, and our allies from attack—whatever the source—by doubling funding for combatting terrorism, by continuing robust funding for missile defense, and by substantially increasing funding for cutting edge technologies, such as unmanned vehicles.

As we meet this morning, our Nation is at war; at war against a global network of terrorism that so brutally attacked this nation on September 11. While many of us had predicted the emergence of new and nontraditional threats, we were all rudely shaken by the reality and ruthlessness of the attacks we faced on September 11.

Far from breaking the spirit of this great Nation, the terrorist attacks of September 11 have rallied the nation and, indeed, the entire civilized world to fight and defeat the scourge of terrorism which threatens us all. In the 5 months since we were attacked, our Nation has accomplished a lot. Al Qaida is fractured, and many of its members are on the run. The Taliban regime in Afghanistan that provided a safe haven for al Qaeda has been destroyed. Afghanistan has been liberated.

The men and women of the U.S. military—together with those of our coalition partners—are to be commended for their superb performance in this war on terrorism. You both are to be commended for the leadership you have provided.

As we begin our review of the President’s budget request, we must be ever mindful of the soldiers, sailors, airmen, and marines on the front lines. We must assure the American people and our men and women in uniform that we are doing everything possible to help win this war on terrorism, provide our armed forces the resources they need, and fully prepare them to deal with future threats.

Winning the war on terrorism and protecting our Nation is not just about destroying the Taliban and al Qaeda in Afghanistan. It is a global effort that must be prosecuted and sustained until the threat is destroyed. We must track down terrorists and those who harbor them. It is a war we must win.

I am encouraged by what I have seen so far with regard to the budget before us. Your continued commitment to our uniformed personnel and their families through pay raises, quality of life and infrastructure improvements is essential. The priority you have given to combating terrorism at home and abroad is commendable. Your focus on transforming our Armed Forces to meet the expected and unexpected threats of this new century is critical to our national security.

There is consensus in Congress, in the administration, and among the American people that significantly increased investment in defense and national security is necessary and prudent. September 11 was a “wake-up call” for all of us. As President Bush reminded us last week, “the price of preparedness is high, but the price of indifference can be catastrophic.”

Thank you.

Senator WARNER. At this point, I would like to submit the written statement of Senator Strom Thurmond.

[The prepared statement of Senator Thurmond follows:]

PREPARED STATEMENT BY SENATOR STROM THURMOND

Thank you, Mr. Chairman,

Mr. Chairman, as the Armed Services Committee begins the review of the fiscal year 2003 defense budget, I want to congratulate you and the ranking member, Senator Warner, on your leadership during the last session. The change in the majority was seamless and, more important, the tradition of committee’s bipartisan approach to national security lives on. As I begin my 43rd and final year on the committee, I continue to believe that this bipartisan approach to national security has been a major contributor to the strength of our military forces.

Secretary Rumsfeld and General Myers, welcome. I want to echo the comments of my colleagues on your leadership of the Department of Defense and our military services. Since the horrendous events of September 11, you have confronted an entirely new challenge. A challenge that no one could have imagined before that tragic date. It was your leadership that brought about the swift results in Afghanistan,

more important, it was your leadership that brought a new approach to our defense strategy and the transformation of our Armed Forces into focus. I know these times have been both a professional and personal challenges. I thank you for your dedication and leadership and look forward to the changes you will make within the Department of Defense.

Mr. Chairman, the President's budget request for fiscal year 2003 is the largest increase to the defense budget since 1981. It represents nearly a 30 percent increase over the 1998 defense budget which was the first major increase to the defense budget since the end of the Cold War. The proposed \$379 billion for fiscal year 2003 is a huge investment in defense and in my judgement one that is long overdue. Although I support the funding level, I am concerned about some specifics that I have read and heard in the media. It appears that we are still dedicating significant resources toward procuring legacy type systems. I hope that once we receive the details on the budget this perception is wrong and that there is a focus on developing the technology and systems that will equip our soldiers, sailors, airmen, and marines with the capability they need to fight the battles of the future.

Although equipping our forces is critical, we must not neglect the quality of life of our military personnel and their families. Last year's budget provided a significant increase in military construction funding, I am disappointed that this year's budget does not keep pace with that level of funding. The living and working conditions that we provide to our men and women in uniform are as critical to their war fighting capability and morale as the latest weapon systems. I urge the committee to carefully review the proposed construction program and make the changes required to ensure it meets the critical needs of our personnel.

Mr. Chairman, I look forward to another productive year and a continued close relationship with our two distinguished witnesses. We all have a common goal of ensuring the security of our Nation and nothing must interfere with achieving that aim.

Before I close, I want to pay tribute to our Armed Forces and the men and women who daily risk their lives in the service of our Nation. I especially want to express my condolences to the families of the men and women who have made the ultimate sacrifice in the service of our Nation. God bless them all.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Warner.

There is going to be a vote at 10:30. My plan is that we will continue the hearing right through that vote, and hopefully enough of us can vote early so we can get back in time to pick up. After the opening statements of Secretary Rumsfeld and General Myers, there will be a 6 minute round of questions for each Senator on the basis of the early bird rule.

Again, we give Secretary Rumsfeld, General Myers, and Dr. Zakheim a very warm welcome. Secretary Rumsfeld.

STATEMENT OF HON. DONALD H. RUMSFELD, SECRETARY OF DEFENSE; ACCOMPANIED BY HON. DOV S. ZAKHEIM, COMPTROLLER, DEPARTMENT OF DEFENSE

Secretary RUMSFELD. Thank you very much, Mr. Chairman and members of the committee. I certainly want to join the chairman and Senator Warner in expressing our appreciation to the men and women in the Armed Forces. They are, as you said, doing an absolutely superb job. You cannot travel anywhere in the world or in this country and visit with them and not come away with a great deal of energy, pride, and confidence.

I also want to say that from the first day on September 11 when Senators Levin and Warner arrived at the Pentagon, we recognized the very strong bipartisan support that this committee has given the Department of Defense. We recognize it, appreciate it, and value it. Thank you.

I have submitted a fairly lengthy statement for the record, which I will not read through. I have some other remarks that I would like to deliver at this point.

Chairman LEVIN. Your statement will be made part of the record.

Secretary RUMSFELD. Thank you, sir.

The events of September 11 shattered many myths, including the illusion that the post-Cold War world would be one of extended peace, where America could stand down, cut defense spending, and focus our resources and attention on domestic and personal priorities. We learned on September 11, that that really is not the case.

When the Cold War ended, a defense drawdown took place that went too far. In my view it overshot the mark. Many on this committee of both parties fought an uphill battle to provide the resources the Department needed. With the benefit of 20–20 hindsight, the reality is that our country spent much of the 1990s living off the investments that the American people made during the 1980s.

Through the prism of September 11 we can now see that our challenge today is not simply to fix the underfunding of the past, but it is to accomplish several difficult missions at once: win the worldwide war on terrorism; restore capabilities by making delayed investments in procurement, people, and modernization; and prepare for the future by transforming the defense establishment to fit the 21st century.

There are some who say this may be too much to ask, that any one of these challenges is daunting and tackling them all at once is not a good idea. I disagree. I think we can do it and I think we must do it.

Our adversaries are watching what we do. They are studying how we have been successfully attacked, how we are responding, and how we may be vulnerable in the future. We stand still at our peril.

For these reasons, President Bush has sent to Congress a 2003 defense budget request of \$379 billion, a \$48 billion increase from the 2002 budget. He includes \$19.4 billion for the war on terrorism; a \$10 billion contingency fund; and \$9.4 billion for a variety of programs related to the war, a good portion of which goes to force protection here in the United States, which is at a totally different level than it has previously been.

That is a great deal of hard-earned tax dollars. But let me try to put it in context. Last year, before this committee, I said that a decade of overuse and underfunding had left us in a hole sufficiently deep that the President's 2002 budget, which also had a significant increase, still left shortfalls in a number of critical areas, including infrastructure, procurement, and operations and maintenance. Moreover, I advised this committee that just to keep the Department going in 2003 on a straight line basis with no improvements, simply covering the costs of inflation and realistic budgeting, we estimated that the DOD would require a budget of \$347 billion, an \$18.3 billion increase over 2002.

Well, as high as it may have sounded then, it turned out that that estimate was a bit low. If you combine the cost of inflation plus military health care, retirement benefits, pay increase, realistic estimates for weapons costs, and readiness and depot mainte-

nance, then the correct figure just to have a straight line over 2002 is \$359.4 billion.

When one adds that to the \$19.4 billion in this budget for the war on terrorism, the total comes to \$378 billion out of a request of \$379 billion. That is a significant investment. We are investing it differently. We are accelerating programs we consider transformational and made program adjustments to achieve something in the neighborhood of \$9.3 billion in proposed savings and adjustments to be used for transformation and other pressing requirements.

At the same time, we are fully funding those areas we must in order to continue reversing years of underinvestment in people, readiness, and modernization.

The 2003 budget request before you was guided by the result of last year's defense strategy review. Given the questions that some people posed last year, I must say that it is really quite remarkable what the people in the Department of Defense have accomplished. In 1 year, 2001, the Department has developed and adopted a new defense strategy; replaced the decade-old two major theater war construct for sizing our forces with a new approach much more appropriate to the 21st century; and adopted a new approach for balancing war risks, as opposed to people risks, against the risks of not modernizing sufficiently. It is not an easy thing to do because we are comparing apples and oranges, but the Department has worked mightily to try to do a much better job than has been the case in the past—reorganized and revitalized the missile defense research and testing program.

We have reorganized the Department to better focus on space capabilities. Because of the nuclear posture review mandate adopted by Congress, we have adopted a new approach to strategic deterrence that increases our security while allowing deep reductions in strategic nuclear weapons. As you pointed out, Mr. Chairman and Senator Warner, within a week or so we will present to the President a new unified command structure.

All this was done with about half of our leadership being new during the first half of the year and while conducting the war on terrorism. That is not bad for a defense establishment, military and civilian, public and private, executive and legislative, that has a reputation for being impossibly resistant to change. I think that is quite a year.

When I look back on that challenging year, I feel we made good progress, thanks to the superb work of the men and women in the Department who have put forth an enormous effort.

In the course of the defense reviews, we identified six key transformational goals around which we will focus our defense strategy. They are: First, to protect the homeland and forces overseas;

Second, to project and sustain power in distant theaters;

Third, to deny enemy sanctuary;

Fourth, to protect information networks from attack;

Fifth, to use information technology to link up U.S. forces so that they can truly fight jointly; and

Sixth, to maintain unhindered access to space and to protect U.S. space capabilities from enemy attack.

The President's 2003 budget requests advances in each of these six transformational goals. With respect to protecting bases of operation and homeland defense, the President's budget requests a number of programs, including a refocused missile defense research, development, and testing program and the development of biological defenses. It requests about \$8 billion for programs to support defense of the homeland and forces overseas, \$45.8 billion over the 5-year Future Years Defense Plan (FYDP), which is an increase of about 47 percent.

Denying the enemy sanctuary: This budget requests \$3.2 billion for programs to support this objective and \$16.9 billion over the 5 years, an increase of 157 percent.

Projecting power in denied areas: Today in many cases U.S. forces depend on vulnerable foreign bases to operate, creating incentives for adversaries to develop access denial capabilities to keep us out. The 2003 budget requests \$7.4 billion for programs to help ensure the ability to project power over long distances and \$53 billion over the 5-year period, an increase of 21 percent.

Leveraging information technology: A key transformational goal is to leverage advances in information to seamlessly connect U.S. forces in the air and on the sea and ground. The President's budget requests \$2.5 billion for programs to support this objective or \$18.6 billion over the 5 years, an increase of 125 percent.

Conducting effective information operations: As information warfare takes an increasingly significant role in modern war, our ability to protect our networks and to attack and cripple those of an adversary will be critical. The President's 2003 budget requests \$174 million for programs to support this objective and \$773 million over the 5-year period, an increase of 28 percent.

Last, strengthening space operations: From the dawn of time, a key to victory on the battlefield has been to control the high ground. Space is indeed the ultimate high ground. The 2003 budget requests about \$200 million to strengthen space capabilities and \$1.5 billion over the 5-year period, an increase of 145 percent.

Of course, we cannot transform the military in 1 year or even in a decade, nor would it be wise to do so. Rather, we intend to transform some relatively modest percentage of the force, turning it into the leading edge of change that will over time lead the rest of the force into the 21st century.

Moreover, investments in transformation cannot be measured in numbers alone. Transformation is not about weapons systems particularly. It is more about changing how we think about war. All the high-tech weapons in the world will not transform our Armed Forces unless we transform the way we think, train, exercise, and fight.

Modernization, procurement, and readiness: As we have transformed for the threats we face, we also have to prepare our forces for conflicts that we may have to fight during this decade by improving readiness, increasing procurement, and selectively modernizing. To deal with the backlog that resulted from the procurement holiday of the last decade, we have requested some \$68.7 billion for procurement in the 2003 budget. That is an increase of about 10 percent over 2002. Procurement is projected to grow steadily over the 5-year defense program to more than \$98 billion

in 2007, and it will increasingly fund transformation programs over the period of time.

We have requested \$150 billion for the operations and maintenance account in fiscal year 2003, including substantial funding for the so-called readiness accounts of tank miles, steaming days, and flying hours for the services.

If we are to win the war on terror and prepare for tomorrow, we have to take care of the Department's greatest asset, the men and women in uniform. We are competing with the private sector for the best young people our Nation offers, and we cannot simply count on their patriotism and willingness to sacrifice alone to attract them. That is why the President's 2003 budget requests some \$94 billion in military pay and allowances, including a \$1.9 billion across the board 4.1 percent pay increase; \$300 million for targeted pay raises for the mid-grade officers and non-commissioned officers (NCOs); \$4.2 billion to improve military housing, putting the Department on track to eliminate most substandard housing by 2007; funds to lower out-of-pocket housing costs for those living off base from 11.3 percent to 7.5 percent in 2003, putting us on the track to eliminate out-of-pocket housing costs for the men and women in uniform by 2005; and \$10 billion for education, training, and recruitment, as well as a breathtaking \$22.8 billion to cover the realistic costs of military health care.

Smart weapons are worthless unless they are in the hands of smart, well-trained, highly-motivated soldiers, sailors, airmen, and marines. While this budget includes proposed increases in a number of areas, it also includes a number of savings. We are committed to pursuing what works and stopping what does not. For example, we terminated the Navy Area Missile Defense program because of delays, poor performance, and cost overruns. We are proceeding towards a goal of a 15 percent average reduction in headquarters staff and the Senior Executive Council of the Department is seeking additional ways to ensure that we manage the Department more efficiently.

We need to save more, but two things make it difficult. First was the decision not to make deep cuts in manpower. Now, in the midst of a war on terror whose final dimension is still unknown, we do not believe is the time to be cutting manpower. We now have 60,000 Guard and Reserves that have been called up and another 10,000 who have been held in the service, for a total of 70,000 people.

It is interesting to note that the largest theater for the United States is not Afghanistan today; it is Salt Lake City and the environs where we have people there for the Olympics. We literally have more people in the area around Salt Lake City for the Olympics than we do in Afghanistan.

Second, Congress' decision to put off base closures for a couple of years means that the Department will have to continue supporting between 20 to 25 percent more infrastructure than we believe is needed for the force. I know this committee was forceful in urging base closing and we appreciate that. It is a fact, however, that with the 2-year delay we have to continue providing force protection for the bases even though we believe a substantial number of

the bases, something in the neighborhood of 20 to 23 percent, are not currently needed.

I have another concern, Mr. Chairman, and it is a hard thing to specify because no one congressional earmark is critical. Each one looks reasonable. But when one looks at the changes made, some 2022 individual programs and line items, the effect of it overall means that a fairly substantial portion of the budget that we proposed last year was changed. I think it is something like 13 percent of all research, development, test and evaluation programs, some 995 changes, 8.6 percent of all the procurement programs—436 individual changes, and 15 percent of all military construction, or 146 changes.

Congress clearly has the constitutional right to do that. There is no question about that. Any one of these individual earmarks when looked at seems very reasonable. I do think, however, it is important for all of us to step back and look at them in the aggregate and ask what the effect of that is year after year and if that is really the way we feel it is best to conduct our business.

After counting the costs of keeping the Department moving on a straight line and the costs of the war and the savings generated, we are left with about \$9.8 billion, so-called free money to invest in transformational activities. It is a lot of money, but it requires us to make a lot of difficult tradeoffs.

Just to get it up on the table before we start, we were not able to meet our objective of lowering the average age of tactical aircraft. We are investing in unmanned aircraft, the F-22, and the Joint Strike Fighter, which require significant up-front investments, and will be coming on the line in future years. But in the current year, the average age of aircraft will not be declining as we had hoped.

Second, while the budget funds faster growth in science and technology, we were not able to meet our goal of 3 percent of the overall budget, though we are slightly higher than the President's request from 2002.

Third and most importantly, we clearly were not able to fund shipbuilding at a replacement rate in 2003, and we must do that in the future. As with every Department, the Department of the Navy had to make choices, and I know they will be up here next week to discuss the choices they made where they decided to place more money in operations and maintenance and other accounts than in shipbuilding.

The fiscal year 2003 shipbuilding budget is \$8.6 billion. It procures five ships. This is for several reasons. First, there are a number of problems, including contractor problems. But also, past shipbuilding cost estimates were off and they needed to be funded. So this year's shipbuilding budget is funding some of the cost increases that were not budgeted from prior years.

Second, the Navy made a calculation that in the short term we can maintain the desired Navy force level at the proposed procurement rate because of the relatively young age of the fleet. A lot of the ships were purchased during the 1980s and the average age of the Navy, I am told, is at or is slightly better than the average age that is expected and targeted. They felt it is more important now to deal with significant needs that have been underfunded in re-

cent years, such as shortfalls in munitions, spare parts, and steaming hours, which are fully funded in this budget.

Further, we are investing significant sums in nuclear-powered cruise missile attack submarine (SSGN) conversions, which do not count in ship numbers because while they give us new capabilities, they do not buy new ships as such.

The Navy's future year defense plan budgets 5 ships in 2004, 7 in 2005, 7 in 2006, and 10 in 2007.

Finally, the \$379 billion that we are talking about here is a great deal of money, but consider that New York City's Comptroller's Office has estimated that the local economic cost of the September 11 attack in New York City alone will add up to about \$100 billion; estimates of the cost to the national economy range to about \$170 billion last year; estimates range as high as almost \$250 billion a year in lost productivity, sales, jobs, airline revenues, and advertising; and most importantly the loss in human lives and the pain and suffering of so many thousands of Americans who lost husbands, wives, fathers, mothers, sons, daughters, sisters, and brothers.

The President's proposed defense budget amounts to about 3.3 percent of our gross domestic product. When I came to Washington in 1957, during the sixties, and in the Eisenhower and Kennedy era, we were spending about 10 percent of our gross national product on defense. It is about 3.3 percent in this budget proposal. In those days we were spending over 50 percent of the Federal budget on defense. This budget proposes that we spend, I believe, 16.9 percent of our Federal budget on defense.

I point that out because there has been a mistake repeated throughout history that free nations tend to recognize the need to invest in their Armed Forces only after a crisis has already arrived. In 1950, just 5 years after the allied victory in World War II, General Omar Bradley urged President Truman to spend \$18 billion on defense. The service chiefs gave an even higher estimate to Congress, around \$23 billion. The services' estimate was still higher, around at \$30 billion.

President Truman concluded that the country could not afford anything more than \$15 billion. The fact was that 6 months later we were at war in Korea, and just as suddenly we found that we could in fact afford, not just \$18 billion, but \$48 billion, a 300 percent increase, because the war was on.

We need to work together to see that our country makes the investments necessary to deter wars, not just to win them. Let us do so with our experience on September 11 in mind and with a renewed commitment to ensure that once the fires burn out, the war ends, and the Nation rebuilds that we will not forget the lessons learned at the cost of so many innocent lives and we will not go back to the old ways of doing things.

Thank you, Mr. Chairman.

[The prepared statement of Secretary Rumsfeld follows:]

PREPARED STATEMENT BY HON. DONALD H. RUMSFELD

INTRODUCTION

Mr. Chairman, members of the committee.

On September 11, terrorists attacked the symbols of American freedom, prosperity, and military might—killing thousands. In just a few short weeks, the United States responded. We built coalitions, positioned our forces, and launched devastating military strikes against Taliban and al Qaeda strongholds in Afghanistan. Before the fires at the World Trade Center burned out, the Taliban had been driven from power and the terrorists were on the run.

We are still in the early stages of a long, dangerous, and global war on terrorism. But while much work remains, we can take notice of the achievements of our brave men and women in uniform, who have accomplished so much in so little time—and who, at this moment, continue to risk their lives in dangerous corners of the world.

September 11 changed our Nation forever. As time passes and wounds heal, we should not forget the horror of what befell us that day, and go back to old ways of doing things. We owe it to those who died September 11 and those who will come after us to ensure that our Nation learns—and heeds—the lessons of that fateful day.

The events of September 11 shattered many myths—among them, the illusion that the post-Cold War world would be one of extended peace, and that after four decades on high alert, America could relax, stand down, and cut defense spending.

We learned on September 11 that this is not the case—and that all the things that we Americans hold dear—freedom, security, prosperity—all these are made possible by the peace and stability our Armed Forces provide. To preserve these precious gifts, we need to invest in the capabilities that the men and women of the Armed Forces need to defend our country and our interests.

This truth was well understood during the Cold War. Then, Americans lived with the knowledge that a dangerous adversary had thousands of missiles on hair-trigger alert, pointed at their homes, schools, and places of work. We spent what was necessary for the Armed Forces to deter that adversary, defend our people, and contribute to peace and freedom. We succeeded.

But when the Cold War ended, so did the consensus behind a robust investment in our national defense. A defense drawdown took place that went too far—overshooting the mark by a wide margin. Many on this committee, Democrats and Republicans alike, fought an uphill battle to secure the resources needed. Hindsight is 20/20, and the truth is that we spent much of the 1990s living off of the investments made during the Cold War, instead of making the new investments needed to address the fast-approaching threats of this new century.

Our military was asked to do the impossible: to stay ready for near-term threats, take on a range of new missions, and prepare for the 21st century—all this while absorbing sizable budget cuts. They did their best—they always do—but to meet the near-term challenges, they were forced to put off critical investments in people, modernization, and the future. Every year those investments were put off, the hole we were in grew deeper—and the task of digging out more difficult.

Now, through the prism of September 11, we can see the error of that approach. Today, the consensus to spend what is necessary on national defense has been restored.

But as we undertake the task of rebuilding, we must do so with eyes wide open, aware of the size of the task facing us, and what will be required.

Our challenge today is to accomplish three difficult missions at once:

- (1) To win the worldwide war on terrorism;
- (2) To restore our force by making long-delayed investments in areas like procurement, people, infrastructure, and modernization; and in addition; and
- (3) To prepare for the future by transforming for the 21st century.

Each of these tasks must be done—none can be put off. We have no choice but to fight and win today's war on terror; but we must also modernize our forces for the wars we may have to fight later in this decade; and, because of the long lead-times in bringing new capabilities online, we must prepare now for the wars we may have to fight in the *next* decade—in 2010 and beyond.

There are some who say this is too much to ask of our Armed Forces—that any one of these challenges is daunting—but that doing all three at once—fighting a war, modernizing, and transforming at the same time—is too difficult. It is not. We can do it.

But even if it were impossible, we would have no choice but to get about the task. Why? *Because our adversaries are transforming.* They are studying how we were successfully attacked, how we are responding, and how we may be vulnerable in the future. They are developing dangerous new capabilities, and new ways of fighting, to take advantage of what they see as our weaknesses and vulnerabilities. We stand still at our peril.

Far from being a time to put off transformation, now is the moment to pursue it more aggressively. If we do not, new enemies will find new ways to strike us—and with the increasing power and range of weapons today, those attacks could well surpass the death toll of September 11.

THE 2003 BUDGET

But transforming our Armed Forces, fighting the war on terror, and selectively modernizing our existing force can't be done without sizable investments over a sustained period.

Because of that, President Bush sent to Congress a 2003 defense budget request of \$379 billion—a \$48 billion increase from the 2002 budget. That is the largest increase since the early 1980s—a significant investment.

It includes \$19.4 billion for the war on terrorism—a \$10 billion contingency fund that will be available, if needed, for the war, plus \$9.4 billion for a variety of programs related to the war, including:

- \$3 billion for counter-terrorism, force protection, and homeland security;
- \$1.2 billion for continuing increased air patrols over the continental United States; and
- \$800 million for converting Tomahawk cruise missiles to newer versions and for increased procurement of precision munitions such as the Joint Direct Attack Munition (JDAM) and Laser Guided Bombs (in addition to what was already funded).

Providing U.S. forces faster, more precise, real-time intelligence will be critical to transformation. The President's 2003 budget includes investments to improve U.S. intelligence collection, analysis, processing, and dissemination.

Moreover, the President has made clear that this is not a one-time increase. It is a commitment to sustained investments over many years. That is why the President's 5-year projected budget for 2003–2007 is \$2.057 trillion—about \$400 billion higher than when he took office.

That is a great of money—hard earned tax dollars. But it should be put in context.

Last year, before this committee, I explained that a decade of overuse and underfunding had left us in a hole so deep, that the President's 2002 budget, while a significant increase, would still leave shortfalls in a number of critical areas—including infrastructure, procurement, and operations and maintenance.

Moreover, I advised this committee that just to keep the Department going in 2003 on a straight-line—with no improvements, simply covering the costs of inflation and realistic budgeting—we estimated that DOD required a budget of \$347.2 billion—an \$18.3 billion increase over the President's 2002 request.

Well, as high as it may have sounded then, it turns out my estimate was low. When one combines the costs of inflation, plus the “must pay” bills (like military health care, retirement benefits, and pay), plus realistic cost estimates for weapons, readiness and depot maintenance, the correct figure is \$359.4 billion.

When one adds to that the \$19.4 billion in this budget for the war on terrorism, the total comes to \$378.8 billion out of a \$379.3 billion budget.

That is still a significant investment of the taxpayer's money. We are investing it differently—by accelerating programs we consider transformational. We have also made program adjustments to achieve \$9.3 billion in proposed savings, to be used for transformation and other pressing requirements. At the same time, we are fully funding those areas we must to continue reversing years of under-investment in people, readiness, and modernization.

While it does not correct a decade of under-funding, it is a lot of money. We need to invest that money wisely if we are to accelerate transformation and continue our efforts to reverse years of under-investment in people, readiness, and modernization, while fighting the war on terrorism. Allow me to briefly set forth how the budget addresses each of these challenges.

NEW DEFENSE STRATEGY

The budget before you is driven by the results of last year's defense strategy review. When President Bush took office, he asked the senior civilian and military leaders of the Department to take a hard look at the emerging security environment and consider whether a new defense strategy was needed. Given the questions some posed last year, I must say that it is really quite remarkable what the people of this Department accomplished. In 1 year—2001—the Department has:

- Developed and adopted a new defense strategy;

- Replaced the decade-old two major theater war (MTW) construct for sizing our forces, with a new approach more appropriate for the 21st century;
- Adopted a new approach for balancing risks;
- Reorganized and revitalized the missile defense research and testing program, free of the constraints of the Anti-Ballistic Missile (ABM) Treaty;
- Reorganized the Department to better focus on space capabilities;
- Through the Nuclear Posture Review, adopted a new approach to strategic deterrence that increases our security while reducing our strategic nuclear weapons; and
- Within a week or so we will present to the President a new Unified Command Structure.

We did all this while fighting a war on terrorism. Not a bad start for a defense establishment—military and civilian, executive and legislative, public and private—that is supposedly so resistant to change.

In January of last year, we initiated a series of informal strategic reviews. We found a Department filled with dedicated men and women—uniformed and civilian—who were doing their best under difficult circumstances to maintain the readiness of our Armed Forces. We also found that the pressure to prepare for near-term risks was crowding out efforts to prepare for longer-term challenges. While we found some transformation underway (such as development of the unmanned combat aircraft employed in Afghanistan), we also found some efforts were without clear goals, measures of success, or the necessary resources. We found chronic under-funding of procurement and infrastructure, and a culture that did not seem to embrace or reward innovation.

These reviews helped pave the way for the Quadrennial Defense Review (QDR), during which the senior civilian and military leaders of the Department came to the unanimous conclusion that a new approach was needed for the 21st century. The President's budget has been designed to fund the priorities we identified in the QDR process.

In the QDR, we made three major decisions. First, we decided to move away from the two MTW construct for sizing our forces—an approach that called for maintaining forces, capable of marching on and occupying the capitals of two aggressors at the same time and changing their regimes. That approach served us well in the immediate post-Cold War period, but after a decade it threatened to leave us too narrowly focused on preparing for two specific conflicts, and under-prepared for other contingencies and 21st century challenges.

To ensure we have the resources to prepare for the future, and to address the emerging challenges to homeland security, we needed a more realistic and balanced assessment of our near-term war fighting needs. Instead of maintaining two occupation forces, we will place greater emphasis on deterrence in four critical theaters, backed by the ability to swiftly defeat two aggressors at the same time, while preserving the option for one major offensive to occupy an aggressor's capital and replace his regime. Since neither aggressor would know which conflict would be selected for regime change, the deterrent is undiminished. But by removing the requirement to maintain a second occupation force, we can free up resources for the various lesser contingencies that face us and be able to invest for the future.

Second, to prepare for the future, we decided to move away from the old “threat based” strategy that had dominated our Nation's defense planning for nearly half-a-century, and adopt a new “capabilities based” approach—which focuses less on *who* might threaten us, or *where*, or *when*, and more on how we might be threatened—and what capabilities we need to do to deter and defend against those threats.

Under the new approach, we will develop a portfolio of military capabilities that will not only help us fight and win the wars of the 21st century, but also help to prevent them. Our goal is to influence the decision-making of potential adversaries—to deter them not only from attacking us with existing capabilities, but by demonstrating the futility of potential military competition, to dissuade them from building dangerous new capabilities in the first place.

Third, to put our capabilities-based approach into action, we identified six key transformational goals around which we will focus our defense strategy and develop our force. These are:

- First, to protect the U.S. homeland and our bases overseas;
- Second, to project and sustain power in distant theaters;
- Third, to deny enemies sanctuary—so they know no corner of the world is remote enough, no mountain high enough, no cave or bunker deep enough, no SUV fast enough, to protect them from our reach;

- Fourth, to protect U.S. information networks from attack;
- Fifth, to use information technology to link up different kinds of U.S. forces so they can fight jointly; and
- Sixth, to maintain unhindered access to space—and protect U.S. space capabilities from enemy attack.

We reached these conclusions well before the September 11 attacks on Washington and New York. Our experiences that day, and in the course of the Afghan campaign, have served to validate those conclusions, and to reinforce the importance of moving the U.S. defense posture in these new directions.

In the 21st century, new adversaries may not to be discouraged from attacking us by the traditional means of deterrence that kept the peace during the Cold War—namely, the threat of nuclear retaliation. The terrorists who struck us on September 11 certainly were not deterred.

This is why the President concluded that stability and security in the new century require a new approach to strategic deterrence that enhances our Nation's security while reducing our dependence on nuclear weapons. With the Nuclear Posture Review, we have proposed deep cuts in offensive nuclear forces, combined with strengthened conventional capabilities and a range of new active and passive defenses against weapons of mass destruction (WMD) and all forms of delivery—to be supported by a revitalized defense infrastructure and improved intelligence. This new triad of nuclear, conventional, and defensive capabilities will help deter and defend against the wider range of threats we will face in the decades ahead.

The 2003 budget request is designed to advance each of the six transformational goals. It does so by accelerating funding both for the development of transformational programs—programs that give us entirely new capabilities—as well as by funding modernization programs that support the transformation goals.

The budget requests \$53.9 billion for research, development, test, and evaluation (RDT&E)—a \$5.5 billion increase over fiscal year 2002. It requests \$68.7 billion for procurement—a \$7.6 billion increase. It funds 13 new transformational programs, and accelerates funding for 22 more existing programs.

We have established a new Office of Force Transformation to help drive the transformation process, and have tasked each of the services to develop Service Transformation Roadmaps by the summer of 2002.

All together, transformation programs account for roughly 17 percent of investment funding (RDT&E and procurement) in the President's 2003 budget request—and will rise to 22 percent over the 5 year FYDP.

This is a significant investment in the future. However, the investment in transformation cannot be measured in numbers alone. Transformation is not just about new weapons—it is about new ways of thinking and new ways of fighting. In some cases, it does not involve new capabilities at all.

In Afghanistan, U.S. Special Forces are using a mix of capabilities in ways that had never been tried before, coordinating air strikes with the most advanced precision guided weapons, with cavalry charges by hundreds of Afghan fighters on horseback. The effect has been devastating—and transformational.

The goal is not to transform the entire military in 1 year, or even in one decade. That would be both unnecessary and unwise. Transformation is a process, and, because the world is not static, it is a process that must continue. In short, there will be no point where our forces will have been “transformed.” Rather, we aim to transform between 5–10 percent of the force, turning it into the leading edge of change that will, over time, continue to lead the rest of the force into the 21st century.

We cannot know today precisely where transformation will take us. It is a process that will unfold over time. But we believe we know the directions we want to take the force. Our goal is to move our military from service-centric forces armed with unguided munitions and combat formations that are large and easily observable, manpower intensive, earth-bound capabilities, and transform a growing portion into rapidly-deployable joint-forces made up of less manpower intensive combat formations armed with unmanned, stealthy, precision-guided capabilities, and unmatched space capabilities.

1. Protecting Bases of Operation / Homeland Defense

Even before September 11, the senior civilian and military leaders of the Department had concluded that defending the U.S. homeland from attack, and protecting U.S. forward bases, should be our top priority. For most of our history, thanks to favorable geography and friendly neighbors, U.S. territory was left largely unscathed by foreign aggressors. As we painfully learned on September 11, this will not be the case in the 21st century.

Future adversaries are at this moment developing a range of new capabilities with which to threaten the U.S.: new forms of terrorism, cyber attacks, ballistic missiles, cruise missiles, nuclear, chemical and biological weapons of mass destruction.

To meet our objective of making homeland defense the Department's top priority, the President's 2003 budget funds a number of programs. These include:

- \$300 million to create a Biological Defense Homeland Security Support Program to improve U.S. capabilities to detect and respond to biological attack against the American people and our deployed forces.
- \$7.8 billion for a refocused and revitalized missile defense research and testing program that will explore a wide range of potential technologies that will be unconstrained by the ABM Treaty after June 2002, including:
 - \$623 million for the Patriot PAC III to protect our ground forces from cruise missile and tactical ballistic missile attack;
 - \$3.5 million for the Mobile Tactical High-Energy Laser that can be used by U.S. ground forces to destroy enemy rockets, cruise missiles, artillery and mortar munitions;
 - \$598 million for the Airborne Laser (ABL), a speed of light "directed energy" weapon to attack enemy ballistic missiles in the boost-phase of flight—deterring an adversary's use of WMD since debris would likely land on their own territory;
 - \$534 million for an expanded test-bed for testing missile intercepts; and
 - \$797 million for sea, air, and space-based systems to defeat missiles during their boost phase.

The 2003 budget requests roughly \$8 billion for programs to support defense of the U.S. homeland, and \$45.8 billion over the 5 year FYDP (2003–7)—an increase of 47 percent since 2000.

2. *Denying Enemies Sanctuary*

Another objective of transformation is to deny sanctuary to enemies—to make certain they understand that if they attack the United States, there is no corner of the world remote enough, no mountain high enough, no cave deep enough, no bunker hardened enough, no SUV fast enough for them to escape the reach of the U.S. Armed Forces.

To achieve that objective, we must have the capability to locate, track, and attack—both mobile and fixed targets—any where, any time, at all ranges, and under all weather conditions, 24 hours a day, 7 days a week, 365 days a year. This will require changes in our intelligence collection, analysis, production, and distribution. It also requires development of new capabilities for long-range precision strike—including unmanned capabilities—as well as the ability to insert Special Operations Forces into denied areas and allow them to network with our long-range precision-strike assets.

To achieve this, we must develop new data links for connecting ground forces with air support; new long-range precision strike capabilities; new, long-range, deep penetrating weapons that can reach our adversaries in the caves and hardened bunkers where they hide; and special munitions for underground attack.

The President's 2003 budget funds a number of programs designed to help us meet our objective of denying sanctuary to enemies. They include:

- \$141 million to accelerate development of UAVs with new combat capabilities;
- \$629 million for Global Hawk, a high-altitude unmanned vehicle that provides reconnaissance, surveillance and targeting information. We will procure three Air Force Global Hawks in 2003, and accelerate improvements such as electronics upgrades and improved sensors, and begin development of a maritime version;
- \$91 million for the Space-Based Radar, which will take a range of reconnaissance and targeting missions now performed by aircraft and move them to space, removing the risk to lives and the need for over-flight clearance;
- \$54 million for development of a small diameter bomb, a much smaller, lighter weapon that will allow fighters and bombers to carry more ordnance and thus provide more kills per sortie;
- \$1 billion for conversion of four Trident nuclear submarines into stealthy, high endurance SSGN Strike Submarines that can each carry over 150 Tomahawk cruise missiles and up to 66 Special Operations Forces into denied areas;
- \$30 million for advanced energetic materials and new earth penetrator weapons to attack hardened and deeply buried targets; and

- \$961 million for the DD(X), which replaces the cancelled DD-21 destroyer program and could become the basis of a family of 21st century surface combat ships built around revolutionary stealth, propulsion, and manning technologies. Initial construction of the first DD(X) ship is expected in fiscal year 2005.

The 2003 budget requests \$3.2 billion for programs to support our objective of denying sanctuary to America's adversaries, and \$16.9 billion over the 5 year FYDP (2003-7)—an increase of 157 percent.

3. Projecting Power in Denied Areas

In the 21st century, we will be increasingly called upon to project power across long distances. Today, however, to operate in distant theaters, our forces in many cases depend on vulnerable foreign bases.

Potential adversaries see this—and they will seek to develop new weapons and ways of fighting to keep U.S. forces out of their neighborhoods—so-called “access denial” capabilities. These capabilities could include: saturation attacks with ballistic and cruise missiles to deny U.S. access to overseas bases, airfields and ports; advanced air defense systems to deny U.S. access to hostile airspace; anti-ship cruise missiles, advanced diesel powered subs, sophisticated sea mines to threaten U.S. ability to project Naval and amphibious forces; as well as the use of chemical and biological agents against deployed U.S. forces.

The President's 2003 budget includes increased funds for a number of programs designed to help us project power in “denied” areas. These include:

- \$630 million for an expanded, upgraded military GPS that can help U.S. forces pinpoint their position—and the location of their targets—with unprecedented accuracy;
- \$5 million for research in support of the Future Maritime Preposition Force of new, innovative ships that can receive flown-in personnel and off-load equipment at sea, and support rapid reinforcement of conventional combat operations. Construction of the first ship is planned for fiscal year 2007;
- \$83 million for the development of Unmanned Underwater Vehicles that can clear sea mines and operate without detection in denied areas;
- About \$500 million for the Short Takeoff/Vertical Landing (STOVL) Joint Strike Fighter that does not require large-deck aircraft carriers or full-length runways to takeoff and land;
- \$812 million for 332 Interim Armored Vehicles—protected, highly mobile, and lethal transport for light infantry—enough for one of the Army's transformational Interim Brigade Combat Teams (IBCT). The fiscal year 2003-2007 Future Years Defense Program (FYDP) funds six IBCTs at about \$1.5 billion each;
- \$707 million for the Army's Future Combat System—a family of advanced-technology fighting vehicles that will give future ground forces unmatched battlefield awareness and lethality; and
- \$88 million for new Hypervelocity Missiles that are lighter and smaller (4 ft. long and less than 50 lbs.) and will give lightly armored forces the lethality that only heavy armored forces have today.

The 2003 budget requests \$7.4 billion for programs to support our goal of projecting power over vast distances, and \$53 billion over the 5 year FYDP (2003-7)—an increase of 21 percent.

4. Leveraging Information Technology

Another transformation goal is to leverage rapid advances in information technology to improve the connectivity and joint war fighting capabilities of different types of U.S. forces. The goal is to find new ways to seamlessly connect U.S. forces—in the air, at sea, and on the ground—so they can communicate with each other, instantaneously share information about their location (and the location of the enemy), and all see the same, precise, real-time picture of the battlefield.

The opportunities here to give U.S. forces unparalleled battlefield awareness are impressive—if they can “see” the entire battlefield and the enemy cannot, their ability to win wars grows exponentially. But as our dependence on information networks increases, it creates new vulnerabilities, as adversaries develop new ways of attacking and disrupting U.S. forces—through directed energy weapons and new methods of cyber attack.

The President's 2003 budget funds a number of programs designed to leverage information technology. These include:

- \$172 million to continue development of the Joint Tactical Radio System, a program to give our services a common multi-purpose radio system so they can communicate with each other by voice and with data;
- \$150 million for the “Link-16” Tactical Data Link, a jam-resistant, high-capacity, secure digital communications system that will link tactical commanders to shooters in the air, on the ground, and at sea—providing near real-time data;
- \$29 million for Horizontal Battlefield Digitization that will help give our forces a common operational picture of the battlefield;
- \$61 million for the Warfighter Information Network (WIN-T), the radio-electronic equivalent of the world wide web to provide secure networking capabilities to connect everyone from the boots on the ground to the commanders;
- \$77 million for the “Land Warrior” and soldier modernization program to integrate the small arms carried by our soldiers with high-tech communications, sensors and other equipment to give new lethality to the forces on the ground; and
- \$40 million for Deployable Joint Command and Control—a program for new land- and sea-based joint command and control centers that can be easily relocated as tactical situations require.

The 2003 budget requests \$2.5 billion for programs to support this objective of leveraging information technology, and \$18.6 billion over the 5 year FYDP (2003–7)—an increase of 125 percent.

5. Conducting Effective Information Operations

As information warfare takes an increasingly central role in modern war, our ability to protect our information networks—and to attack and cripple those of adversaries—will be critical to America’s success in combat.

To do so, we must find new ways to more fully integrate information operations with traditional military operations, while developing new computer network defenses, electronic warfare capabilities, and the ability to influence an adversary’s perceptions of the battlefield.

Many of the programs supporting this objective are, for obvious reasons, classified. But the President’s 2003 budget funds a number of programs designed to provide unparalleled advantages in information warfare, such as \$136.5 million for the Automated Intelligence, Surveillance, and Reconnaissance System, a joint ground system that provides next-generation intelligence tasking, processing, exploitation, and reporting capabilities. The 2003 budget requests \$174 million for programs to support this objective—\$773 million over the 5 year FYDP (2003–7)—an increase of 28 percent.

8. Enhancing Space Operations

From the dawn of time, a key to victory on the battlefield has been to control the high ground. Space is the ultimate “high ground.”

One of our top transformational goals, therefore, is to harness the United States’ advantages in space. Space can provide an ability to see what enemies are doing, anywhere in the world “24–7–365”—and to ensure global secure communications for U.S. forces.

This will require moving operations to space, improving the survivability of U.S. space systems, and developing a space infrastructure that assures persistent surveillance and access.

As we become increasingly dependent on space for communications, situational awareness, positioning, navigation, and timing, space will necessarily become an area we have to defend. Adversaries are likely to develop ground-based lasers, space jamming, and “killer” micro-satellites to attack U.S. space assets.

They will do so whether or not we improve U.S. space capabilities—because the U.S. economy and our way of life are growing increasingly dependent on space—making U.S. space assets inviting targets for asymmetric attack. Consider for a moment the chaos that would ensue if an aggressor succeeded in striking our satellite networks: cell phones would go dead; ATM cards would stop functioning; electronic commerce would sputter to a halt; air traffic control systems would go offline, grounding planes and blinding those in the air; and U.S. troops in the field would see their communications jammed and their precision strike weapons would stop working.

Today, in so far as we know, no nation has the capability to wreak such havoc. We must make sure no one can. Our goal is not to bring war into space, but rather to defend against those who would. Protecting U.S. military and commercial assets in space from attack by foreign aggressors must be a priority in the 21st century.

The President's 2003 budget includes funds for a number of programs designed to provide unmatched space capabilities and defenses. These include:

- \$88 million for Space Control Systems that enhance U.S. ground based surveillance radar capabilities and, over time, move those surveillance capabilities into space;
- \$103.1 million for Directed Energy Technology to deny use of enemy electronic equipment with no collateral damage, to provide space control, and to pinpoint battlefield targets for destruction.

The 2003 budget requests about \$200 million to strengthen space capabilities—\$1.5 billion over the 5 year FYDP (2003–7)—an increase of 145 percent.

* * *

Of course, many of the programs I have described support several transformation goals. For example, the Trident-SSGN conversion will help support our goals of operating in access denial environments and denying enemy sanctuary. Together, they represent an emerging portfolio of transformational capabilities that should enable us to defend freedom in the dangerous century ahead.

Again, it is important to emphasize that transformation is not an event—it is an ongoing process, a journey that begins with a transformed “leading edge” force, which, in turn, leads the U.S. Armed Forces into the future.

Moreover, it is not only about changing the capabilities at our disposal, but changing how we think about war. Imagine for a moment that you could go back in time and give a knight in King Arthur's court an M-16. If he takes that weapon, gets back on his horse, and uses the stock to knock his opponent's head, it's not transformational. Transformation occurs when he gets behind a tree and starts shooting.

All the high-tech weapons in the world won't transform the U.S. Armed Forces, unless we also transform the way we train, exercise, think, and fight.

* * *

As we transform for the wars of 2010 and beyond, we must also prepare the forces for wars they may have to fight later in this decade, by improving readiness, increasing procurement and selective modernization.

To advance transformation and deal with the backlog that resulted from the “procurement holiday” of the last decade, we have requested \$68.7 billion for procurement in the 2003 budget request—an increase of 10.6 percent over fiscal year 2002. Procurement is projected to grow steadily over the 5 year FYDP to \$98 billion in fiscal year 2007, and will increasingly fund transformation programs over time.

We have requested \$140 billion for operation and maintenance (O&M) accounts in 2003. This includes substantial funding for the so-called “readiness accounts”—tank miles, steaming days, and flying hours for the Army, Navy, and Air Force—with only minor shortfalls. Funding includes:

- Aircraft operations/flying hours: \$11.8 billion, up from \$11.3 billion in fiscal year 2002;
- Army OPTEMPO: \$3.7 billion, up from \$3.3 billion in fiscal year 2002;
- Ship operations: \$2.4 billion, up from \$2.3 billion in fiscal year 2002;
- Depot maintenance: \$4.8 billion, up from \$4.5 billion in fiscal year 2002;
- and
- Training: \$10.0 billion, up from \$9.4 billion in fiscal year 2002.

PEOPLE/MILITARY PERSONNEL

If we are to win the war on terror, and prepare for the wars of tomorrow—in this decade and beyond—we must take care of the Department's greatest asset: the men and women in uniform. They are doing us proud in Afghanistan and around the world—and today, thanks to their accomplishments in the war on terrorism, morale is high.

But if we want to attract and retain the necessary force over the long haul, we need to know we are looking for talent in an open market place, competing with the private sector for the best young people our Nation has to offer. If we are to attract them to military service, we need to count on their patriotism and willingness to sacrifice to be sure, but we must also provide the proper incentives. They love their country, but they also love their families—and many have children to support, raise, and educate. We ask the men and women in uniform to voluntarily risk their lives to defend us; we should not ask them to forgo adequate pay and subject their families to sub-standard housing as well.

The President's 2003 budget requests \$94.3 billion for military pay and allowances, including \$1.9 billion for an across-the-board 4.1 percent pay raise and \$300 million for the option for targeted pay-raises for mid-grade officers and NCOs. It also includes \$4.2 billion to improve military housing, putting the Department on track to eliminate most substandard housing by 2007—several years sooner than previously planned. It will also lower out-of-pocket housing costs for those living off-base from 11.3 percent today to 7.5 percent in 2003—putting us on track to eliminate all out of pocket housing costs for the men and women in uniform by 2005. The budget also includes \$10 billion for education, training, and recruiting, and \$18.8 billion to cover the most realistic cost estimates of military healthcare.

Together, these investments in people are critical, because smart weapons are worthless to us unless they are in the hands of smart, well-trained soldiers, sailors, airmen, and marines.

COST SAVINGS

While this budget proposes increases in a number of important areas, it also includes a number of terminations. We have proposed terminating a number of programs over the next 5 years that were not in line with the new defense strategy, or which were having program difficulties. These include the DD-21, Navy Area Missile Defense, 18 Army legacy programs, and the Peacekeeper Missile. We also accelerated retirement of a number of aging and expensive to maintain capabilities, such as the F-14 and 1000 Vietnam-era helicopters.

We have focused modernization efforts on programs that support transformation. We restructured certain programs that were not meeting hurdles, such as the V-22 Osprey, Comanche, and Space-based Infrared Radar System (SBIRS) programs. Regarding V-22, the production rate has been slowed while attention is focused on correcting the serious technical problems identified by the blue ribbon panel and a rigorous flight test program is to be conducted to determine whether it is safe and reliable. The restructured programs reflect cost estimates and delivery dates that should be more realistic.

We are working to generate savings and efficiency by managing the Department in a more business-like manner. For example, today, the B-1 bomber cannot operate effectively in combat environment where there is a serious anti-aircraft threat. So the Air Force is reducing the B-1 bomber fleet by about one third, and using the savings to modernize the remaining aircraft with new precision weapons, self-protection systems, and reliability upgrades that will make them suitable for use in future conflicts. This should add some \$1.5 billion of advanced combat capability to today's aging B-1 fleet over the next 5 years—without requiring additional dollars from the taxpayers. These are the kinds of practices we are encouraging throughout the Department.

We are also proceeding toward our goal of a 15 percent reduction in headquarters staffing and the Senior Executive Council is finding additional ways to manage DOD more efficiently.

The budget reflects over \$9 billion in redirected funds from acquisition program changes, management improvements, and other initiatives—savings that help to fund transformation and other pressing requirements.

We would have liked to save more. Several things have held us back. One example was our decision not to make deep cuts in manpower. Before September 11, the services were considering such cuts as trade-offs for other needs. In retrospect we are finding that to fight the war on terrorism and fulfill the many emergency homeland defense responsibilities, we have had to call up over 70,000 guard and Reserves. It is clear now—in the midst of the war on terror, the final dimensions of which are unknown—that it is not the time to cut manpower. Our goal is to avoid having to increase manpower end-strength by refocusing our country's forces, by tightening up on the use of military manpower for non-military purposes, and by phasing down some of the domestic and the many of the international activities that the U.S. military is currently engaged in.

Defense is a manpower intensive business—some 60 percent of defense costs are related to manpower (pay, healthcare, etc.). That leaves only about 40 percent of the operating budget for everything else. So without end-strength cuts, DOD is limited in what can be done.

Second, Congress's decision to put off base-closure for 2 more years means that the Department will have to continue supporting between 20–25 percent more infrastructure than is needed to support the force. I know that members of this Committee worked hard to prevent a delay—and we appreciate that support. But the decision to holdup the process another 2 years will end up costing the taxpayers in the range of \$6 billion annually.

Further, because of the new force protection requirements for forces here in the U.S., DOD is forced to spend to protect 25 percent more bases than we need.

Moreover, we are forced to put off investments in infrastructure replacement because we can't know which bases will be kept and which may be closed. It would have been a waste of the taxpayers' money to invest significant sums in modernizing bases that could eventually be closed.

By putting off modernization, we are making the cost of modernizing more expensive—since the costs of repairing and replacing decrepit facilities grow exponentially each year the investments are put off. So the decision to delay base closure will ultimately be an expensive one for the taxpayers.

We stand by our goal of reducing the replacement rate for DOD facilities from the current and unacceptable 121 years, to a rate of 67 years (which is closer to the commercial standard). We have dedicated some \$20 billion over the 2003–2007 FYDP to this end. But most of those investments had to be delayed until the out-years, when we will know which facilities will be closed.

The 2-year delay in base-closure should not taken as an opportunity to try to “BRAC-proof” certain bases and facilities. Earmarks directing infrastructure spending on facilities that the taxpayers of America don't need and that eventually could be closed would be compounding the waste the delay in BRAC is already causing.

This leads to another area of concern: earmarks. Mr. Chairman, I asked DOD Comptroller Dov Zakheim to check, and he reports to me that last year alone—in the 2002 budget—Congress made changes to 2,022 individual programs and line items. In some cases, Congress either increased or cut requested programs, and in others Congress added funding for un-requested programs.

Congress changed 13 percent of all Research, Development, Test and Evaluation programs—995 different changes in all; 8.6 percent of all procurement programs—436 individual changes; and 15 percent of all military construction programs—146 individual changes.

Now each of these individual changes probably seems modest—and each one is. But in the aggregate, their effect is substantial. We find the Department like Gulliver, with thousands of Lilliputian threads over the Department. No one, individual thread kept Gulliver down. But in the aggregate, he couldn't get up.

Between the 2,000-plus earmarks and changes, and the hundreds of reports Congress requires DOD to prepare every year, we find ourselves killing thousands and thousands of trees, and spending hour after hour trying to figure out how we can do our jobs and show respect for the taxpayers dollars that they deserve.

Mr. Chairman, I don't know quite how it happened, but over the past 2 decades distrust seems to have developed between Congress and the executive branch. Possibly the executive branch did some things that caused distrust in Congress, and Congress has, for whatever reasons, decided that they want to try to micromanage the Department by putting literally thousands of earmarks on the legislation. We need to find a compromise of some sort.

TRADE OFFS

After considering the costs of keeping the Department moving on a straight-line, plus the costs of the war, we have roughly a \$9.8 billion increase. That's a lot of money. But it required us to make a number of difficult trade-offs.

- We were not able to meet our objective of lowering average age of tactical aircraft. However, we are investing in unmanned aircraft, and in the F-22 and JSF, which require significant upfront investments, but will not come on line for several years.
- While the budget proposes faster growth in Science and Technology (S&T), we were not able to meet our goal of 3 percent of the budget.
- We have not been able to fund shipbuilding at replacement rates in 2003—which means we remain on a downward course that, if not unchecked, could reduce the size of the Navy to a clearly unacceptable level in the decades ahead.

The fiscal year 2003 shipbuilding budget is \$8.6 billion and procures 5 ships—two DDG-51 destroyers and one *Virginia* class submarine, one LPD-17 Transport Dock Ship, and one T-AKE Dry Cargo Ship. There are several reasons for this level. One problem involves contractor difficulties. Also, we are forced to fund ongoing programs where, for whatever reasons, cost estimates were too low.

Second, the Navy has made a calculation that, in the short term, we can maintain the required force level at the current procurement rate because the current average age of the fleet is at an acceptable level. Specifically, we are still benefiting from the sizable shipbuilding investments of the 1980s. The Navy concluded that it was more important now to deal with significant needs that had been under-funded in

recent years, such as shortfalls in munitions, spare parts, and steaming hours, which are all fully funded in this budget. Further, the budget would also invest significant sums in SSGN conversion, which do not count in the shipbuilding totals because, while they do provide new capabilities, they do not buy new ships.

To sustain the Navy at acceptable levels, the U.S. needs to build eight or nine ships annually. The proposed Future Years Defense Program budgets for procurement of 5 ships in fiscal year 2004, 7 ships in 2005, 7 ships in 2006, and 10 ships in 2007.

So we have not done everything we hoped to be able to do. But these remain our goals and we intend to get these trends on the upswing in the years ahead.

CONCLUSION

Three hundred seventy-nine billion dollars is a great deal of money. But consider: the New York City comptroller's office has estimated the local economic cost of the September 11 attacks on the city alone will add up to about \$100 billion over the next 3 years. *Money* magazine estimates of the cost of September 11 to the U.S. economy at about \$170 billion last year—and some estimates range as high as \$250 billion a year in lost productivity, sales, jobs, airline revenue, media and advertising, and costlier insurance for homes and businesses.

That is not to mention the cost in human lives and the pain and suffering of so many thousands of Americans who lost husbands and wives, fathers and mothers, sons and daughters, and sisters and brothers that terrible day.

The message is clear: we must invest so our country can deter and defend against the now clear new threats—against those who might wish to attack and kill our people. All together, this proposed defense budget amounts to 3.3 percent of our Nation's Gross Domestic Product. Compared to the cost in lives and treasure if we fail to stop another September 11 or worse, it is cheap at that price.

It is a tragedy repeated throughout history: free nations seem to have difficulty recognizing the need to invest in their Armed Forces until a crisis has already arrived. In 1950—just 5 years after the allied victory in World War II—General Omar Bradley urged President Truman to spend at least \$18 billion on defense. The Joint Chiefs requested an even higher amount at \$23 billion, and the services' estimate was higher still at \$30 billion. But the President concluded the country couldn't "afford" that much—\$15 billion was as much as the U.S. could "afford."

Six months later, the United States was suddenly at war in Korea. Just as suddenly, the President, Congress, and the American people found they could "afford" \$48 billion just fine—a 300 percent increase.

In this time of crisis, let us work together to make the investments necessary to win this war—and to prevent the next one. Let us do so chastened by our experiences on September 11, and with a renewed commitment to ensure that, once the fires burned out, the war ends, and the Nation rebuilds, we won't forget the lessons learned at the cost of so many innocent lives; that we won't go back to old ways of doing things. The lives of our children and grandchildren depend on it. Thank you.

Chairman LEVIN. Thank you, Secretary Rumsfeld.
General Myers.

STATEMENT OF GEN. RICHARD B. MYERS, USAF, CHAIRMAN, JOINT CHIEFS OF STAFF

General MYERS. Mr. Chairman, Senator Warner, other distinguished members of the committee: Thank you very much for the opportunity to appear before you today. It is very much an honor to report on the state of our Nation's Armed Forces.

We are a military force and a Nation at war, and as the Secretary said, the attacks of September 11 shattered the prism through which we all looked at the world. In the span of a few minutes, we confirmed the historic reality that adversaries can strike at us anywhere in the world, even inside our own borders.

When President Bush came to the Pentagon the following day, the assembled troops told him: We are ready, Mr. President. They spoke for themselves and all the men and women of our services. As we found out, they were right.

Take the crew of the U.S.S. *Enterprise*: on their way home from a 6-month deployment, they learned of the attacks. Each man and woman on board felt a shudder as the rudder came hard over and they increased to flank speed and came to a new heading to arrive off the Pakistani coast the next morning.

Or take the young marines of the 15th Marine Expeditionary Unit (MEU) aboard the U.S.S. *Peleliu* off the coast of Australia who began cleaning their weapons, knowing that they could in a short time be fired in combat.

Our bomber crews in receipt of alert orders began planning their strike missions a few days later, and our Army Rangers and Green Berets began to collect detailed intelligence as they received their orders to go fight in Afghanistan.

They were all ready to defend our freedom and to strike back against our Nation's enemies. Fighting together as a joint team, they have achieved much in the first phase of this global war against international terrorism. Like many of you, I visit some of them, and I saw them working hard on the front lines, getting the mission done regardless of the formidable obstacles that they had to overcome. I saw them proudly wearing their country's flag on the sleeves of their desert BDUs and on their flight suits. I saw in their eyes strength, courage, and commitment, and I knew these young Americans would get the job done.

As I talked with them, one message came through loud and clear: This is truly a total force effort. Unless you ask, you do not know whether you are talking to someone from the Reserve or Active component. Many of our Reservists and Guardsmen did not wait to be called up. They volunteered. I heard about one Navy Reservist who sold his business so he could serve without distraction. I think you will agree that these American heroes are unmatched in the world and we have every reason to be proud of them.

When I was a young fighter pilot, I never imagined that some day we would have to fly combat air patrols over Detroit, New York, and many other locations here at home. But that, along with other defensive actions, is exactly what we have done in the 5 months since this war began. These actions on the home front are called Operation Noble Eagle and they include more than 13,000 combat air patrol sorties over the United States, flown by the National Guard, Reserves, Active-Duty, and NATO air crews. The Air Force alone has committed 260 planes and 1,200 airmen flying almost 57,000 hours from 29 different bases.

We have also established a Homeland Security Joint Task Force to provide the command and control of our homeland security task. We are helping our busy Coast Guard by augmenting port security. We also have 7,200 national guard troops at 444 airports and we are protecting many critical infrastructure sites.

Our overseas offensive actions have included air, land, and maritime operations, with three primary objectives: to disrupt and destroy global terrorist organizations; to eliminate safe havens for terrorists; and to prevent access to weapons of mass destruction by terrorist groups.

General Tommy Franks and his entire team have done a tremendous job in Afghanistan with Operation Enduring Freedom and the results so far speak for themselves. Working closely with our coali-

tion partners and Afghan opposition forces, we drove the Taliban from power and severely degraded the al Qaeda network. The plan worked and it continues to work. The Taliban were forced to surrender all major cities to opposition forces, and a number of Taliban and al Qaeda leadership personnel were either killed or captured. We destroyed their training camps, centers, and command and control sites.

For the first time, we combined humanitarian operations with combat operations as we air dropped rations, medical supplies, and shelters, thus helping avert a humanitarian disaster of potentially extraordinary proportions. Our efforts have helped the Afghan people reclaim their lives.

These results have been achieved with about 60,000 deployed troops in the Central Command area and about 4,000 on the ground in Afghanistan. Our success has been enabled by the following key factors: Clear and well-established national security goals; the overwhelming support of the American people; outstanding leadership from the President and the Secretary of Defense; great support from Congress; and close inter-agency coordination; patience in formulating our response to the attacks; great support from our coalition partners and the anti-Taliban forces; good planning from Central Command that was well executed; superb assistance from the services and supporting unified commands, particularly Transformation Command; flexibility and adaptability at the tactical level; and ultimately, our great soldiers, sailors, airmen, marines, and Coast Guardsmen who made it all happen.

But there remains much to do. Even as we continue the long-term effort to win this global war, we must also sustain other global commitments, such as Operation Northern Watch, Operation Southern Watch, other responsibilities in the Persian Gulf, the Balkans peacekeeping mission, and the defense of the Korean Peninsula.

To fulfil our range of commitments and protect our global interests, we must make the investments necessary to maintain the quality of our force while preparing for future challenges of the 21st century. The best means of accomplishing these goals are to improve our joint warfighting capability and transform the Armed Forces into a 21st century force.

With the help of Congress, we have come a long way in recent years toward improving our joint warfighting capabilities. Certainly the operations in Afghanistan are proof of our progress, but there is much more to be done.

To illustrate, let us consider the issue of interoperability. In recent years we have gotten pretty good at making sure that our legacy systems work well together. For example, we took a Cold War anti-submarine platform, the Navy's venerable P-3, put some different data links and sensors on it, and have used it in support of ground units to hunt for Taliban and al Qaeda in Afghanistan. We also used P-3s in tandem with AC-130 gunships, the Joint STARS, and Marine Corps attack helicopters. That they all worked together is a tribute to the ingenuity of all the people involved.

But we need to make sure that new systems are conceived, designed, and produced with joint warfighting requirements in mind. To do that, we need to change our thinking to look at new systems

as interchangeable modules that can plug and play in any situation and in any command arrangement. We have put a lot of effort into interoperability on the tactical level, like the modifications of the P-3 that I just described, but we must also concentrate on the operational level of warfare, where organizational and process improvements are just as important.

The current focus of our efforts and the area with the greatest potential payoff is, I believe, in command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR). By improving our C⁴ISR, we can ensure our commanders have the best information available for rapid battlefield decisionmaking. We have made progress in recent years, but stovepipes continue to cause gaps and seams between our combatant commands and the forces that are provided by the services. These gaps and seams must be eliminated. Close cooperation across the services, combatant commands, and with other government departments is key to success in achieving our national security objectives.

Additionally, we are developing a command and control architecture in our unified commands that will lead to an improved ability to accept and employ forces. We call this architecture the Standing Joint Force Headquarters. This headquarters will provide the combatant commanders the ability to employ an agile and lethal force using the integrated C⁴ISR network that I described earlier and further enhance our joint warfighting capabilities.

The second key to maintaining the quality of our force and preparing for the future challenges is transformation. The Secretary has already laid out for you our transformational goals, but I would like to follow through with a couple of points. For me, transformation is simply fostering changes that result in a dramatic improvement over time in the way a combatant commander wages war. I am convinced that our force structure requires better flexibility and adaptability to achieve our national security objectives in this new international security environment.

Such dramatic improvement requires not only technological change, but most importantly, changes in how we think and how we employ our capabilities to achieve more effective results in less time, with fewer lives lost, and with less cost. True transformation must include training and education, as the Secretary said, and changes in our doctrine and in our organizations.

The second point on transformation is that, while sudden technical, organizational, or doctrinal breakthroughs are possible and should be vigorously pursued, it is important to note that transformation often results from an accumulation of incremental improvements. Let me give you an example. When I was flying F-4s in Vietnam, we lost a lot of airplanes to pilots trying to destroy single targets like bridges and anti-aircraft sites. We had to put a lot of people in harm's way to get the job done because our weapons systems were not very accurate.

So we developed laser-guided bombs and found a way to steer them to the target. Nevertheless, we still had to have relatively good weather because you had to see the target to be able to put the laser-guided bomb on the target. Now, we still needed to put the aircraft in harm's way to keep the bombs on target, but we had achieved, I think, a significant improvement in bombing accuracy.

Now let us think about where we are today. We have bombs that are impervious to the weather conditions, that steer themselves using satellite-generated global positioning system signals. Let me also point out that when the global positioning system was being developed and first deployed, no one was talking about using it for bombing. It was seen as a better navigational tool.

So essentially, we have linked incremental improvements in several different technologies to achieve today our precision strike capability with accuracy that I believe amounts to truly transformational change.

But this transformation is not just about more accurate bombs. The real transformation is in the target set, where we have advanced from needing multiple sorties to strike one target to using one sortie to strike multiple targets. There has also been a transformation in our thinking. Bombs are no longer regarded as solely area weapons. Instead, they can be used like bullets from a rifle, aimed precisely and individually.

The foundation of that breakthrough, laid over 30 years ago in Vietnam, was tactical innovation in the midst of war. On that foundation we have built successive improvements to get where we are today. Of course, we are laying that same foundation of future breakthroughs in the midst of today's war.

For example, the armed unmanned vehicle is a tactical innovation that we are just beginning to explore. We cannot accurately foresee the future for sure, but I am confident we are working on other capabilities that, when you couple them with the improvements of armed unmanned vehicles, have the potential to change significantly the way we fight and perhaps even the nature of warfare itself. That, and similar possibilities, are why I believe that the service recapitalization and modernization programs are so important to transformation.

Members of the committee, I am pleased to say that our forces remain the most powerful and the best trained in the world. Their excellence is due in no small part to your unwavering support of our troops. We have made tremendous strides in recent years providing our people a comprehensive set of quality of life improvements, especially in the areas of pay, housing, and health care. But quality of life also includes adequate training, modern equipment, modern infrastructure, and adequate spare parts.

I ask that we continue to keep faith with both our Active and Reserve component members, as well as our retirees. Sustaining the quality of life of our people is crucial to recruiting and retention, and is especially crucial to our readiness to fight. But more important, it is the right thing to do for our heroes who this very minute are serving in harm's way, defending our freedom. They are the practitioners of joint warfighting and the creators of transformation. They make things happen and should always be our top priority.

The men and women of your Armed Forces are committed to achieving victory no matter how long it takes or where it takes us. They are counting on all of us to provide them the tools they need for success today and tomorrow. They certainly deserve our best effort.

Mr. Chairman, I welcome the opportunity to work with you and the committee as we continue to fight against global terrorism, and I thank you again for the opportunity to be here with you today. I look forward to taking your questions.

[The prepared statement of General Myers follows:]

PREPARED STATEMENT BY GEN. RICHARD B. MYERS, USAF

It is an honor to report to Congress on the state of the U.S. Armed Forces. The United States is engaged in a multi-front war that includes operations in direct defense of our homeland and a sustained military campaign overseas. All elements of our force—Active, Reserve, and National Guard—are taking part in this struggle to maintain the safety and security of our Nation, and the initial results have been promising. While there are relatively few American troops deployed “on the ground” in Afghanistan, it is important to note that a significant percentage of the force is directly engaged in some aspect of the global war on terrorism. At the same time, other threats to U.S. interests remain a part of the strategic environment. Thus, elements of our force are committed to other missions, such as defense of the Korean peninsula, protection of U.S. interests in Southwest Asia, and peacekeeping operations in the Balkans.

With our friends and allies, we continue to gather intelligence and prepare for action against the al Qaeda network and other terrorist organizations that threaten nations around the world. As President Bush has reminded us on several occasions, the global war on terrorism will require great effort over an extended period of time—and it will require all elements of our national power. The U.S. Armed Forces are steeled and ready to engage the enemy for as long as it takes to complete the mission. The threat that we face and the effort that will be required remind me in some ways of the situation faced by the United States after the attack on Pearl Harbor.

While there are significant differences between that global war and this one, there is at least one key lesson to be remembered. During World War II, the services showed a remarkable capacity to learn from experience. At the beginning of the war, they faced conditions they had not prepared for, but managed to adapt themselves in the midst of the fight and within a short time had established an extraordinary degree of teamwork and combat efficiency. We face a similar task today—to defeat multiple enemies who are capable of striking us with asymmetric means from locations around the world. Winning this new global war will require us to exhibit the same flexibility in adapting to changing conditions and considering new technologies and procedures to enhance our combat capabilities. An equally important imperative in the midst of this war is to continue to modernize and transform our force to meet future challenges in this rapidly changing 21st century.

These imperatives dictate my priorities as Chairman—to win the global war on terrorism, to improve the joint warfighting capabilities of the U.S. Armed Forces, and to transform those forces so they are ready to face future challenges. I look forward to working with President Bush, Secretary Rumsfeld, and Congress in the months ahead to achieve these goals and to address other critical issues facing the U.S. military. To keep our forces superior to those of any other nation, we must maintain our quality force today and create the capabilities needed to meet the challenges of tomorrow. Guiding our efforts is the thought of the brave soldiers, sailors, airmen, marines, and coastguardsmen who are defending our way of life and who are counting on us to make the right decisions.

GLOBAL WAR ON TERRORISM

As you well know, we are engaged in only the first phase of the global war on terrorism. In this new kind of war, we face adversaries who refuse to adhere to the norms of international behavior, who have sought access to weapons of mass destruction (WMD), and who have demonstrated both the capacity and the will to use those weapons. Our objectives in this war are simple: to disrupt and destroy global terrorist organizations, eliminate safe havens for terrorists, and prevent access to WMD by terrorist groups.

In response to the terrorist attacks of 11 September 2001, we have been conducting both offensive and defensive operations. The Reserve components have been essential to these actions. As of late January 2002, we had alerted just over 97,000 individuals for activation and completed the call-up of 64,013 people. Additionally, since 11 September, the number of personnel, both Active and Reserve component, deployed to the U.S. Central Command area of responsibility increased from approximately 22,000 to about 60,000.

The direct defense of the American homeland is called Operation Noble Eagle. This operation, comprised of actions to protect civil population centers, critical infrastructure, and special events, began with the dramatic shift in operational focus that the North American Aerospace Defense Command (NORAD) executed on 11 September. When the day began, NORAD's attention was on a large Russian air exercise in the Arctic. As the magnitude of the terrorist attacks quickly became apparent, the command "shifted gears" completely—to prepare to respond to further attacks, establish combat air patrols over key domestic locations, expand air operations, and accept command and control of Active component forces, including U.S. Navy ships with anti-aircraft systems to enhance the security of U.S. domestic airspace. Noble Eagle also includes Coast Guard inspections of cargo vessels and patrols in defense of major sea ports. Additionally, there is widespread augmentation of civil site security with both Active Duty and Reserve component military personnel. Familiar examples of these actions are the 7,200 National Guard troops augmenting security at 444 airports, which will continue at least through March of this year. We have also enhanced security at military and other government installations and for space launch operations at Cape Canaveral. The North American Treaty Organization (NATO) has provided airborne early warning aircraft and combined aircrews to augment our airspace protection activities under Article 5 of the NATO treaty. This has freed U.S. E-3 Airborne Warning and Control System aircraft to prosecute the war in forward areas. We have also established a Homeland Security Joint Task Force (JTF) to coordinate and provide command and control for homeland security operations.

Our offensive operations are labeled Operation Enduring Freedom. These actions include, but are not limited to, ground, air, and naval operations in the Afghan theater and North Arabian Sea; planning and training for follow-on operations; and a host of support activities. In 2001, U.S. forces flew over 16,700 sorties employing over 17,000 precision and freefall munitions in support of operations in Afghanistan. These operations included not only reconnaissance and strike missions, but also simultaneous humanitarian airdrop missions by C-17s flying from Germany.

Operations Noble Eagle and Enduring Freedom have both highlighted many lessons that will be of great use in the subsequent campaigns of this war, as well as in our planning, programming, and transformation efforts. Foremost among them is the importance of versatility and flexibility to achieving operational success. Consider the examples of forward air controllers on horseback and special operations troops transporting their high-tech gear on donkeys to isolated mountain tops from which they directed strikes of precision guided munitions—illustrations of the kind of versatility and flexible thinking that we need to foster.

A second lesson is the ever-increasing importance of operations in the information domain. The actions in Afghanistan highlighted two key aspects of this topic. The first is the importance of a "networked" operations capability. We have continued the process of connecting sensors, shooters, and command and control elements with a single network of voice and data links, without regard to platforms or individual services. We do not yet have this capability complete, but we are making steady progress. For example, in Afghanistan special operations forces (SOF) on the ground guided strikes from both U.S. Navy and Air Force aircraft. Additionally, Navy and Air Force intelligence, surveillance, and reconnaissance (ISR) platforms were able to feed sensor outputs to Marine and SOF ground units, as well as other airborne platforms. We were also able to link real-time inputs from unmanned aerial vehicles to orbiting AC-130 gunships, which then provided responsive and pinpoint fire support to ground operations. These Afghan operations provide a hint of the operational advantages we will gain when this element of the transformation process is more mature.

The second aspect of information operations highlighted by the Afghan campaign is the importance of a well-integrated information campaign. To that end, the Department of Defense (DOD) activated an information operations task force focused on winning the information campaign against global terrorism. This task force is committed to developing, coordinating, deconflicting, and monitoring the delivery of timely, relevant, and effective messages to targeted international audiences.

Additionally, the more we rely on information resources and systems, the greater must be our efforts to protect them. An important step will be the development of military doctrine for Information Assurance/Computer Network Defense. This doctrine will guide our actions in employing safeguards against attacks upon our critical information networks and in detecting, combating, and recovering from cyber attacks as soon as they are attempted.

Finally, another lesson learned with every operation, but that bears repeating, is that the friction and fog of war remain difficult to overcome. Our adversaries are always thinking and reacting in an attempt to increase our difficulties and defeat

our forces. Although we do our best to prevent errors, because human beings make mistakes and mechanical systems sometimes fail, we will never have perfect success—and sometimes will suffer tragic accidents. History tells us these types of difficulties will never be completely eliminated, but we continue to work hard to change this history.

In addition to providing lessons learned, the campaign has reinforced some existing concerns and validated concepts that we have been working on for quite some time. It has had a significant impact on and exacerbated shortfalls in specialized assets and capabilities. It has also added emphasis to the requirement of maintaining an adequate inventory of precision guided munitions (PGM). These weapons are an increasingly important tool for operational commanders across the entire spectrum of conflict. We need to maintain sufficient capability in the industrial base to manufacture adequate quantities of PGMs. We also need to protect our ability to surge to meet increased demands associated with sustained high-tempo operations. We ask for your continued help in building PGM inventories so we may react to future contingencies with our full capability to deliver this lethal combat power.

Other weapon systems that have further validated their potential in Afghanistan are unmanned aerial vehicles (UAV). The increasing importance of these systems in a reconnaissance and surveillance role and their newly demonstrated potential for accomplishing combat missions is unmistakable. We will continue to experiment with additional roles and missions for these vehicles, improve their communications reach-back capabilities, and develop and acquire them at greater rates.

The war has also validated our emphasis on the importance of interagency coordination and cooperation, especially the need for close partnership with both domestic and international law enforcement agencies. On the domestic front, the military will usually act in support of civilian law enforcement and first responders, as has been the case in Operation Noble Eagle. We are working to build strong ties with other government agencies in the areas of training, planning, and operations—and especially in intelligence sharing. We have established a Domestic Threat Working Group with the goal of sharing domestic threat information between the services, Defense Agencies, and Combatant Commanders. This group allows us to properly fuse domestic intelligence related to the antiterrorism effort.

As the war continues, the Armed Forces will remain focused on the fundamental mission of homeland defense. Our enemies have exploited the openness of our society and the very freedoms that we cherish to attack our citizens. To better organize our forces at home and provide support to civil authorities, we are in the midst of modifying the Unified Command Plan to establish a combatant command responsible for homeland security. However, our first line of defense will remain our overseas forces.

On that front, our main effort is the destruction of the al Qaeda network. Continued success toward that goal will require sustained effort as we work with our friends and allies around the world to disrupt, preempt, and prevent terrorist attacks at their source. We have Special Forces troops in the Philippines, training and assisting their forces in antiterrorism efforts—another illustration of the global nature of this war. At the same time we stand ready to plan for and take action against other international terrorist organizations and the Nations that harbor them when ordered to do so. We are working diligently with our friends and allies to prevent the proliferation of WMD and their falling into the hands of terrorist organizations. Our challenge will be to prioritize resources and operations in support of that mission against the other security responsibilities to which we are also committed. We must remain trained and ready to execute the full range of military operations to simultaneously protect the homeland as well as other U.S. interests in the near term, even as we transform our forces to meet future challenges.

IMPROVING JOINT WARFIGHTING CAPABILITIES

The superb warfighting capabilities of the services have given us the winning edge in Operation Enduring Freedom and form the foundation for success against future adversaries. While our forces operating in and near Afghanistan have achieved enormous success on the battlefield, the same operations have revealed that so much more can be accomplished. I look forward to sharing with you after-action reports from Commander in Chief, Allied Forces Central Europe (CINCCENT) and his component and task force commanders for their recommendations regarding improvements to joint warfighting.

Joint warfighting brings the combat capabilities of the services together with a focus on desired effects, resulting in a whole that is greater than the sum of the parts. It is, therefore, imperative that we continue to improve joint warfighting capabilities. We have made great progress in improving those capabilities, especially

since the landmark Goldwater-Nichols legislation of 1986, but there is much still to be accomplished. In pursuing further improvements, there are four areas of particular importance to me: joint command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR); interoperability; joint officer management; and joint experimentation.

Joint C⁴ISR

A cornerstone of joint warfighting is C⁴ISR. Although we have made significant recent improvements, current deficiencies in joint C⁴ISR result in gaps and seams between the combatant commands and between the forces the services provide. These gaps and seams must be eliminated. An adequate joint C⁴ISR capability will provide the necessary flexibility to better integrate diverse capabilities and achieve desired effects.

In terms of command and control, development of a joint force headquarters based on this architecture is essential to improving our ability to rapidly deploy and employ joint forces. The 2001 Quadrennial Defense Review Report discussed the implementation of a standing joint force headquarters within each regional combatant command. Currently, the regional combatant commanders in chief and U.S. Joint Forces Command are developing proposals. Among the options we will examine are deployable joint task force headquarters and the deployable joint command and control systems required to support them. Building on these efforts, we will be able to recommend a standardized model later this year or early next year. I ask for your support of this critical joint warfighting initiative.

Interoperability

The second key to improvements in joint warfighting is interoperability. The ability to fight jointly requires command and control and weapon systems that are interoperable with each other and with those of our coalition partners. The force must have systems conceived, designed, and produced with joint warfighting in mind. We must think in terms of interchangeable modules we can “plug and play” in any situation and any command. These modules can be as simple as individual components. They may be complex like a multi-service ISR network providing data to multiple layers of command at multiple locations. Or they may be planning tools, staff processes, and organizations that are standardized across combatant commands.

Here, too, joint C⁴ISR is a focus for our efforts. We have made important strides, but we are acutely aware of the need to solve remaining interoperability shortfalls in our legacy C⁴ systems. It is critically important that future C⁴ISR systems have interoperable technologies, processes, and products. In terms of C⁴ISR, the necessary “plug and play” capabilities will be designed to facilitate immediate employment and readiness to accept additional forces, execute missions, and integrate multinational and interagency support.

Joint Officer Management

In the long term, a third key to improving joint warfighting capabilities is continued improvements in the management of our joint officers. The quota-based system mandated by the Goldwater-Nichols legislation has served us well; however, joint officer management must evolve to reflect the way we operate in today's environment. To meet future requirements, we need more flexibility than currently exists. I applaud the independent study on joint officer management and professional military education directed by Congress. We are prepared to work closely with you to facilitate continued improvements.

Joint Experimentation

Meaningful improvements in all areas of joint warfighting will require a willingness to question current practices, organizational patterns, and command processes—in essence, continued progress toward significant cultural change. One of the most important means of engendering cultural change is the joint experimentation process. This process is designed to evaluate new missions, devise new force structure, and test new operational concepts. For example, this summer the Millennium Challenge 2002 joint experiment will test the U.S. Joint Forces Command model of the standing joint force headquarters. Joint experimentation also allows us to integrate the experimental concepts and new weapon systems being developed by the services into a joint framework early in the development process. Finally, joint experimentation is a key element of the transformation process, and we are revising the Unified Command Plan to enable U.S. Joint Forces Command to focus more time and effort on experimentation and transformation efforts. Naturally, we need to use the lessons from Operation Enduring Freedom in the joint experimentation

process to ensure we are prepared for subsequent battles in the war against terrorism.

The willingness to examine and change, if necessary, all aspects of joint capabilities is imperative if we are to win the global war on terrorism and surmount other national security challenges of the 21st century. The process of improving joint warfighting is a key component of and is closely intertwined with our transformation efforts. Just as improved joint warfighting capabilities are necessary to succeed against future enemies, so too is transformation of the force a necessity.

TRANSFORMATION OF THE U.S. ARMED FORCES

Transformation is a process of change devoted to maintaining U.S. military superiority in all areas of joint warfighting. It is an on-going process and must be continuous since our enemies will persist in attempts to neutralize or erode our superiority and exploit perceived weaknesses. As history has repeatedly shown, service modernization efforts have often proven to be the key to transformational change. This proved to be the case in World War II when an accumulation of incremental technical advances and tactical lessons, combined with a willingness to experiment, led to significant improvements in combat capabilities. While sudden technological, organizational, or doctrinal breakthroughs are possible and should be pursued vigorously, I believe our current modernization programs and those of the services will prove to be an engine of transformation in the 21st century as well. But we must ensure we are all heading down the same transformation path.

Technological change alone does not lead to transformation—intellectual change is also necessary. Transformation, therefore, must extend beyond weapon systems and materiel to doctrine, organization, training and education, leadership, personnel, and facilities. We need to foster cultural change that allows us to take advantage of both new ideas and new technologies.

Capabilities-Based Approach

Part of the required cultural change entails a transition to a capabilities-based model as the foundation of our transformation efforts. Such an approach does not preclude consideration of specific threats. Indeed, it would be unwise to ignore those nations and organizations that pose a clear danger to U.S. interests. It is, however, appropriate, given the rapidly changing international security environment and the diffused nature of the threats we face, to shift the weight of our considerations away from our historical emphasis on specific threats. The United States cannot know with confidence which nations, combinations of nations, or non-state actors will pose threats to its interests, or those of its allies and friends. It is possible to anticipate with greater accuracy the capabilities that an adversary might employ. Such a capabilities-based model focuses more on how an adversary might fight than on who the adversary might be. It broadens our strategic perspective and requires us to identify the capabilities U.S. military forces will need to deter and defeat a wide variety of adversaries.

Accordingly, an appropriate blueprint for change will include the following important considerations. First, we must base the process of change on an overarching set of capabilities we believe our forces must possess to support the National Security Strategy now and in the future. Second, we need to use those capabilities to guide the development of joint operational concepts and architectures that drive decisions concerning materiel and non-materiel improvements and to establish standards for interoperability. Third, because transformation involves more than fielding new systems, we must integrate requirements for new doctrine, organizations, training and education, leadership, personnel, and facilities into the process. Fourth, we need to find ways to modernize and integrate legacy systems when it makes sense, while developing technological bridges with interagency and international partners. Finally, we must ensure that the transformation process is characterized by unity of effort based on clearly defined roles and responsibilities throughout DOD.

Joint Vision 2020 contains the conceptual outline we will use to help guide these transformation efforts. We will, however, commence a detailed evaluation of the document in the near future with a view toward updating it in light of the results of the 2001 Quadrennial Defense Review, changes to our defense strategy, the global war on terrorism, and strategic guidance from the administration.

Information Capabilities

The area offering the greatest promise for the most significant transformation in the near term is information sharing. The U.S. military is an “information intensive” force. Much of the military superiority we currently enjoy rests on our ability to achieve and maintain a decisive advantage in accessing, gathering, exploiting, and acting on information. The ability to arrive at and implement better decisions,

faster than an opponent can react, rests on the accumulation, processing, and understanding of vast quantities of operational and tactical information.

As mentioned above, we have taken the first steps toward fully integrating our capabilities to find and strike targets of all types, using networks of sensors and shooters to achieve an effects-based targeting capability. Our goal is to allow dispersed forces to collaborate on operations and give our warfighters the ability to achieve desired effects rapidly and decisively—with a speed and accuracy that will overwhelm an adversary's ability to respond. This goal is attainable if we creatively use existing and planned technologies.

Success will depend on several factors. First, we must take advantage of U.S. leadership in information technologies to create networks that allow a coordinated exchange of information among different levels of command and a wide variety of units at ever-increasing rates. Second, we must shift from a reconnaissance to a surveillance approach in gathering information on adversary operations, emphasizing the ability to “watch” or “stare” at targets. Third, we must continue to place an appropriate emphasis on vital information transfers such as voice, video, and data exchanges, and on the ability to operate effectively in areas with primitive or nonexistent communications infrastructure. These requirements drive a growing need for more transmission capability or bandwidth. For example, in Afghanistan we used the maximum available bandwidth, and as we continue the interlinking of networks, our bandwidth requirements are only going to increase. It is also imperative that we continue to hold the line on military radio frequency spectrum allocations. Additionally, adequate investment in communications infrastructure is an absolute necessity. In particular, our reliance on satellite communications capabilities is expanding exponentially, and we need your support in ensuring the Military Satellite Communications program continues to enjoy full funding.

We will also use improved networks of information systems to transform logistics capabilities. By taking advantage of new technologies, improving logistics processes, and fusing information from many different sources, decision support tools will integrate data to make logistics information available to the appropriate commander anywhere in the world. We have already fielded an initial joint decision support capability and have successfully experimented with a shared data environment that provides integrated information from various service legacy systems. This type of logistics capability will provide the joint warfighter with real-time logistics situational awareness and allow us to control and use our logistics assets with greater effectiveness and efficiency.

Finally, continued improvements in all facets of information capabilities are dependent on acquiring, operating, and protecting computer networks. U.S. Space Command has the responsibility for the entire gamut of Computer Network Operations. The command's main areas of effort include reassessing the command and control relationships among Computer Network Attack (CNA) forces, re-evaluating CNA request and approval procedures, developing a Computer Network Defense mission needs statement, acquiring improved indications and warning capabilities for impending information attacks, and focusing all actions toward an effects-based capability.

Force Requirements

Developing better ways to identify, validate, and acquire new systems is essential to effective transformation. To improve the generation of joint warfighting requirements, we initiated actions 2 years ago to improve the Joint Requirements Oversight Council process. Since then, we have established processes to develop, test, and approve joint operational concepts and architectures that will be used to establish and enforce standards for system interoperability. Additionally, we now have a process to implement joint experimentation recommendations and have greatly improved our ability to assess and implement transformation of areas beyond weapon systems and materiel.

As discussed previously, among the most important non-materiel initiatives is the development of a standardized Standing Joint Force Headquarters model. This headquarters will serve as a tool for combatant commanders in chief to improve joint warfighting and better integrate service-provided forces. The development of this model will require us to identify baseline command and control systems and standardized organizational patterns, tactics, techniques, and procedures.

Another important initiative is focused on interagency cooperation. Threats to U.S. national security in the 21st century will, more often than not, require an interagency response. As a result, missions and responsibilities will blur across agency boundaries, and a decisive and timely interagency response to crises will be increasingly important. We recognize the need, therefore, to work closely with non-

DOD agencies of the U.S. government on training, crisis planning, and coalition building.

In terms of materiel changes, the improved accuracy and effectiveness of precision-guided munitions and our ability to match them to a variety of delivery systems have significantly reduced collateral damage and non-combatant casualties while greatly increasing the combat effectiveness and versatility of our forces. They have become integral to the plans prepared by the combatant commanders; therefore, we must ensure our requirements determination and acquisition processes meet this warfighter need. As we continue experiments to evaluate transformational technologies, we will look for weapon systems with similar high-payoff potential.

One development with a high-payoff potential is theater missile defense. Analysis over the last decade has consistently validated the combatant commanders' requirements for a family of missile defense systems. There is a specific requirement for land- and sea-based, lower tier, terminal phase missile defense systems because of their capability against the predominate and growing short-range ballistic missile threat. The fielding of PAC-3 missile defense is an important first step, but only partially covers potential threats. The recent cancellation of the Navy Area Defense program allows us to assess a wider range of options for protection of sea and airports of entry. Additionally, we will continue to evaluate methods of broadening terminal-phase defense beyond a single tier so as to improve operational flexibility and the ability to achieve a sufficient probability of shootdown against the entire range of missile threats.

CRITICAL ISSUES FOR THE U.S. MILITARY

As you consider the specifics of the Fiscal Year 2003 Defense Budget, I would like to bring to your attention a number of issues that are critical to maintaining today's quality force and meeting tomorrow's challenges. The most important of these is supporting our troops.

People

Success in all missions depends on our number one asset—our people. We must continue to keep faith with both our Active and Reserve component members, as well as our retirees. We must keep their trust and confidence by ensuring they are compensated commensurately with their responsibilities and the hardships they face. We also need to ensure they have the tools and facilities they need to accomplish their missions. Collectively, the Joint Chiefs are committed to five quality of life initiatives: pay and compensation, health care, unaccompanied and family housing, infrastructure and workplace improvements, and those base support programs that comprise our community services. This past year's legislation was a large step in the right direction. We are grateful for the hard work of the administration, Congress, and Department of Defense in raising the standard of living and improving the quality of life of our Service members and their families, including the continued congressional support of the Secretary of Defense's initiative to reduce out-of-pocket housing expenses to zero by fiscal year 2005.

I am also grateful for the strong support of Congress in providing a comprehensive, world-class health care program for our active duty and retired service members, and their families. Now, we must ensure the military health care system is fully funded. In view of today's security environment, we also must develop an adequate vaccine production capability and immunization programs, as well as medical surveillance systems that provide early warning of potential threats, enhanced medical data collection, and tracking processes to support the medical aspects of consequence management.

Congressional support of our program to eliminate substandard family and unaccompanied housing has been outstanding. The services have made great strides and, for the most part, remain on track with their plans to achieve this goal by 2007.

We must also commit to reversing the decay of infrastructure and workplaces. Within civilian industry, the replacement, restoration, or modernization of buildings is accomplished in roughly a 50-year cycle. By comparison, the rate of investment in DOD infrastructure has fallen to a level that requires over 100 years for recapitalization. The Fiscal Year 2003 President's Budget significantly increases our out-year infrastructure investment and puts DOD on a path to approach a recapitalization rate of 67 years by 2007. We need to ensure resources are available in the future to adequately sustain, restore, and modernize our facilities.

Finally, community services is a critical quality of life area that is, perhaps, the easiest to overlook, but dollar for dollar, is one of the most effective programs the services provide. Based on the 2001 Quadrennial Defense Review, we are reviewing existing community services programs and policies to ensure we meet the needs of

the changing demographics of military families and keep pace with modern requirements.

Providing better quality of life for our service members and families directly affects recruitment, retention, and family welfare. Personnel and family readiness are inseparable from operational readiness. We have made significant investments over the past several years in the quality of life of our soldiers, sailors, airmen, marines, and coastguardsmen and their families; we must maintain the positive trends we have worked so hard to establish.

Readiness, Modernization, and Recapitalization

The war on terrorism has provided fresh validation of previous readiness assessments. Our forward deployed and first-to-fight forces remain capable of achieving the objectives of our defense strategy. However, we remain concerned about the effects of a sustained high operations tempo on the force, strategic lift and sustainment shortfalls, and shortages of ISR assets, as well as the challenges associated with weapons of mass destruction (WMD), antiterrorism, and force protection. Additionally, in some locations, we face operational limitations that may affect mission success. Usage restrictions and a shortage of training ranges and operating areas contribute to lost or degraded training opportunities, resulting in reduced operational readiness. Recent funding increases have helped address critical readiness concerns, but we must maintain an appropriate balance between near- and long-term readiness initiatives.

One avenue for maintaining that balance is through modernization of our existing forces. The development and procurement of new weapon systems with improved warfighting capabilities leads to incremental improvements that cumulatively may result in transformative changes. Through a sustained and carefully managed process, we can reap the benefits of such an incremental approach while also pursuing more radical technological changes. Modernization thus serves as a hedge against both near-term readiness shortfalls and failures of unproven technologies.

I also remain concerned with recapitalization of older assets. Our older fleet is taking its toll in increased operational costs and reduced equipment availability rates. For example, between fiscal year 1995 and fiscal year 2001, the Air Force's F-15C/D aircraft, at an average age of 17½ years, have experienced an 83 percent increase in cost per flying hour (constant fiscal year 2000 dollars) and a decrease from 81 percent to 77 percent in mission capable rate. Similarly, the Navy's EA-6B aircraft, at an average age of 20 years, have experienced an 80 percent increase in cost per flying hour (constant fiscal year 2000 dollars) and a decrease from 67 percent to 60 percent mission capable rate. For the Army, the M2A2 Bradley Infantry Fighting Vehicle, at an average age of 10½ years, has experienced a 61 percent increase in cost per operating mile (constant fiscal year 2000 dollars) and a decrease from 95 percent to 93 percent in mission capable rate.

We cannot continue to defer procurement as we did over the last decade. Rather, we must accelerate the replacement of aging systems if we are to sustain our capability to meet near-term challenges and all of our 21st century commitments. In conjunction with the service staffs, we have conducted a steady-state procurement estimate that concluded the DOD should spend \$100–110 billion (fiscal year 2001 constant dollars) per year for several years to come to recapitalize today's force structure. The Fiscal Year 2003 President's Budget significantly increases current and outyear procurement investment and puts DOD on a path to approach steady-state procurement. We need your support to continue this real growth in procurement accounts.

Strategic Mobility

Over the past several years, DOD has worked diligently to overcome the shortfalls in strategic lift capability identified in the Mobility Requirements Study-2005. The events of 11 September and the subsequent U.S. military response once again highlighted a requirement to deliver combat forces and their support elements quickly anywhere in the world.

Our strategic lift forces proved themselves capable of supporting a fight in a landlocked country with limited infrastructure, 8,000 miles from the United States; however, we also identified deficiencies that call for resolution. For example, we do not have a sufficient number of C-17s to meet our strategic lift requirements, so procurement of additional aircraft remains our top strategic mobility priority. Our tanker force has significant shortfalls in total numbers of tankers, crew ratios, and maintenance personnel. Additionally, improvements in speed and capacity for inter-theater sealift are not expected to develop in the commercial marketplace so the government will be required to make research and development investments if we are going to derive benefit from emerging technologies in this area.

Personnel Strength

The domestic and overseas commitments of the war on terrorism, when coupled with other ongoing commitments, have stretched our active forces. They also have the potential to stress our Reserve component forces and their patriotic civilian employers who are sharing precious personnel resources that are vital to continued economic recovery. As we move forward in the war on terrorism, we will continue to analyze our end strength requirements and will keep Congress informed regarding the results.

CONCLUSION

I look forward to working closely with Congress this year as we progress toward attaining these goals. We face adversaries who would destroy our way of life. In response, your Armed Forces will not rest until we have achieved victory in the global war on terrorism. At the same time, improving the joint warfighting capabilities of our Armed Forces and transforming those forces are essential if we are to conquer successfully the ever-changing threats and challenges of the future.

In pursuing these goals, we face tough, complex issues—with no easy answers. It is understandable that reasonable people can disagree on both the substance of and the solutions to those issues. The great strength of our form of government is the open dialogue engendered by such disagreements, and one of the privileges of my position is the responsibility of providing military advice to aid that dialogue. The men and women of our Armed Forces are doing a superb job. We owe them our best as we work through these issues. Thank you for the opportunity to present my views and your continued outstanding support of our soldiers, sailors, airmen, marines, and coastguardsmen.

Chairman LEVIN. General Myers, thank you for that powerful statement. Thank you both.

The vote is scheduled to begin just about now. Again, we will try to keep the hearing going right through the vote, some of us leaving early and coming back in time to continue with questions.

Secretary Rumsfeld, the 2003 budget request contains a contingency request of \$10 billion. It is stated to fight the war on terrorism. It is stated very generally. Other than the extraordinary circumstances that prevailed immediately after September 11 last year, Congress has generally not appropriated money in advance for unspecified military activities or contingency operations.

My question is this: As requested, could those funds be used for any activities that the President or you decided to use them for? For instance, could that \$10 billion be used to initiate military operations against any of the three countries specifically identified as terrorist states in the President's State of the Union message without further authorization or action of Congress?

Secretary RUMSFELD. Mr. Chairman, the \$10 billion contingency fund as proposed by the President clearly would not be spent if the United States were not engaged in the war on terrorism at the early part of 2003. Also, it is clear that the amount would have to be more in the event that we were engaged, because the \$10 billion included in the contingency would only provide the current level of effort into the early months of 2003. It would not carry us through the year.

That being the case, if one assumed that we are in roughly the same circumstance we are today, still tracking down al Qaeda and Taliban pockets of resistance in Afghanistan and engaged in activities elsewhere in the world, the dollars would be roughly what we are currently spending. I think it is about \$1.8 or \$1.9 billion a month. So it would carry us through 3, 4, or 5 months. If you disaggregate what the cost of the war, something between 50 percent and 30 percent is in the homeland defense category for combat

air patrols, assistance on our borders and in our airports, and at a host of events, such as the Olympics, and the Super Bowl.

My understanding is that the funds would be used for the war on terrorism that the President has announced. He has indicated that al Qaeda is in some 60 countries, and that the task has to be to root out those terrorists. I do not think there is anything in the budget that contemplates—it is such a relatively small amount of money, given the current demands on us—anything of the size that you are talking about.

Chairman LEVIN. General Myers, there is some confusion as to exactly what our forces will be doing in the Philippines and I would like you to address that issue. The Philippine army units are going out on patrol to find and capture or destroy terrorist elements in the Philippines. One of our commanders there said that our forces will be going into dangerous places.

Can you tell us what the mission is of the forces which are being deployed to the Philippines, and is it likely that they would be involved in what would normally be considered combat operations along with those patrols seeking out those terrorist groups?

General MYERS. Mr. Chairman, I know there has been some confusion over the role that Joint Task Force 510 will play in the Philippines. They are really there to assist the Philippine government and the Philippine Armed Forces in their quest to rid their country of terrorist organizations, in this case specifically the Abasayef group, which we know has some ties to the al Qaeda organization as well.

What we hope to bring to them is some assistance, training, and advice in the areas of command and control, communications, and intelligence analysis and fusion of many sources of intelligence. We will do that, provide that advice and that training, down to the battalion level. This is not an operation like you saw in Afghanistan. This is assistance and this is training.

To answer your other question, is it possible that our forces will come in harm's way. I think the answer to that has to be it is absolutely possible. This is a very dangerous group. They have kidnapped many people over time and they hold two Americans today, as I think we are all pretty well aware of. They have beheaded people, so we shouldn't think that our folks will not be in harm's way.

But this is to assist and advise the Philippine Armed Forces so that they can take the fight to the enemy with our assistance.

Secretary RUMSFELD. Mr. Chairman, may I comment on that?

Chairman LEVIN. Yes. If you would, while you are commenting tell us, given that prospect, will Congress be given notice under the War Powers Act of that prospect?

Secretary RUMSFELD. Let me just first elaborate briefly on General Myers' response. There are really two aspects to the existence of U.S. Armed Forces in the Philippines. One is, as the General indicated, training 4,000 or 5,000 Philippine troops to engage in trying to deal with terrorist groups.

The other is that there may very well be some in the Philippines on an exercise, which is a separable thing. The reason I mention this is because there has been some sensitivity in the Philippines. They have a constitutional provision about foreign forces being in their country for combat purposes. The president of the Philippines

and the Ministry of Defense of the Philippines have been very careful to properly characterize what our role is.

What General Myers addressed is the problem of self-defense. Our troops are involved with assisting and training, with training essentially, and do have rules of engagement that permit them to defend themselves. But they are not there in an active military role, as the President of the Philippines and the Ministry of Defense of the Philippines has indicated.

Chairman LEVIN. My time is up. We will pick up on that because I think there is still some real difference as to the prospect of them engaging in what is normally called combat and what the very purpose of the patrols that they will be joining is, unless you are saying they are not going out on those patrols, that they are going to be limited to a battalion level. If that is what you are saying, that is different because then they are not going out on the patrols that are seeking out to destroy the terrorist groups.

General MYERS. Mr. Chairman, the current plan is that they will advise at this point no lower than the battalion level, so I think your assumptions are correct.

Chairman LEVIN. Senator Hutchinson.

Senator HUTCHINSON. Thank you for calling the hearing today. I want to thank Secretary Rumsfeld and General Myers for the leadership they are providing our country in this war on global terrorism. As I told you before the hearing, Mr. Secretary, I think our country is fortunate to have you and your team at this time of great crisis. I am glad you are there.

The sobering assessment that you have given in recent days in speeches and briefings, as well as the very strong and forceful language that the President appropriately used in the State of the Union address, continues to keep the American people on the alert and aware of the great challenges that we have ahead. This is not a short or easy prospect that we have. I think the assessments that you have given fully justify the kind of budget requests that you have laid out before us today.

You mentioned in your prepared statement, Mr. Secretary, the \$300 million budgeted to create a biological defense homeland security support program to improve U.S. capabilities to detect and respond to biological attack against the American people. I am pleased with that and I want to ask you about it. Biological defense is something that I have been very involved in and concerned about.

I have supported the administration in their desire for national missile defense and its rationale that we must not leave our cities and the American people defenseless against enemy attack. Yet when we look at the area of vaccine production and the possibility of a biological attack, the American people remain defenseless to a large extent against a threat that is arguably greater and more imminent than a missile attack.

General Myers, in your submitted testimony you state that: "In view of today's security environment, we must develop an adequate vaccine production capability." I am very pleased with the recognition of vaccine production as an immediate priority. As we send our troops into combat around the globe, it is critical that they have adequate protection against biological weapons.

It seems to me there has been a growing consensus that the Department needs to establish an organic vaccine production capability, a government-owned/contractor-operated facility (GOCO) as the key to a vaccine acquisition strategy. The Department of Defense recommended this approach twice, including a report that was issued last August. This approach has been endorsed by the Gilmore Commission on Combatting Terrorism. The approach has been endorsed by the Institute of Medicine at the National Academy of Sciences and last year's defense authorization bill included the authority for the Department to go forward with a GOCO.

Mr. Secretary and General Myers, will the Department be moving expeditiously on the planning, design, and construction of a vaccine production facility?

Secretary RUMSFELD. My understanding of the current status is that the Department of Defense has been working closely with the Department of Health and Human Services. The decision as to whether to further fund a GOCO or a contractor-owned contractor-operated—I guess it is “COCO”—production facility is pending the analysis of the national requirement for biodefense vaccines.

Senator HUTCHINSON. General Myers, could you comment?

General MYERS. The only thing I would say, Senator Hutchinson, is that the requirement to have some sort of facility, however it is organized, is well-documented. I think the discussions and the process is going on to figure out the best way to do this. But from my standpoint, the requirement is a valid requirement.

Senator HUTCHINSON. I think that the studies, as I cited them, show that the consensus has been for a GOCO. “COCO” has kind of a funny sound to it. GOCO sounds all right.

Do we have any time frame on when we can expect decisions on which direction we go on an acquisition strategy?

Secretary RUMSFELD. I do not know of a time frame on it. I can check.

[The information follows:]

The Department of Defense has intensified the focus on securing an assured source of safe and effective vaccines for use against biological warfare agents. To that end, DOD has coordinated an assessment of approaches to fulfill this requirement. This assessment included participation from the Department of Health and Human Services, the U.S. Department of Agriculture, the Office of Homeland Security, other federal agencies, and key executives in the pharmaceutical industry.

As a result of this assessment, the DOD is recommending establishment of a high-level executive council, tentatively established with representatives from DOD, HHS, USDA, the Office of Homeland Security, and the President's Science Advisor, to address national vaccine requirements.

Therefore, to allow full development of a national approach, the DOD is reconsidering the need for a government owned, contractor operated (GOCO) contractor owned, contractor operated (COCO) Vaccine Production facility as part of an overall program. Consequently, the current fiscal year 2003 President's budget submission does not include funding for this effort. The recommendations of this new executive council will determine how we proceed with this program in the future.

Senator HUTCHINSON. I would appreciate getting some guidance on that. I think it is a huge issue. We all understand the vulnerability that our forces, and indeed the American people face, to biological attack. It is a huge area of the weapons of mass destruction issue that we have to address, without alarm, or panic. We must move expeditiously because too much time has passed already completing a plethora of studies.

Once again, I want to thank you. I just am very pleased with the kind of forceful and reassuring leadership that you have given our Nation and the American people. Thank you.

Secretary RUMSFELD. Thank you, sir.

Senator WARNER. Mr. Secretary, some members have had to go vote. We apologize for some having to leave, but we want to keep the hearing rolling and use this time.

You and I discussed yesterday at lunch my concern, and indeed I think the concern of many here in America, about the decline in military spending by some of our principal allies, particularly those in the North Atlantic Treaty Organization (NATO). Last week, Secretary Wolfowitz attended the Wehrkunde Conference, where the Secretary General of NATO, Lord Robertson, spoke. We know him well; we have a high respect for him. He was former chief of the defense for the British government.

Robertson said: "Europe has the status of a military pygmy"—strong words—"and is falling farther behind the United States in terms of military capabilities as a result of not investing enough in defense."

Our President, quite properly, is asking for the largest increase in defense spending in two decades, the last of that magnitude being under President Reagan. I think our taxpayers are ready to assume it. A bipartisan spirit exists in Congress. Terrorism is common to all nations in terms of its potential threats.

What can you say to the American public here at this moment as we address this budget on that question?

Secretary RUMSFELD. Senator Warner, it is a question that we all think a lot about and certainly, as a former ambassador to NATO, I have thought about it a good deal in terms of the contributions over the decades. I think it has to be said that during the period of the Cold War our NATO allies were involved and did invest, in varying degrees to be sure, and it did tend to ebb and flow over time. But thanks to the leadership of successive governments on both sides of the Atlantic, we were able to have the kinds of investments that enabled us to prevail in the Cold War.

There are two points I would like to make with respect to this issue. First, with respect to the war on terrorism, we are receiving assistance from a number of countries, both NATO as well as non-NATO countries, in terms of dollars, in-kind contributions, and troops on the ground. I think at U.S. Central Command (CENTCOM) in Tampa, General Franks has approximately 20-plus countries with liaisons actively cooperating in intelligence-sharing, overflight rights, basing rights, troops, ships, and aircraft. There is a coalition that is functioning.

Second, with respect to Lord Robertson's comments, he is basically right. For whatever reason, we are in a period in Europe where a lot of the governments have not been making the kinds of investments in defense that the NATO Council continuously calls on them to do. What is the answer to that? I do not know any better answer than anyone does.

I suspect it is because we understand in this country, to our great credit, that all of our freedoms and opportunities depend on having a relatively peaceful and stable world. It is the Armed Forces of the United States that enables us, along with diplomacy

and economic interaction, to contribute to peace and stability in the world and provide a deterrent to global conflicts.

We also have no choice because at this moment in history our country has a leadership position. It is distinctive. Yet, there is no reason in the world why the European countries cannot do more. No country has to do everything. Those countries are perfectly capable of selecting out areas where they can be particularly helpful, and some have, there is no question about that.

Senator WARNER. If I could interrupt, I think your testimony today quite properly alluded to the tragic loss of life on 9–11, but also the extraordinarily severe impact on our Nation's economy. The figures that you relate today are staggering and should be considered not only here at home as we accept this request of our President for increased defense spending, but clearly abroad. They have the same tall buildings. They have the same vulnerable targets, and it could be at their doorstep next. I hope that those facts you related distressingly this morning will be taken to heart by them.

Mr. Secretary, during the course of our visit to the region over Thanksgiving, Senator Levin and I met General Franks. We also shared four Thanksgiving dinners with our troops in 36 hours, which was quite interesting. We will have General Franks here tomorrow before this committee. General Myers and Secretary Rumsfeld, he has done a brilliant job.

Secretary RUMSFELD. Absolutely.

Senator WARNER. It is extraordinary to have had him in place at this particular point in time.

While I was in that region and visited a carrier myself, I talked to him at length about the importance of our naval ships, which were able to bring platforms from which our aircraft could launch as close as possible to the targets, because of the waters in which they operated. Even in that proximity, as close as they could get, they still had many flying hours. Some of those missions were 4 and 5 hours to get in on target, to be there just 30 minutes or so, and then come back out, with significant refuelings.

Mr. Secretary, I think you are the first Secretary in history to have been a naval aviator. Have you ever checked that out?

Secretary RUMSFELD. No, sir, I have not.

Senator WARNER. Well, I think it is a point of history, having flown off those carriers yourself. I took note that your budget slipped funding for the carrier that has been planned for a number of years. When you look at the funding profile, I think it is not one that will cause any question about the carrier program. But I would like to have your reassurance that the carriers are still an integral part of our shipbuilding program, that this slipping of 1 year to enable technology to catch up with the construction contracts is in no way to be construed as a lessening of support in your Department for the naval aviation component and particularly those of carriers.

Secretary RUMSFELD. No, sir. You have stated it correctly. I believe it is a 1-year slide to the right.

Mr. ZAKHEIM. That is correct.

Secretary RUMSFELD. There is no question but that the Quadrennial Defense Review and the defense planning guidance that went out fully recognizes the importance of carriers in our capability.

Senator WARNER. That Quadrennial Defense Review had 108 active duty surface combatants and 55 attack submarines, and our shipbuilding today will not enable us to maintain those force structures unless we begin to see an increase. I have so indicated to the Secretary of the Navy in my conversations with him yesterday and he gave me the assurance that they are going to address it in the out years.

Now, turning to precision guided missiles, General Myers, in your written testimony you mention that over 17,000 precision and free-fall munitions were employed in support of the operations in Afghanistan. You also mention the importance of maintaining sufficient industrial surge capacity to fill the need for these weapons during the sustained high-tempo operations.

What percentage of the weapons used in Afghanistan were precision guided and does the fiscal year 2003 budget, which you are presenting today, restore and maintain sufficient inventory of these weapons?

General MYERS. Senator Warner, the good news is that both the supplemental for the war on terrorism in 2002 and the 2003 budget do exactly what we need to do in terms of preferred munitions, which in the most case are precision munitions. The problem we found ourselves in is that we had some new munitions coming on board and we had not build up sufficient stocks to cover what all the unified commanders thought they needed for their war plans. We were in the process of doing it. It was kind of the normal process, if you will.

We have significantly increased the funding again in the 2002 supplemental for the war and in the 2003 budget to correct those deficiencies. One of the interesting things we are going to have to look at in the future is that Joint Direct Attack Munitions (JDAMs) quickly became the preferred munition. As I remarked in my statement, those were the global positioning system guided weapons that are useful in any conflict, but particularly useful in this conflict. In fact, we were using almost 3,000 a month during this conflict.

Laser-guided bombs were used heavily as well, about 1,700 a month for those. They are both essentially built by one manufacturer each, and they have some subcomponents that are common to both of them with only one supplier. So we potentially have an industrial base issue. But we have ramped up production and we think the 2003 budget really supports that in all the services the Air Force and the Navy in particular.

Senator WARNER. Do you see our allies moving ahead on guided weapons? That is a key point.

General MYERS. Senator Warner, I think you bring up a very good point. The practical aspect of our allies and our partners underfunding defense is that as time goes on it becomes harder and harder for them to participate with U.S. forces as we get ahead of them in precision guided weapons and our ability to provide the strategic lift, be it sealift or airlift. That is an issue for our allies for sure, particularly in their ability to link with us. I talked about

C⁴ISR. As time goes on, and the smaller their budgets get, we are going to find it very difficult to continue to work with some of these countries.

Now, what the Secretary suggested is that they could specialize. Some nation could decide that strategic airlift could be their specialty and they could help in that regard. But regardless, this is an issue that will become more and more serious. We have transitioned our force. I think in Desert Storm 10 percent of the munitions we dropped were precision munitions and we have essentially flipped that percentage in Afghanistan, where upwards of 90 percent of our munitions were precision munitions. Our allies need to come with us on this journey to provide, as the Secretary said, the defense of freedom, so we do not have to fight these wars.

Secretary RUMSFELD. I think it is worth mentioning that NATO invoked the article that said an attack against one nation is an attack against all, and as we sit here today NATO Airborne Warning and Control Systems (AWACS) are flying over the United States, assisting us with the homeland security aspect of our problem.

We also do not want to lump all the allies together. There is no question that the United Kingdom, for example, has some very capable aspects of their armed services that have been contributing significantly in Operation Enduring Freedom.

General MYERS. Senator Warner, let me correct my number. It is a little greater than 60 percent precision munitions, not 90 percent as I stated.

Chairman LEVIN. Senator Kennedy.

Senator KENNEDY. Thank you very much, Mr. Chairman. I join in welcoming the Secretary and the Chairman to our committee.

Certainly, some things were done right over the last 8 years because our service men and women are performing so well, and we all take our hats off to them.

We have a limited period to ask questions. I am going to give you three, Mr. Secretary. This is not multiple choice. If you can comment on them, I would appreciate it. We will start with a more technical one regarding science and technology. You have said we need the best-trained, best-led, and the best technology, yet your science and technology budget is effectively flat. I am not talking about the research and development budget; I am talking about your science and technology budget. Is this not necessary in terms of where we are going in the future?

Second, if we compare shipbuilding to the Clinton program—they get up to 23 ships and you are at 17 ships. I know there is a difference, not a great deal of difference in the ships, but a rather significant difference. Even with your increase in budget, the shipbuilding budget is really dramatically lower than it was even in the Clinton program, which had a significantly lower defense budget. Perhaps you would want to make some comments. We will hear more from the Secretary.

The third item, and perhaps the one I would hope that you might spend the most time addressing, is that I had the chance to go to Fort Detrick recently and see what the DOD is doing out there in regards to bioterrorism, both in equipping our service men and women with the vaccines and in making recommendations on how to preserve military service members and civilians.

There is a good deal of expertise out there in terms of understanding what the Russians are up to. A number of them have been over with counterparts in the Soviet Union. I would be interested if you would comment on your own sense about the effectiveness of the storage of the various bioterrorism materials in the Soviet Union and how secure they are, as well as the scientists that have been working in those areas. As we are looking at the area of prevention, what are we doing in terms of the budget on the cooperative threat reduction (CTR)? That obviously applies to nuclear weapons, but it also can be used in terms of the bioterrorism.

In your budget, what addresses that? Perhaps you would comment as to what is being done now and what you think should be done.

Secretary RUMSFELD. Yes, sir. I will start and just make a brief comment on the science and technology budget. You are right, it is not up to the level we are aiming for, which is about 3 percent. I think in 2003 we are at about 2.7 percent of the overall budget. It is a very important aspect of the budget. Tradeoffs were made, choices were made, and that is where it came out. But I certainly agree with you that it is important.

Dov, do you want to comment?

Mr. ZAKHEIM. Sure. On the numbers, we tend to look at what our request is compared to the immediately prior request, simply because there are a number of programs that Congress chooses to add. Just to have an apples to apples comparison we look at what we asked for in the previous year. We are up by over \$1 billion relative to the previous year. We are actually slightly up even if one includes the congressional add-ons that took place in fiscal year 2002, although it is a small amount, something like \$13 million.

But more important in terms of the percentages, Senator, is that, even though our baseline is so much larger because of the increase, we are actually slightly above percentage-wise relative to what we asked for a year ago. A year ago we were at 2.65 percent. Now we are at 2.68 percent. So we are headed toward the 3 percent goal. We are maintaining that goal even though the baseline is larger.

Senator KENNEDY. Just quickly because my time will be up, I was looking at really the science and technology rather than the total research and development budget.

Mr. ZAKHEIM. That is what I am referring to.

Senator KENNEDY. As I understand it, you have gone from \$8.8 billion to \$9.9 billion.

Mr. ZAKHEIM. That is right.

Senator KENNEDY. It is effectively flat and I think I have answered the question on it. I think it leads on into making sure we are going to have the cutting edge.

Mr. ZAKHEIM. Yes, but that is \$1 billion, sir, which is not really flat. It is about over \$8.8 billion. It is quite a significant increase when you are talking about \$1.1 billion, sir.

Senator KENNEDY. On the ships, Mr. Secretary?

Secretary RUMSFELD. Yes, sir. As I mentioned in my opening remarks and in the prepared statement, the Navy made some choices during this budget cycle that were based on their conclusion that, because the average age of ships in the Navy is relatively young because of the sizable number of purchases during the buildup pe-

riod of the 1980s, they were better off making choices that tilted their funds toward the operation and maintenance accounts and toward some aviation accounts.

They recognized that we cannot sustain the current size of the Navy if we are building ships at the rate that this current budget proposes, and this budget is down, I believe, about a billion dollars in shipbuilding. Therefore, if you look in the future year defense plan (FYDP), we do get up to 10 ships in the last year and I believe 6, 7, or 8 in the middle years, which will begin to correct the problem.

There were bills from prior shipbuilding contracts that were much larger than had been programmed in that budget, and I believe that was something in excess of \$600 million that we are paying this year for ships that were being budgeted in prior years. So we are having to pay off these overruns that existed.

Do you want to comment additionally?

Mr. ZAKHEIM. Yes, sir. On the prior year contracts, Senator, if you took what we put in the 2002 budget for prior year shipbuilding, which was about \$730 million, and you add what the Secretary just mentioned, about \$645 million, you could have bought at least one ship and maybe two. The decision was made that we really needed to clean up our past act first. That goes to the heart of what we are trying to do with realistic budgeting and to have a better baseline from which to build more ships.

As the Secretary said, because we have a fleet that is about 16 years old on average, it gives us a little bit of time to both clean up the past and get ready for the future.

Senator KENNEDY. I appreciate it. I know the time is running down, particularly where there are a number of the older ships, such as the auxiliary ships and other resupply ships. But I appreciate your comment and we will have a chance to talk to the Secretary about it.

On the questions on the bioterrorism, Mr. Secretary?

Secretary RUMSFELD. Dov, why do you not respond on that.

Mr. ZAKHEIM. Sure. Senator, we are funding the CTR program you referred to, commonly called Nunn-Lugar, at \$416 million, which is roughly what we funded it at last year. Not all the money in the past has been expended and there has been a considerable buildup of unexpended funds.

Many people have argued for that reason that we should not have put more money in. The administration and the Secretary felt that it was terribly important to keep funding CTR to send a message that we were prepared to do exactly what you were talking about. That is why we have maintained the level.

Secretary RUMSFELD. With respect to the last part of your question, Senator Kennedy, we have to worry about the biological weapons and capabilities of Russia and how they are managed and how they are handled. We clearly have to worry about the people that were involved in developing those capabilities because they are available to other countries to assist. It is a very serious problem.

Senator KENNEDY. My time is up. I will send you just a brief note on that if I could, about some of the observations we have made out there, for whatever consideration you have.

Secretary RUMSFELD. Good. Thank you.

Senator KENNEDY. Thank you very much. At this point, I would like to submit my opening statement for the record.

[The prepared statement of Senator Kennedy follows:]

PREPARED STATEMENT BY SENATOR EDWARD M. KENNEDY

Thank you, Mr. Chairman. I join in welcoming Secretary Rumsfeld and General Myers, and I look forward to their testimony on the Fiscal Year 2003 Defense Budget.

I know I speak for all of us when I express our vast appreciation and respect for all the men and women in the Armed Forces who are fighting to uphold our values and to keep us free. Our first priority—indeed our number one responsibility—is to ensure that our Armed Forces have the resources to complete their mission.

I fully support the President's goals of winning the war on terror and defending the homeland. I am concerned, however, that the large budget increase—the largest in over 20 years—is spent wisely on systems and new technologies that will improve our military's combat readiness. Additionally, it is unclear how this year's budget will be used to achieve the Department's transformation goals outlined in the quadrennial defense review. I am also concerned with the large national missile defense budget, particularly in light of current threat estimates. I look forward to hearing your comments on these areas.

People must continue to be our number one priority. Recruiting, training, equipping, and retaining a technologically superior force will be the cornerstone of transforming our military and maintaining our superiority. I am pleased with the progress we have made in improving military pay, housing, and medical care and I look forward to closely working with the Department to continue these efforts.

The key to our defense policy has been the ability to deter a potential adversary and should deterrence fail, our ability to fight and win. Deterrence may best be achieved through investments in science and technology. We should carefully study lessons learned from current operations to ensure we invest in the right systems and technologies to maintain our superiority in the future. We must improve our ability to gather, process, and disseminate intelligence information and convert that into knowledge for the warfighters. Our people deserve the very best intelligence. Our capability to understand and dissuade potential adversaries demands this.

Should deterrence fail we must develop and maintain the capability to fight and win any future war. While this requires significant investments in transformational technologies and systems, we must also continue to modernize and procure systems to support our existing force structure. I would like to see more emphasis on ensuring adequate airlift and sealift capability that is essential to get our forces and equipment to the fight. I am also deeply concerned with our shipbuilding plan. I do not feel it adequately addresses the requirements necessary to support the forward presence strategy outlined in the QDR.

The outstanding performance of our forces in Operation Enduring Freedom has validated the hard work and important decisions the Department and Congress have made with our past defense budgets. Now more than ever we must think to the future to ensure we maintain our readiness and enhance our technological edge. I look forward to working closely with you, Secretary Rumsfeld and General Myers, in the months ahead on these complex issues.

Senator KENNEDY. Senator Inhofe.

Senator INHOFE. Thank you very much, Mr. Chairman.

Let me first of all say that there is going to be some criticisms as to the level of the defense budget. There are a lot of us who feel that even what you have sent to us is still inadequate in many areas, as I think was pointed out by Senator Kennedy. I have some of these areas that I am very much concerned about.

I have to say that I just returned in the last 5 days from Ramstein, Aviano, Vicenza, Camp Eagle in Bosnia, Camp Darby way down in the southern part of Italy, and the hospital at Landstuhl. The reason was that back when Republicans were important, I was the chairman of the Readiness and Management Support Subcommittee for about 6 years and so I have an orientation toward readiness. I have to say that in all cases we have a

very high OPTEMPO. I think we all know that. We have a high level of dependency upon Guard and Reserves.

I want to share something with you. At the hospital at Landstuhl, where all of those who are injured in the Afghan effort are immediately transferred to, I talked to a number of the troops who are over there, who are injured, and who are really paying a high price. Specialist Justin Bingool of the 10th Mountain Division was crushed in an earthmoving effort over there. Chief Warrant Officer Fred Pellino of the 101st, along with Corporal Eldridge of the 101st, were both in that helicopter accident, which was a very tragic thing. Lastly, Seaman Latoya Stennis—oddly enough, the same name—was on the U.S.S. *Stennis*, and she was an entry level seaman who was swept off in a refueling accident from the *Stennis* in the Afghan theater.

Just imagine being swept off, falling 66 feet into the water down below, and crushing both lungs. All four of these servicemembers said that their first concern was to get back with their unit. All four said, as did everyone else I talked to, those who were injured, that they were going to be career. I just cannot tell you how moving it is when we talk to these individuals. I know that you have done that, both of you, General Myers and Secretary Rumsfeld.

But at the same time, while Senator Kennedy brought out some of the inadequacies of the budget, I see force structure as an inadequacy. These people are willing to do it now, but we know, and you have said many times, that this is going to be a long and sustained effort. We are using our Guard and Reserve to a point where we are losing some real critical military occupational specialties (MOSs). They do not want to leave, but they have to do it because these people, by their very nature, are maintaining a career.

Since we are flat in our force structure—and I know that you would probably agree with me that we should be increasing it in the regular services—I would like to have your comments on that. If you do not feel we need to increase it, what we can do in terms of the problem that we are having with Guard and Reserve. They are doing a great job, but some of them just cannot continue with these deployments.

Secretary RUMSFELD. Senator Inhofe, I share your feelings after visiting our troops and certainly thank you for your many visits to the troops. I know they are appreciated by the men and women you visit, as well as the rest of us.

General Myers properly talked about the fact that this is a total force effort, and indeed it is. I mentioned that we have some 60,000 Guard and Reserve and another 10,000 people that are being held in, for a total of 70,000 that in the normal order of things would not be involved in the activities of the U.S. Armed Forces absent the war on terrorism.

We are doing a variety of things to deal with it. For one thing, every time we get a homeland security request for the use of Guard and Reserve, what we have done is we have required that there be an exit strategy. So when they say they need men and women from the Armed Forces to go and handle the airport security, INS, or Customs, all of which they are, in each instance we have said: Look, those are basically civilian responsibilities and they should be handled by civilians; we are willing to help at the outset, but

we need an exit strategy; and we need to be shown a plan where these organizations are going to establish training programs and get the right number of people that they need to do the jobs that need to be done.

We feel that at least a non-trivial portion of the total is a temporary situation. Second, we are hopeful that we can reduce the demand on strip alerts and combat air patrols at some point in the period ahead. It varies with the threat assessment.

The other thing I would say is that I have been making an effort, and I must say it is not easy, but making an effort to try to reduce some of the U.S. forces that are around the world in places like the Sinai and Iceland. We have been pulling down the number of troops along with our allies in Bosnia in a very responsible, measured rate, so that we can get others to backfill behind us in some of those activities.

I agree with you that right now there is a very high OPTEMPO and PERSTEMPO and we need to recognize the stress it puts on people.

Senator INHOFE. Mr. Secretary, I really do appreciate the stress that puts on people and that we are going to have to pull people in from other areas. I agree with you, it is going to be necessary.

The week before, I spent some time on the two ships that will be deployed with the U.S.S. *Kennedy* from the east coast when the time comes. I am talking about the U.S.S. *Whitney* and the U.S.S. *Wasp*. One of the things that I found was that, while they had a chance to have inert training on Vieques they all came to the conclusion that they need unified training.

Now, we passed in the section 1049 of the National Defense Authorization Act for Fiscal Year 2002 language that says that we will continue our training on Vieques as it has been in the past 50 years until such time as we get the certification of both the Chief of Naval Operations (CNO) and the Commandant, which has not happened. Now, let us keep in mind that all of those out there had come to the conclusion that we were lucky enough in this deployment to have training, even though it was inert training, and that we would not have had adequate training without that; and number two, it would have been better and our troops would be better trained if we had had live fire training.

What are your plans to address that specific section of the fiscal year 2002 authorization bill?

Secretary RUMSFELD. I am going to ask that the Secretary of the Navy and the Chief of Naval Operations respond more fully. But I do note here that the decision to train the U.S.S. *Kennedy* off the east coast rather than in Puerto Rico was made by the operational commander responsible for training the Atlantic Naval Forces. In response to the war on terrorism, we have had to modify the normal rhythms of deployment, upkeep, and predeployment training.

Apparently, the Commander in Chief, Atlantic Fleet (CINCLANTFLT) decided to save transit time at sea by conducting the final training close to home port, and they used the saved days to focus on other predeployment issues facing the U.S.S. *Kennedy*.

Senator INHOFE. Rather than have General Myers comment on that, General Myers, you stated——

Senator KENNEDY. The Senator's time has——

Senator INHOFE. Mr. Chairman, let me get one more question in here; is that all right?

General Myers, you stated that you noted a negative impact on the operational readiness caused by the usage restrictions and shortage of training areas and ranges. That is exactly what we are talking about here. If we were to lose this, this will have a domino effect on all ranges and all services, not just Navy and Marine Corps as we are talking about right now.

Are you concerned about these, as you comment in your statement here? Do you not believe that this would have a negative effect on other ranges?

General MYERS. Senator Inhofe, I think what I am most concerned about is when we deploy carrier battle groups that they be trained and ready. I am worried about encroachment of training areas not only in the continental United States, but elsewhere in the world, because we have to be trained to be a ready force.

In this particular case, like the Secretary said, I think this is primarily a Navy issue, and they are going to have to figure out if there are alternative ways to train. Any time we lose any training space though, we are not getting more of it, so it is only going to be a subtraction. But there are other ways we can hope to train.

If I can tag onto that just a little bit on the end strength question, I know the services will come in with some end strength requests. I have not seen those yet, but we are all concerned about those. We spend a lot of resources for force protection, both here at home and abroad. I think clearly that is an area that is susceptible to solving some of our issues with technology and not being so manpower-intensive. So I think that is one of the things we can look at in terms of end strength.

There are also some transformational initiatives, going back to your earlier question, that I think will hopefully save us some manpower. We have to look for those efficiencies at the same time as we look for legitimate requests for end strength increases.

Senator INHOFE. I would only ask that you do confer with those responsible for the training, that was the non-unified training that was taking place, just to get their input. I think it is very important that you do that. Thank you.

Senator KENNEDY. Senator Byrd.

Senator BYRD. Mr. Chairman and Mr. Secretary: I join in everything that has been said by all parties, expressing accolades to you and, in particular, to our service men and women. I have been very impressed with your performance as Secretary of Defense. I have seen a good many secretaries of defense. You are one of the best during my 50 years here in Congress. You have been forthright in your press conferences. I have viewed them, having been greatly impressed by your common sense approach and by your frank and up-front responses to questions.

I am fully supportive of what we are doing in the war on terrorism up to this point. I have lived a long time and I will have served half a century in this body at the completion of this year. I have been a hawk for 50 years here in Congress. When I first came to Congress, I was opposed to the entry of Red China into the United Nations. I fought it. I supported appropriations for the war in Vietnam. I was with Generalissimo Chiang Kai-Shek and the Madam

on their wedding anniversary in 1955 on the island of Formosa. We do not hear that name cast about much any more.

I was the last hawk to leave Vietnam. As the Democratic whip in a Democratically-controlled Senate, I offered an amendment supporting President Nixon in his efforts to bomb the Viet Cong enclaves in Cambodia because men were coming out of those enclaves and killing our men in Vietnam. I supported that against my then-Majority Leader, the late Mike Mansfield.

So I think I have pretty good credentials. I join in the accolades, as I say. I am concerned as to where we are going. I am concerned not just with today or tomorrow, but with a year from now, 2 years from now, 3 years from now, 4 years from now.

I think that under our Constitution we have a duty to ask questions. The President said at the Citadel 2 years ago: "Sending our military on vague, aimless, and endless deployments is the swift solvent of morale. I will replace diffuse commitments with focused ones. I will replace uncertain missions with well-defined ones. We must be selective in the use of our military precisely because America has other great responsibilities that cannot be slighted or compromised."

Now, as a member of the United States Senate, as a Senator from the State of West Virginia, as chairman of the Appropriations Committee in the Senate, I have a duty to look ahead and try to see where we are going. The President is a very popular man at this moment. So was his father in Desert Storm. Fame is a vapor, popularity an accident. Riches take wings. Those who cheer today may curse tomorrow. I think we as Senators have to keep these things in mind.

We need to ask questions. We have other great responsibilities that cannot be slighted or compromised. I am thinking of the baby boom generation. They are looking forward to the Social Security program. They are looking forward to Medicare. Our aging population is looking forward to drug prescriptions. We have great problems out there. Yet we have in this budget only a 2 percent increase for domestic discretionary programs generally speaking.

Now, our time is very limited. I could ask many questions. Let me ask just two or three. I will ask them all at once and give you an opportunity to answer if you will. We say that we are spending \$1 billion a month. We spent \$7 billion in Vietnam in 4 months. We have a budget here that is going to spend over \$1 billion a day on defense. Defense is the first priority of any nation. I do not take a back seat on that. I have supported defense programs. Practically every weapon system that has ever been thought of, I have been a supporter of it. So you are not looking at a naysayer, Mr. Secretary.

But when we say we are going to bring these people to justice, we have already spent \$7 billion; whom have we brought to justice thus far? When we say we are going to go into the caves, we are going to run them out of the caves, we are going to keep them on the run and there is no place to hide until we win victory, my question is what is victory? What is victory?

So let me ask two or three questions. What is our goal in the war on terrorism? Is it to topple regimes that support terrorism? How will we know when we are winning victory? How will we know?

You said just a few days ago that there will not be a signing ceremony on the U.S.S. *Missouri* to signal the end of the war on terrorism. But what will victory look like? How will I as John Q. Citizen know that I have accomplished my objective? What is the objective beyond what has been said: We will keep them on the run, we will run them down, they cannot hide, we will bring them to justice, victory will be ours. What is victory? What is going to be our standard of measurement?

Also, the President in his State of the Union Address singled out Iran, Iraq, and North Korea. He said: "All nations should know America will do what is necessary to ensure our Nation's security. We will be deliberate. Yet time is not on our side. I will not wait on events while dangers gather. I will not stand by as peril grows closer and closer."

Now, what does this mean? How about North Korea? The President included North Korea in his axis of evil. I wonder if the President has the authority to send U.S. troops into North Korea on the strength of the September 14 resolution?

These are questions which I will ask. Now, it may be that you will not be able to answer these today. Maybe you will not have the time. But the questions ought to be asked. I have a responsibility to ask these questions, and I hope that we Senators will keep in mind this Constitution, which I hold in my hand. Yes, President Bush is the Commander in Chief, but take a look at this Constitution and see what powers this Constitution gives a Commander in Chief. Take a look also at the congressional powers in section 8.

Let us not forget this Constitution. We are in a conflict now and we intend to win, but when will we know when we have won? How many more years will we be appropriating at the rate of a billion dollars a day, when we have the baby boom generation looking at it?

We who are here are going to have to answer these questions. It may be the popular thing today to say "me too." So I say "me too," but I also say that "me too" has a responsibility under this Constitution to look to other responsibilities to which the President referred in his speech at the Citadel, "other great responsibilities."

So if I may just ask those two or three questions. Let me ask them again so that we will be clear: What is our goal? What is our goal in the war on terrorism, number one? How will we know when we have achieved our goal? What will victory look like? Finally, the specific question: How about North Korea, which the President included in his axis of evil? Do you believe that the President has the authority to send U.S. troops into North Korea on the strength of the September 14 resolution, for which I voted? I thank you.

Secretary RUMSFELD. Thank you, Senator Byrd, for your comments and your questions. There is no question that the defense request is an enormous amount of money. However, the fact is that it is about 3.3 percent of our gross domestic product. It is a much smaller demand today than it has been during my adult lifetime in terms of use of funds for defense purposes as opposed to non-defense purposes.

As a percentage of the Federal budget, it is down from over 50 percent to about 16.9 percent. So it is demanding a smaller per-

centage even though, as you point out, it is a much larger total number of dollars.

Those questions are important questions, and I quite agree that it is appropriate for members of the House and the Senate to pose them and to pose them vigorously. I will do my best to respond to the first one, as to what is the goal. The goal is to recognize that we are living in a dramatically different period than we did in my time in Washington, dating back to the 1950s.

We had a big margin for error in those days, when weapons had shorter reach and less power. There were not multiple nations with weapons of mass destruction. Today we have a very modest margin for error. An error today, with the existence of weapons of mass destruction, changes the effects dramatically. So we cannot afford to make a mistake.

It seems to me the goal is to recognize that the nexus between weapons of mass destruction and terrorist states that have those weapons and that have relationships with terrorist networks is a particularly dangerous circumstance for the world. You know that well and that was the essence of the President's State of the Union address.

How will we know when we have won, so to speak? It is a very difficult thing to say, because there are not armies, navies, and air forces arrayed against each other. Instead, there are these terrorist networks that are hiding out there. We know thousands and thousands were trained in these terrorist training camps in 4, 5, 6, 8, or 10 countries. We know that they are well trained, and we have seen the training manuals that taught them and we saw the skill that was demonstrated on September 11.

The complexity and difficulty of the problem is that we are putting pressure on them. You said we are chasing them, we are running them to ground, we are trying to root them out. That is true, and it is part of the law enforcement effort that is taking place. All across the globe, people are being arrested, people are being interrogated, intelligence information is being gathered, and intelligence information is being shared.

The cumulative effect of the pressure that is being put on these—bank accounts are being closed. We are chasing them out of Afghanistan. We have other countries making arrests. Singapore just made a series of arrests that very likely stopped some very serious terrorist acts. All of that pressure is making life very difficult for those people. They are not going to be as successful in terrorizing and killing innocent people as they would otherwise have been.

So how do we know when we have succeeded? I suppose we will know we have succeeded when our collective free world intelligence-gathering apparatus tells us that, in fact, countries are no longer harboring terrorists, that the countries where these terrorists have found haven have decided it is not in their interest to do that, countries like Iran, Iraq, Syria, Sudan, Somalia, and Libya, and all the others that have been on the terrorist list. Everyone knows those countries. They are no longer harboring terrorists; fewer people give money to terrorist organizations; fewer recruits are signed up by terrorist organizations; more people are fleeing terrorist organizations; and more people are functioning with a heightened degree of awareness and sensitivity, turning in people

that in fact look like they may be engaged in terrorist acts. We have had some good success there.

Is it as simple as World War II? No, it is not. It is much more complex. I appreciate your question.

With respect to North Korea, I do not know that I can answer that question effectively. Obviously, these are judgments that the President of the United States makes. We do know certain things about North Korea. We know that they have probably 100,000 to 200,000 people in detention camps, that they are repressing their people, and that they are starving their people. We know they have a very active weapons of mass destruction program, including chemical, biological, and nuclear weapons. We know that they will sell almost anything to anyone on the face of the earth for hard currency, and they do it. They do it every single day.

I would submit that the President's State of the Union message was very likely to let the world know what I just said: people best be careful about spreading weapons of mass destruction to terrorist networks, as the North Korean government has been wont to do.

Senator BYRD. Mr. Secretary, I have greatly overextended my time. Thank you very much.

Secretary RUMSFELD. Thank you, sir.

Senator KENNEDY. Senator Sessions.

Senator SESSIONS. Thank you, Senator Kennedy.

I serve under Senator Kennedy on the Subcommittee on Seapower and we have some real interest on those issues. I would like to join his expression of concern.

I also want to, I know as Senator Kennedy intended, to try to take a look at where we are in seapower and what we can do to strengthen that.

Mr. Secretary, we have come a long way since September 11. Our Nation was in shock and in a state of real unease. Through President Bush's vigorous leadership, the professional leadership of General Myers, and the effort of all the men and women in uniform, we have a good vision about where we need to go as a Nation. I salute you for it.

I never thought that we could guarantee that Osama bin Laden would be captured and you made that clear from day one. But one thing that both the President and you said was that nations and governments that harbor him are going to be in big trouble. The Taliban, that government that harbored bin Laden, allowed him to operate and plan his attack on the United States to kill innocent American citizens, has fallen. It no longer exists, and I salute you for achieving that. I think that was very important as a signal to the world of the seriousness with which the United States takes these kind of activities.

I am hopeful other nations in the future will think twice if they were to consider allowing terrorists to operate from within their countries or in fact support them directly.

I say that with great appreciation for the leadership that you have given us. I also was a strong supporter of your initial vision for defense, that we must transform our Defense Department. President Bush said there may be generations of technology that we could leap. We never have enough money to do everything that

we need to do. It is essential that we be as creative and as technologically advanced as possible.

I am very appreciative of your commitment to transform our Defense Department, which was clear and unequivocal before September 11. I am sure that within the vast Defense Department, the defense contracting crew, and the politicians here in Congress, there is objections all along the way.

My question to you is, after this military effort, after seeing at least this face of what a modern battlefield might look like, are you more or less convinced that we need to transform and what are some of your ideas in that regard?

Secretary RUMSFELD. Thank you very much, Senator Sessions.

There is no question of the many hours that General Myers and I spend together with the chiefs and with the senior officials in the Department. But what has taken place in Afghanistan has underlined and underpinned the efforts that we have been engaged in with respect to transformation. We have seen significant changes from the Desert Storm to Kosovo to Afghanistan, and it has pointed up the importance of information, battlefield, and situational awareness. It has pointed up the importance of connectivity and interoperability, as General Myers said in his opening statement.

It has, in my view, underlined the importance of seeing that we exercise and train like we fight, and we are taking steps to see that we do a better job of that.

I think that it is probably true of every war, every conflict, that you immediately begin the process of saying what are the lessons to be learned. We have started that already. Even though we are far from finished in Afghanistan and we have a lot more to do with respect to the war on terror, we have begun that process of trying to capture the important things that we have experienced already.

I would say one thing about transformation. There is a tendency for all of us to think of it in terms of a weapons system or a new unique way of doing something. I think of it also in terms of people. General Richard Myers, General Peter Pace, and General John Jumper are three individuals that have very recently been placed in their posts by the President of the United States. All of us had discussions about transformation during the decisionmaking process as to who should be the new chairman and who should be the vice chairman.

We now have 6 to 10 combatant commander openings coming up in the next 12 months. I would hazard a guess that 5 years from now, looking back, we will say that the single most transformational thing we did was to select those people. They will then fashion their staffs and their key people and they will be involved in the promotions of the people under them. Those decisions that are going to be made in the next 12 months will affect the United States of America for the next decade and a half.

Senator SESSIONS. I think the American people have had an unusual opportunity to see you and your leadership style, and they have great confidence in you and your vision for our Defense Department. I think that there is a window of opportunity here. I hope that you will push it. Please know that I would like to support you in it.

There are a number of issues on seapower that I am wrestling with. I am not exactly sure what the right number of ships should be for our Navy, but we need to know that. We need to know whether or not we can use some aging ships. We are decommissioning ships with projected life spans of 10 years or more left. I am not sure that is wise.

We know that it takes three ships to keep one ship on station. Perhaps we can do a better job of forward-deploying or forward-stationing ships, and increase our effective ship force structure in that regard.

There are a number of things that we could do there. Mr. Secretary, I would just ask if you are going to be looking at some of these potential changes that could effectively allow us to have more ships deployed than we have today, without maybe building as many new ships as we would like to build.

Secretary RUMSFELD. Senator Sessions, thank you so much for your support on transformation and your generous comments. There has been the beginning of an analysis of shipbuilding and the size of the Navy, that is coming close to being completed, I believe—

Mr. ZAKHEIM. That is correct, sir.

Secretary RUMSFELD. It has not been presented to me, but it addresses the issues that you, Senator Collins, Senator Warner, and so many others who have such an active interest in shipbuilding and the importance of the Navy and seapower have raised. I do not know the answer to your question as to reactivating ships. It is going to be a part of that study and I expect to be briefed on that some time in the period right ahead.

I do know that there is not anyone involved in the Navy that made the recommendations for this particular shipbuilding budget, which we have all agreed is skinny. Everyone agrees that the number of ships, if you did a straight line projection using five ships a year, results in an unacceptably small Navy. There is just no question about that.

We have no intention of doing that. As I believe came up in the discussion with Senator Warner, the fact is that the average age of our ships is relatively young. I think it is 15 or 16 years and that is why the Navy made the choice they made. We can afford for a year or two to be underbuilding, as long as we recognize that in the out years we simply must get back up to the 7 to 10 level.

In the meantime, we have to do a good job with respect to the shipyards of recognizing the importance of the industrial base and finding ways to balance the tasks that need to be done by way of engineering and other aspects of shipbuilding, even though we are living in a period with relatively low number of total ships.

Senator SESSIONS. Just briefly, would you comment: Do you believe that the importance of dominance in space and unmanned vehicles is adequately addressed in this budget? Have you provided increases for those two areas that I think are clearly proven to be essential for the modern battlefield?

Secretary RUMSFELD. I am personally satisfied that we have addressed the space issue in a responsible way. We have the kinds of increases that are going to be necessary to assure that we do not persist over a sustained period of time with a high degree of vul-

nerability, which realistically a country that is that dependent on space has to face.

On the second part of your question, with respect the UAVs, the Department of Defense has fashioned the phrase "low density, high demand assets." What that means is that there is a lot of demand for them and we did not buy enough of them. It is kind of a euphemism for, "We did not have our priorities exactly right."

We are living in a period where that is a fact. We did not have our priorities quite right. We do not have enough of these aircraft. They have done a superb job, not just in Afghanistan, but in a variety of other intelligence-gathering activities. In this budget we have substantially increased the funding for unmanned vehicles and, life being what it is, it is going to take some time. Right now, not a week goes by that General Myers and I are not confronted by a combatant commander in some part of the world who is asking for additional unmanned aerial vehicles. We are in fact forced to deny them because there simply are not enough to go around.

We are building them as rapidly as possible. Dov, you may want to comment on the specific dollars here.

Mr. ZAKHEIM. Certainly, sir.

Senator, we are spending close to a billion dollars this year on unmanned vehicles, which is a significant ramp-up, as you well know, from where we were. For Global Hawk, which everyone has read about, the very long-range UAV, we will be spending in excess of \$600 million. We are developing a new combat air vehicle, which essentially is a pilotless attack plane, but developed from the start that way. That is in excess of \$140 million. Predator, which again everyone has heard about, is the UAV workhorse of Afghanistan and is funded at \$150 million alone.

So you have a major commitment that I think is unprecedented in the DOD.

Senator SESSIONS. Thank you.

Secretary RUMSFELD. It is not just for new aircraft, either. There is modernization taking place with respect to UAVs. We have lost a number of Predators because of weather and icing and we have lost a Global Hawk. We lost some because of control difficulties. We have some of these vehicles that are not armed, of course, and we are looking at different ways to improve their capabilities. We are also looking at some different sensors with respect to these aircraft.

So it is an important area. It has been underlined by the Afghan situation and we are putting some beef behind it.

Senator SESSIONS. Thank you. I think that is a good direction.

Thank you, Mr. Chairman.

[The prepared statement of Senator Sessions follows:]

PREPARED STATEMENT BY SENATOR JEFF SESSIONS

Mr. Chairman, I want to thank you for calling this hearing to receive the testimony of these two patriots about the future of our Armed Forces. I can't think of two more important people to testify during this critical time in our Nation's history, a time when we again find ourselves at war. Senator Warner, I appreciate your leadership as well and your insights on the many defense and national security issues facing our Nation during this war on terrorism.

Mr. Secretary and General Meyers, thank you both for your leadership. During this current crisis you each have shown vision and perseverance while also leading the transformation of the Department of Defense. I, along with all Americans, deeply appreciate your continued leadership during Operation Enduring Freedom.

The President's Fiscal Year 2003 Budget submission is based on his determination, and our's in Congress, to win the war on terrorism, and to protect the American people and our homeland from attack. It also includes a significant down payment on the transformation objectives which were articulated in the Quadrennial Defense Review. But, as you said during your remarks at the National Defense University last week, Mr. Secretary, transformation is as much a change in mindset, as it is acquiring new technology. The highly trained, professional members of our Armed Forces can and have innovatively employed older systems like B-52s which, coupled with our most advanced weapons and sensors, produced devastating results on the battlefield. These results can only be achieved by approaching our requirements and acquisition decisions with a capabilities-based mindset.

The Air Force, for instance, espoused a new organizational concept last week that calls for developing "ad-hoc task forces" which are tailored to provide specific effects-based capabilities required by the warfighting CINCs. I am sure that the use of B-52s loaded out with precision guided munitions as an on-call close air support weapon in Afghanistan was not something that was envisioned prior to the conflict. But the adoption of this tactic was driven by specific effects required by the CINC. I applaud this direct approach to solving problems and truly hope that this type of innovative thinking can be brought to bear not only on future battlefields, but also on other issues that the Department of Defense faces.

Our current world-wide war against terrorism has also served to highlight the efficacy of having Naval forces forward deployed and ready to strike on call from the Commander in Chief. Our Navy-Marine Corps team was able to decisively influence the war on the ground in a landlocked country from ships on station 800 miles away.

On a trip I took early last month to Japan to visit the Seventh Fleet, I was briefed on the aircraft carrier *Kitty Hawk's* unannounced and rapid deployment in support of Enduring Freedom. *Kitty Hawk's* ability to provide a mobile base for special operations forces is an example of the flexibility and transformation capability of naval forces at sea. While in Japan, I visited the U.S.S. *O'Brien*, a *Spruance* class destroyer. *O'Brien* is a 25-year-old ship that had just returned from combat operations. *O'Brien* was in excellent condition, completed all missions assigned to her and, according to her Commanding Officer and crew, has a lot of service life left. The Navy's plan to retire a significant number of these destroyers before the end of their planned service life causes me to be concerned that the Navy will be drawing its forces down below the QDR level. As we have heard in previous testimony, the burden of inadequate numbers of ships falls on the shoulders of our men and women in uniform. This brings me to one thing that concerns me about the President's Budget, and that is what appears to be the lack of funding in the shipbuilding account.

I think we may need to look at new ways to keep our ships forward in theater and supporting the CINCs. We can do this by swapping crews of ships already deployed, increasing the number of ships that are homeported overseas, or by pre-positioning warships in a minimally manned status in strategic areas much like we do with our pre-positioned logistical supplies in Diego Garcia and other areas.

Finally, the Army, particularly its Special Operations Forces, have performed superbly in the war against terrorism. We all can be very proud of them. I am excited about the transformational strides this service is considering. New equipment like the Interim Armored Vehicle, which will be rolled out in April at Anniston Army Depot in Alabama, and the Future Combat System will ensure that the Army continues to move towards a lighter, more lethal, force that is able to be deployed on short notice to support any of the warfighting CINCs. I am also immensely pleased with the progress that is being made at the home of Army Aviation, Fort Rucker, Alabama. Army Aviation will continue to play a key role in the war on terrorism, and the superb training that is being conducted at Fort Rucker will continue to be critical to the successful conduct of the war. One item I observed during a visit 2 weeks ago is a necessity for advanced simulators and advanced simulator technology. I can only wonder if more hours in advanced simulators could have helped mitigate the recent spate of aviation accidents which have occurred in Southwest Asia. I feel that more advanced simulators are vital for the professionals at Fort Rucker and I hope this fiscal year 2003 budget and those in the future will fund the simulators Army Aviation needs.

Once again, I'd like to thank you gentlemen for your comments today. I don't think the Nation could have asked for two more dedicated and talented professionals to lead us through the war on terrorism. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Sessions.
Senator Dayton.

Senator DAYTON. Thank you, Mr. Chairman.

Mr. Secretary, General, I want to join with the others in paying tribute to you, to the President, to your military commands, and to our men and women of the Armed Forces for the very successful prosecution of this war in Afghanistan.

Along with others in the Senate, I was in Afghanistan, Uzbekistan, and other countries in Central Asia in January. General Myers, I had the same kind of reaction as you expressed in your testimony to learning of Reservists with whom I had lunch who had volunteered for that duty and whose morale was extraordinarily high. I think their degree of professionalism and commitment is extraordinary. Obviously, as you both outlined, the superiority of the military operation and the advances that have been made even subsequent to the Gulf War have been very impressive. They have had the kind of devastating results that we want to demonstrate to the rest of the world as a consequence of the kind of heinous acts that were perpetrated on the United States in September.

It is not my purpose here to debate the past, but given that success, I think I would like the hearing record to not reflect, at least not without some questioning, the aspersions that have been cast upon the previous administration. Reference has been made to a procurement holiday in the 1990s, which, if I believe the record is accurate, Mr. Secretary, the procurement budget that your administration inherited for 2001 was in excess of \$55 billion. If, as you say, we lived in the 1990s off of the investments made in the 1980s, then it seems to me that you have to give some recognition to the fact that whatever level of preparedness and effectiveness we have today is at least in some part a result of investments that were made during the 1990s.

That is not to say that more does not need to be done. I would not quarrel with your observation there. I think you and the President deserve due credit for both last year and this year sending that message loud and clear. As Senator Warner has indicated, there was bipartisan support last year and I believe there will be strong bipartisan support this year to doing whatever must be done.

But I think it would be unfair not to realize or acknowledge that some of this technological and coordinated superiority that we have seen demonstrated is a result of the previous administration.

I also think it is important in a context that does pertain to the future because, as Senator Byrd and others have noted, we and the administration also have to make some very critical choices in terms of our allocation of resources that are going to have real and long-term consequences for this Nation. President Clinton perhaps can be faulted, as was said here, for overshooting the mark in terms of reducing defense expenditures overall. But he also succeeded in reversing years of deficit spending and bequeathed to the Nation 4 years of budget surpluses.

I give President Bush credit because from what I can tell the 10-year budget is presented very forthrightly in terms of its assumptions and its dollars. I think he has done a service because he has set forth clearly the critical choices that he has made and that this Congress is going to stand to review.

The military increases that are being proposed, while they are necessary, essential, and unavoidable in the context of what occurred to this Nation on September 11, also have very real consequences for our Nation's financial security. I think it is in that context that this committee will have to be making its own decisions about this budget request.

Last year, the Office of Management and Budget (OMB) projected on-budget surpluses every year for the next 10 years totaling \$841 billion. Now, 1 year later, OMB is projecting on-budget deficits for the next 10 years of almost \$1.5 trillion.

The unified budget including the Social Security and Medicare trust funds, which I think is somewhat disingenuous, what I call sort of the Federal Government's version of Enron accounting, even there the total unified surplus has dropped by \$2.5 trillion over the next 10 years, down to a \$1 trillion level. This means that the Social Security and Medicare trust fund surpluses are funding these on-budget expenditures, which include defense along with all of our other functions of government, to the amount of \$1.5 trillion over this decade. That means \$1.5 trillion that is not going to pay down our national debt. It means arguably that in 10 years we will be less financially secure as a Nation as a result of these critical choices.

As we have learned today, what you are proposing to spend is not enough to do everything that needs to be done. I just want to emphasize what I believe is the need to make some very critical choices in terms of how much money can we afford to spend on the military and still have that level of preparedness that we need. We must recognize that every dollar spent there is going to be one dollar less somewhere. It is going to be less either for other domestic programs or in drawing down our Social Security and Medicare trust fund surpluses which are going to impact our long-term security.

So I guess my preamble here has exhausted my time, and I will be respectful of my time. But I do want to just conclude with one question. It picks up on something that Senator Inhofe said about Reservists and National Guard. I am very concerned, since Minnesota has a large contingent of Reservists and National Guard participating, in the inequities in the treatment of their pay and benefits to the active services.

I want to just ask, in general, can we be assured that these pay and other benefit improvements, which I commend you for in your recommendations, will include also the Reserves and National Guard to the same degree as the Active Forces?

Secretary RUMSFELD. Mr. Chairman, I just would like to make a brief comment. What you say, Senator Dayton, is of course correct. The weapons systems that are invested in in one period take years to be procured, acquired, developed, built, tested, and deployed. When I was Secretary of Defense in the 1970s, I was involved in the rollout for the F-16. We still have it. I approved the M-1 tank. We still have one. The B-1 bomber was in its earliest days.

Every administration, every president, and every congress has available to them to contribute to peace and stability in the world not what they do during their time in office, but only what was

done by their predecessors, and not simply their predecessors of 4 years or 8 years, but their predecessors of 20 and 25, and in the case of B-52s, 30 or 35 years. That is a truth.

I would add that there is practically nothing that this administration will ask Congress to invest in that will benefit this President during this term. The lags are too long, the times are too great. The legacy forces we are living with and we are dealing with were the result of decisions made by Congresses and presidents that go back up to four decades. I agree with that. I do not think anyone can contest it.

Chairman LEVIN. Thank you very much.

Senator BUNNING.

Senator BUNNING. Thank you, Mr. Chairman.

I would like to associate myself with Senator Sessions' remarks. I am sorry he is gone. But I also would like to go back to our success in Afghanistan. We combined our forces with the in-country forces, the Northern Alliance and the Southern Alliance, in assisting to run out the Taliban, which we did successfully. I would say that is a major accomplishment for the U.S. military. The U.S. military is capable of doing a heck of a lot more than just that.

But I look at the al Qaeda results, the terrorist results other than the destruction of training camps, and the main people that are in charge, and you cannot tell me today whether they are alive or dead or where they are at. If we are going to spend a billion plus dollars a month, we ought to be able to do that. We ought to know one way or the other if Osama bin Laden is in Somalia or if he is in Iraq. We ought to know where his second of command is.

Most, it seems like, al Qaeda leadership have escaped and now—you are shaking your head no, that is not true. Maybe you know more than I do?

Secretary RUMSFELD. Who is shaking?

Senator BUNNING. No? Well, most of them seem to have escaped and left Afghanistan and are in other countries planning destruction again. We ought to be able to centralize our forces with others to make sure that that does not happen.

You have come to us to ask approval of almost \$380 billion worth of expenditures. I would like to have a little more assurance that you are going to finish the job that you started after September 11.

Let me just give you one example that is in the budget that I have difficulty with. You said you are going to centralize aircraft and the F-22 was going to be an aircraft that the Army, Navy, and any other forces could use. Now, you have requested in your budget additional aircraft for each and every service. Maybe you can help me out. Is it because it is available? Is it because the F-22 is down the road too far? When we were going to go and get a unified aircraft that all the services could use, why are you requesting money for additional planes, as you just discussed, even the unarmed or unmanned planes? You just talked about that.

In spite of the fact that we were successful with the Taliban, tell us more? Where are we going?

Secretary RUMSFELD. Thank you, Senator. I will take a stab at it. I think it may be a little early to describe the situation in Afghanistan as a success, in this sense. You are quite right, the Taliban is no longer governing that country, but there are still

pockets of Taliban there. There are still al Qaeda there, and there are still al Qaeda and Taliban just over the borders of that country, and it is still a very dangerous situation.

It has been 4 months since September 11 and it has been a month less since October 7, when General Tommy Franks and the Central Command began the operation in Afghanistan. It is not over. I wish I could say it is over in Afghanistan.

Senator BUNNING. I did not say it was over. I just would like an update.

Secretary RUMSFELD. I am saying I wish I could say it was over. It is not and we have work to do still.

First of all, the task in my view has been to put enough pressure on terrorists and countries that harbor terrorists that they have difficulty recruiting, financing, organizing, and engaging in terrorist acts. Now, I do not doubt for a minute but that you are right, that they are out there planning additional terrorist acts right now. I agree with that.

I would say that the pressure that has been put on, not just by our country but by countries across the globe, through law enforcement, on their bank accounts. Pressure in Afghanistan and in other places is making life very difficult for them. It is much more expensive for them to try to do their planning, and we have disrupted things.

With respect to the aircraft, it is the Joint Strike Fighter that was to have the version for each of the services and the F-22 is earlier in the queue and is an Air Force aircraft. Possibly General Myers would want to comment on it, but I think that we will find that when the Joint Strike Fighter moves through its paces and its tests and its funding and is finally brought on line—when is that expected to be, the Joint Strike Fighter, do you recall?

General MYERS. We are only just getting started. I think it is about—

Secretary RUMSFELD. It is in the very early stages.

General MYERS.—about 2010, sir.

Secretary RUMSFELD. Something like 2010 for the Joint Strike Fighter. That is the aircraft that would have a version for each.

Senator BUNNING. Each individual service.

I want to hold on with you because my time has almost expired. It was brought up before: with respect to Iraq, Iran, North Korea, when do you act when you absolutely know that they have weapons of mass destruction and they are capable of delivering them?

Secretary RUMSFELD. Senator, those are judgments for the President and Congress. There is no question but that countries that have weapons of mass destruction and are capable of delivering them and are active as a terrorist state, so to speak, have relationships with terrorist networks. There is no question but that they pose a threat to the world. The President's State of the Union address and his comments underlined that very clearly.

Senator BUNNING. Thank you.

Chairman LEVIN. Thank you, Senator Bunning.

Senator REED.

Senator REED. Thank you, Mr. Chairman.

Secretary Rumsfeld, Dr. Zakheim, and Chairman Myers, thank you very much, not only for your testimony this morning, but for

your distinguished leadership in very difficult times, leadership that is not only a function of competence but also great character. I thank you for that.

Secretary RUMSFELD. Thank you.

Senator REED. Like many of my colleagues, I had the occasion to travel to the theater of operations to visit troops in Afghanistan. General Myers and Mr. Secretary, I share the same deep respect and profound regard for what they have done.

I must say also I am particularly pleased at the leadership provided by some of my classmates, General Hagenbeck in the 10th Mountain Division, General Dailey in the Special Operations Forces, and a near classmate, General Cody in the 101st. Obviously, the sorting system works very well in the Army. They are commanding divisions and I am here.

But one concern I have is that we are reaching a critical set of decisions about the follow-on to our very successful military operations. We have all pledged a long-term commitment to Afghanistan, but I think there is a reluctance, perhaps caused by political aversion, to the notion of nation-building and committing our forces to detailed planning for a military transition.

The military international force is scheduled for about 6 months. The British are commanding now. The Turks would like to take over. But my fear is that at that point, at some point in the near future, we will run into a situation where we have not made an effective transition.

I would say in that context that any international force must rely upon the United States to participate, perhaps not putting troops on the ground, but in logistics, intelligence, and coordination with Central Command. Mr. Secretary, I guess the question comes down to this: Are you convinced that detailed planning is under way for a smooth transition so that we will not find ourselves in a situation where forces are drawn down, international components refuse to cooperate, or we do not have an effective coordination with those forces?

Secretary RUMSFELD. Senator Reed, thank you. The question is truly an important one. What the President, myself, and General Myers have done is asked Central Command to send a modest team in to do an assessment with Fahim Khan, the interim defense minister, and with the Karzai interim government. We want to take a look at the existing proposals, and they are plural, at this stage for an Afghan national military, as opposed to what we have now where we have these different warlords with forces that are left over from the anti-Taliban effort.

That work is starting immediately. There are a variety of ways of approaching it. I do not know what will be decided or what will be recommended by this assessment team, but I do know they are going to be coming back to General Franks, then General Myers, then to me, and ultimately we will go to the President.

We have every intention of trying to be very helpful in the development of a national Afghan army. It could be a big help to us if they had such a series of units that could then go out and help us track down the Taliban and al Qaeda pockets. That could do a better job on the borders and contribute to stability in the country.

That is one piece of the answer to your question. The other piece is the international security force, and that is of course unnatural, to have foreign forces in your country on a long-term basis. So the preference is to try to see that the Afghan government develops its own ability to provide for stability in the country, recognizing, as your question does and as we do, that that is not likely to happen quickly and there is a continued need for the international security assistance force.

You correctly point out that we are involved in it. We are assisting with intelligence, logistics, and a quick reaction force in the event there is a problem. We are already working with the United Kingdom as the lead during the interim period to develop the country that will become the lead when the UK steps out. I do not know over what period of time the UK will continue to lead, but they are a very responsible military and country. I have every reason to believe that they will manage the transition to the new leader, whoever it may be, whichever country it might be, in a proper way and that we will be working with them to try to see that the requested number of ISAF forces are available.

It is a very dangerous country, as many of you know. You have been there. There are a lot of land mines, criminals, and leftover Taliban and al Qaeda, and people are getting killed. It requires a security force and we are at the task that you have cited.

Senator REED. Mr. Secretary, it seems to me that the tasks that you have indicated are not going to be accomplished within a few months, perhaps not even a few years. We have a situation where we are implicitly committing to a multi-year stay, but we only have an international force that has been stood up for about 6 months, maybe a little longer.

I think that disconnect not only will cause operational problems down the road, but also undercut our statements that we are there for the long term. As long as you have a notion that you can take public a consistent ongoing support for this international police force or international military force, I think that would be helpful on two fronts.

I would like you to respond. I notice my time has expired and I will cease.

Secretary RUMSFELD. Yes, sir. I think when you use the phrase we are there for the long term, it is in relationship with the Afghan government. I would not want it thought that we are there from a military standpoint for the long term, because those are judgments that have to be made down the road. Obviously, we have a good deal of other demands on our forces.

That is why we were so pleased that the United Kingdom took up the international security assistance force and that people are stepping forward now to develop their own force.

Senator REED. Thank you.

Chairman LEVIN. Thank you very much.

Senator Allard.

Senator ALLARD. Mr. Chairman, thank you.

Mr. Secretary, I would like to compliment you on a very courageous budget. I know it is not easy to put together this kind of budget. We talk about flexibility and mobility in our Armed Forces, but we do not talk about flexibility and mobility perhaps in a more

fundamental aspect of this process, and that is the budget, where you have to look at some older programs that perhaps do not serve us too well and look at newer programs which don't have not much of a constituency in Congress. So on that basis, I think you have put forward a very courageous budget.

I have also noted that on the Space Commission report, you talked about the vulnerability of U.S. space assets. In your nomination hearing you reiterated your concerns about it, and then again last week you talked about protecting our space capabilities from enemy attack. I think that is one of those areas that we have to be vitally concerned about. I think that Senator Sessions in his questions properly brought out that issue. Perhaps maybe you would like to elaborate a little more.

I just want you to know that when we are talking about space-based radar that I would like to do whatever I can to help to make sure and support you in your efforts, because I view that as very important in moving forward with modernizing this country's defenses.

I have a question also for General Myers. I understand you are still in the process of modifying the unified command plan and the new plan will include a Northern Command to address the military functions of homeland defense. Can you give us some insight into the new command and especially in regard to those functions currently assigned to North American Aerospace Defense Command (NORAD)?

Secretary RUMSFELD. Given the fact that General Myers is the combatant commander of Space Command, I think I may ask General Myers to answer both those questions.

General MYERS. Senator Allard, good afternoon.

You are right; what the Secretary has done is implement a lot of the recommendations out of the Space Commission. I think the 2003 budget goes a long way to fixing some of the problems that we had in some of our space systems. We are putting a significant amount of money into our surveillance capability, which is the first step in ensuring that we can protect the assets that we have in space. So that is part of the 2003 budget that you have either seen or will see.

In terms of our space-based communications, as I think most everybody knows, we rely mostly on commercial communications capabilities in space for most of our needs. But for the 20 to 30 percent that we think must be indigenous to the Department of Defense, we have fully funded those programs and programs like the advanced Extremely High Frequency (EHF) program. The follow-on to our U.S. Military Communications Satellite Program (MILSTAR) system, the Navy Multi-User Operating System (MUOS) program, the follow-on to the UHF program, have both been fully funded in 2003 and in the out years so we can deploy the appropriate constellations.

If my memory serves me right, there is just about \$90 or \$91 million in the 2003 budget for space-based radar, and that is to prove the technology, cost-effectiveness, and military utility of such a system. I think it is time we get on with that and demonstrate its capabilities and see its military worthy. This is a system that, if it comes to fruition as we think it will, will give us the kind of

persistence that we have talked about even in Afghanistan. One of the things the Predator gives us is persistence over the battle space. We are able to stay on station for long periods of time and surveil what we want to see.

I can go back to my Vietnam days when we had our reconnaissance aircraft and that was primarily how we got our intelligence. The reconnaissance aircraft, they would have a sortie in the morning and they would have a sortie in the afternoon, and those were two snapshots in time. A lot of things happened before they got there and after they got there and before they got there again and after they left.

With systems like space-based radar you have the potential, of course, to have this persistence. I think this budget has gone a long ways to ameliorating some of the concerns we have had in the past about some of our space assets.

On space-based radar, I said \$91 million. I think it is \$48 million in 2003. I was corrected by Dr. Zakheim. My memory did not serve me right as I thought it had, which is not the first time.

In terms of the unified command plan, anything we say has to be modified with the fact this has not gone to the President yet and so he has not approved this plan. But the basics are the basics of a new Northern Command, if you will, that would focus primarily on the defense of the continental United States and our neighbors, would be this. There are really three parts of it.

One of the parts would be the NORAD piece. NORAD already does the air sovereignty piece. It does the space warning and so forth. It would be a piece of this new command. In fact, the proposal is that the new unified commander would be dual-hatted as commander in chief NORAD as well. As you can imagine, we have started our discussions with our Canadian partners in this and they understand and are fine with that.

We blend two other things with this new command. One is the support that the Defense Department traditionally supplies in times of other natural disasters, such as hurricanes, floods, and forest fires. So that support right now goes to the Secretary of the Army, and that would be something else this new command would worry about.

The third piece is what we have already stood up, which is Joint Task Force for Civil Support. These are people that are trained to respond to chemical, biological, nuclear, or major explosive incidents in the United States as support to the lead Federal agency, or maybe it is a lead city agency or state agency, but as support to that.

So those are the three main pieces: the NORAD piece, the natural disasters, and the response to chemical, biological, nuclear, or explosive incidents. We will propose that to the President and see how he disposes, and then we have about less than a year now, but we would like to stand this new command up on October 1, 2002, and we have time to work through the implementation plan. That is where we are.

Senator ALLARD. Mr. Chairman, I would like 30 seconds just to summarize here. I think Senator Byrd asked a very pertinent question: With this defense, what is our world going to look like? I think that the answer is obvious if we phrase that question a little

differently: What would this world look like if we do not move ahead with this budget? I think the answer is very obvious. We know what it is going to look like if we just look at New York. We know what it is going to look like if we look at the Pentagon. We know what it is going to look like if we look at every American's life and the impact that the attack of September 11 has had on American lives.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Allard.

Secretary RUMSFELD. Thank you. I think that is a very important observation.

I would add one thing on the unified command plan. Not only have we not presented it to the President, but after we get his okay then we begin the process of discussing it with our NATO allies because they are involved with Canada and various other parts of the world where the adjustments are going to be made. So it is going to be a process that is going to play out over a month or 2, I would think.

Senator WARNER. You are going to consult with us. I saw you make that clear.

Chairman LEVIN. Senator Carnahan.

Senator CARNAHAN. Thank you, Mr. Chairman.

I recently returned from a visit to Central Asia along with several of my colleagues on this committee, and we visited the theater of operations. I was very impressed with the level of morale and the spirit of our troops. As one of them told me: "We know why we are here."

I think what we see here is not only a testament to these young people, but also to our military leadership and to you, Mr. Secretary, because you have given us the steadfast leadership and you have innovatively conducted this war, and we thank you for what you are doing for our country.

Secretary RUMSFELD. Thank you very much.

Senator CARNAHAN. I am looking forward to working with you in funding, fighting, and winning this war on terrorism.

There have been a number of questions asked today, so I will go to one that has not been addressed. I recently wrote you a letter and I shared my concerns about the emerging threats to the United States in Central, Eastern, Southeastern Asia, as well as eastern Africa. I pointed out that Navy fighters and long-range bombers are the only aircraft that can reach these areas of concern easily.

We all know that the F/A-18C flew the bulk of the U.S. Navy strike missions in Afghanistan, so I believe it is important that we sufficiently fund their maintenance and continue to modernize their capabilities. The Navy is currently in a multiyear contract to procure the next generation of F/A-18s, the "E" model Super Hornet. I was disturbed that the President's budget cut the number of Super Hornets to be purchased in the year 2003.

Given our future needs for tactical aircraft, it would seem to me that we should be increasing our capabilities rather than cutting them. I was wondering what your rationale is for this and if you would comment on that.

Secretary RUMSFELD. Yes indeed, Senator. The Secretary of the Navy is, of course, going to be here next week and he and the Chief

of Naval Operations will be delighted to discuss that in some detail. What took place was a decision that the F-18 is in full production until the Joint Strike Fighter comes out. It is a program that is supported by the United States Navy. You are correct, of course, that the numbers they are looking at are 44 planes instead of 48.

On the other hand, the operation and maintenance accounts or the maintenance piece of it is, we believe, fully funded. Like always, choices had to be made and the Navy concluded that this was the appropriate thing for fiscal year 2003 and it should not in any way suggest any lack of support for the aircraft.

Senator CARNAHAN. So you are saying there is not a possibility, then, that these other four would be built?

Secretary RUMSFELD. I think that at the moment it looks as though the Navy and the Department have made their judgment, and the judgment is that they wanted to fully fund the maintenance accounts and therefore this particular number, 44, is what fell out of all of the choices that they had to make, and that is our recommendation.

Senator CARNAHAN. Thank you. I would like to include my statement for the record.

[The prepared statement of Senator Carnahan follows:]

PREPARED STATEMENT BY SENATOR JEAN CARNAHAN

Thank you Mr. Chairman. I wish to welcome our distinguished panel today. I am looking forward to working with you and my Senate colleagues this year on the National Defense Authorization Act for Fiscal Year 2003.

I recently returned from a trip to Central Asia with several of my colleagues on this committee where we saw our military personnel in the "theater of operations" first-hand. I must say, our soldiers, sailors, airmen, and marines are in good spirits.

They are performing superbly, and professionally. Our success in Operation Enduring Freedom is truly a testament to these men and women, their military leaders, and you, Mr. Secretary—for your steadfast leadership and innovative conduct of this war against our terrorist enemies.

Today, I look forward to hearing your testimony on the President's proposed budget. I am particularly pleased this year that the President has put such a strong focus on defense and homeland security spending.

This budget takes an important step in the right direction—including a 4.1 percent pay raise for our troops, an increase in operation and maintenance accounts, and substantial investments in acquisitions and recapitalization of our forces.

Our Nation is at war, and we cannot afford to shortchange these priorities. Thank you.

Chairman LEVIN. Thank you, Senator Carnahan.

Senator Roberts.

Senator ROBERTS. I thank the distinguished chairman.

Mr. Secretary, in our war on terrorism, where do you see the DOD headed as far as preemption is concerned? If we are worried about the weapons of mass destruction and those states that would produce, develop, or use that capability, it would seem to me we would be prepared or we should be prepared to take preemptive action rather than risking absorbing the consequences of an attack that we have all seen. Within the limits of security in this session, do you see the need to increase our intelligence capability, our precision weapons technology, and the use of Special Forces to militarily preempt a potential attack on the U.S. using any weapon of mass destruction?

Secretary RUMSFELD. Senator, you ask where is the DOD going. I think the answer on preemption is really more where is the coun-

try or the President going. The DOD is going to go where we are told.

You are right, the problem of terrorism is a unique one. It is distinctly different in the sense that you cannot defend everywhere at every time against every technique. Therefore, you have no choice in the case of terrorist acts, particularly with powerful weapons, but to go after the terrorists where they are. As the President has said, states that harbor terrorists, facilitate them, and finance them are every bit as serious a problem.

We have increased intelligence in this budget; we have increased precision guided munitions; and we have increased I believe funds for the Special Forces. We recognize, as you do in your question, their importance in the distinctly different kind of a world we are living in.

Senator ROBERTS. We need an Assistant Secretary of Defense for Special Operations and Low Intensity Conflict. We have been saying that on the Emerging Threats and Capabilities Subcommittee since 1999. Can we expect one in the near future? We do not have a nominee for that important position. It has been about a year. I am not complaining. You have to make the right choice, I understand that.

Secretary RUMSFELD. The nomination process is a long and torturous one, and we have had a couple of people move along the path part of the way and fall off for a variety of reasons. We do intend to fill it, yes, sir.

Senator ROBERTS. On the weapons of mass destruction, on the civil support teams, they used to be called Rapid Assessment Initial Detection (RAID) teams. Now they are Civil Support Teams (CST) teams. We tried to get an acronym with Senator Stevens and Senator Byrd involved so we can get it appropriated, but we could not come up with the right acronym. If you could suggest one, that might help.

But we have 22 full-time National Guard personnel and now there are 32 of these teams authorized. Do you support establishing a team in every U.S. state and territory?

Secretary RUMSFELD. It is not a question I have personally addressed.

Senator ROBERTS. That is where teams would be 4 hours from any incident, regardless of what kind of threat would be involved, to inform the team in Washington. The first responders would have the first responsibility to identify exactly what they are dealing with. They must be highly trained; it would be a mission for the National Guard.

Are we going to examine whether or not the Russians, with their expertise with anthrax and other biological pathogens that they actually produced, can be tapped into by the Cooperative Threat Reduction (CTR) and the DOD programs to address our homeland defense needs?

Secretary RUMSFELD. With respect to the first question, Dr. Zakheim tells me we currently have 22 of those teams.

Senator ROBERTS. Right.

Secretary RUMSFELD. Your question is are we going to go to 50?

Senator ROBERTS. We have 22. They are authorized up to 32. We are going through the training. We had a GAO report that was not

too kind, one of those again. So there has been an effort to say we need them in all 50 States. That was the goal with no special time frame.

General MYERS. Senator Roberts, I just think that is one of the things we have to look at in our new command.

Senator ROBERTS. The changes in the military transformation include the intelligence community and their ability to rapidly collect and analyze in a very threat-rich environment. In view of the fact that many of the enemy combatants in the war on terrorism may be within our borders of our country, how will the military intelligence have to change to be able to receive information? Specifically, I am talking about the relationships between the Federal Bureau of Investigation (FBI), Central Intelligence Agency (CIA), and Defense Intelligence Agency (DIA). Can we get some courses in our various military schools to get us updated on that?

Secretary RUMSFELD. That is certainly a worthwhile suggestion, Senator. I have been heavily focused on the non-homeland security piece and Deputy Secretary Wolfowitz has been very heavily focused on the homeland security piece, along with the Secretary of the Army. I have, however, observed in an awful lot of meetings your point being raised—the importance of fusing the intelligence information among the various agencies.

I know for a fact that the DIA and the CIA have a relationship that I would characterize as closer than I have ever seen in my experience. I have watched the Department of Justice and the FBI improve their linkages with the Central Intelligence Agency and with the Defense Department. I do not know that we have the answers to this because it is complex and the FBI data tends to be decentralized out in the regions, as opposed to centralized, which makes it quite difficult to have the kind of fusing of intelligence and knowledge.

Senator ROBERTS. Their mission has changed as well. I was suggesting that some specific education for the military leaders at our service war colleges and the National Defense University.

I have one last question if I can, Mr. Chairman. Where are we going with NATO? We have had an excellent speech by Senator Lugar, pretty much saying that under the strategic concept of NATO that was adopted 2 years ago, my goodness, if we do not have terrorism in the laundry list of things that we ought to be worried about numero uno, what is going on? We had a delegation that came back, some sparks there, some meaningful dialogue, I remember 2 years ago.

NATO is now in charge of things like crime, drugs, ethnic cleansing, the environment, and economics. I even said, do not put gum in the water fountain. I got a little bit upset about that in terms of the original purpose of NATO. Now we see some hesitancy on the part of NATO—at least that is in the press—under article 9.

If NATO is not going to atrophy and if NATO is going to mean something, certainly we are going to have to have NATO take a very strong stance on terrorism, especially with regards to the terrorists within their countries.

Where are we headed there? We are going to have NATO expansion coming up and we are going to have a hearing on that here fairly quickly. I am very worried about it.

Secretary RUMSFELD. Yes, Senator. There is no question but that NATO is attentive and should be attentive to the problems of terrorism. It is something that they have addressed in each of the two meetings that I have been to at NATO. I am aware that they have invoked the article of the NATO Treaty involving—it is article 5—that an attack against one, and it was a terrorist attack, is an attack against all.

I quite agree with you that they do need to focus on this, because that is part of the world we are living in.

Senator ROBERTS. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Roberts, and thank you again for the leadership which you showed over the years in the Subcommittee on Emerging Threats and Capabilities.

Senator Nelson.

Senator BILL NELSON. Mr. Secretary, my compliments to you. You are talking about the renewed cooperation with all of the intelligence agencies and how you have put it together for a highly visible event, such as the State of the Union or at the Super Bowl this past weekend. My compliments to all of the agencies involved, which was a combination of State, local, and Federal agencies.

A delegation from this committee was the first to go into Guantanamo Bay. I was intrigued to find out that reporters from Europe in the press conference afterwards actually wanted to argue with my conclusions about the humanitarian treatment. Yet what I tried to say was that the most important purpose that I had there was to see if we were getting the information from the detainees.

I take this occasion to tell you that our congressional delegation had concluded that we were not getting that information quickly enough. I know you followed our trip by a couple of days. They were just completing that wooden housing that was going to be air conditioned where two per structure could go through what they call the screening process. But up to that point they had not received that much information.

I expressed in the press conference that I thought that that would accelerate by virtue of these new facilities that they could move into. Would you comment briefly on that, what you observed and what you know now?

Secretary RUMSFELD. Yes, sir. I saw the screening rooms. They were completed. They were air conditioned. They were planning to start the next day with individual detainees for discussions. I have a feeling that your trip down there urged them on.

I think that you are quite right, it is enormously important. If we are going to do everything humanly possible to protect this country and our deployed forces and our friends and allies from additional terrorist attack, going through that process of knowing what those detainees know is just enormously important and time sensitive.

Senator BILL NELSON. While I was there we had our commanding officer stepping in for General Peter Pace as the Commander in Chief, Southern Command (CINCSOUTH), if I recall a two-star general. It is my understanding earlier here today you were talking about the importance of the selection of our combatant CINCs. Can we expect a four-star CINC to be appointed to U.S. Southern Com-

mand so that there is not a vacancy there, given your remarks earlier in this hearing?

Secretary RUMSFELD. You bet.

Senator BILL NELSON. Good. The quality of that position means a lot to Latin America, such as having an officer like General Pace. That was an excellent choice and obviously you recognized that by bringing him up here.

Secretary RUMSFELD. We did indeed. General Myers agree that he is doing a wonderful job for the country.

Senator BILL NELSON. I believe so, too.

Earlier you said that you are talking about taking North American Aerospace Defense Command (NORAD) and putting it under the CINC for homeland security. What does that do to Commander in Chief, U.S. Space Command (CINCSPACE)?

Secretary RUMSFELD. The details are still being worked out and we have not fully briefed Congress. We have not presented it to the President. We have not gone through discussions with Canada completely. I know you have talked to the chief of the defense staff and I have mentioned it briefly to the Minister of Defense of Canada.

General MYERS. I think the theory here that the Secretary asked us to drive on is to, as much as we can in the new unified command plan, to focus people on their primary mission. So what it does in the case of the Space Command is that it does not dual-hat potentially the U.S. Commander of U.S. Space Command any longer. He does not have the NORAD responsibility. That will be the new U.S. Northern Command (NORTHCOM), supposedly. He or she will be able to focus on the task at hand and that is the space mission as that continues to grow and evolve.

So that is kind of the rationale behind it. That is where the Secretary was pushing us. That also occurs in Joint Forces Command, which is going to be our change agent for transformation, experimentation, and joint training. The Joint Forces Command commander today has several hats. One of those is the responsibility for this Joint Task Force Civil Support, which would then again come under NORTHCOM. So again, to focus Joint Forces Command on what we think their most important task is, that is the rationale, sir.

Chairman LEVIN. If I could interrupt just for one second, Mr. Secretary, to remind you that Congress has to be in on that consultation prior to the decision in this area.

Secretary RUMSFELD. Yes indeed.

Senator BILL NELSON. Mr. Chairman, I would conclude by suggesting to the Secretary and the Chairman that they may want to take a look at a budget that is not your budget, but it is going to have profound effects on you. I believe that the National Aeronautics and Space Administration (NASA) budget is being unwisely savaged. There is a 13 percent reduction in human space flight. The reason this is important is that the proposal takes space shuttle launches down to four. That is almost cutting it in half.

The inevitable result is that you get rid of a good part of that launch force. How this affects you, Mr. Secretary, is that if we were ever to have legitimate threats or be down on some of our expendable launch boosters and-or pads, your only assured access to space

is the shuttle. You might crank that into your thinking, even though it is not your budget.

Secretary RUMSFELD. Thank you, Senator.

Senator BILL NELSON. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator Nelson.

Senator Collins.

Senator COLLINS. Thank you, Chairman Levin.

Mr. Secretary, I want to join with my colleagues in applauding your extraordinary leadership in the war against terrorism. I thank you, General Myers, and Dr. Zakheim, for being with us today.

Last month, I was a member of the bipartisan delegation that several of my colleagues have referred to that journeyed to Central Asia. It was a wonderful opportunity not only to meet with the leaders of the countries involved in our coalition against the war on terrorism, but also to meet with our troops first-hand and hear their impressions. I was so impressed with their high morale, patriotism, professionalism, skills, and training. It truly was an inspiring trip for me.

I also learned a great deal more about the absolutely critical role that our Navy has played, particularly our carrier battle groups, in launching operations in the war in Afghanistan. I fully realize and understand that the administration has inherited very serious budget and program shortfalls affecting shipbuilding, but I share the concerns that many of my colleagues have mentioned today that the budget before us does not restore shipbuilding to the levels that will sustain a 310-ship Navy nor our industrial base.

My concern is that there seems to be a pattern in which the Department sincerely plans and hopes to increase ship construction rates in future years, but then ends up scaling back the plans when funding runs short. So I would like you to comment on the commitment of the Department to maintaining an adequately sized fleet. I realize that there may be dispute about exactly what the number should be, but I think there is widespread agreement among the experts that we have been heading in the wrong direction in future years.

My concern is that if we do not start this year and instead only proceed with five ships this year, that we are just going to fall further and further behind.

Secretary RUMSFELD. Senator Collins, thank you so much. I am delighted that you have been, and I knew you were, out visiting the troops. I know how important it is to them and we appreciate that.

The shipbuilding part of the budget is a real dilemma for me because it is a matter of tough choices that have been made in the Department of the Navy as to what they thought made the most sense. They all agree with what you have said, that the straight line projection if you go at five, six, or even seven ships a year is going to take you to an unacceptable level of the Navy. Everyone agrees with that. Whether they think the Navy ought to be 280, 300, 340, or 360 ships, they all know it ought not to be down where it would go if we stayed at this particular level.

The task they had was to figure out was how to get the funds to do the operations and maintenance accounts, which they think are enormously important, to deal with the aviation piece of the Navy, to fully fund the overruns from past shipbuilding that need

to be added in for this year that were unexpected and in excess of \$600 million, and still make a rational choice with respect to the number of ships.

The judgment they made as I understand it, and Dov was involved in the decision with them, was that the average age of the Navy ships today is sufficiently low that we are not going to be going down on a straight line projection. We are going to be able to go down gently for a period.

However, you then go off a cliff, as you suggest. We have all seen that forward year projections tend to look better than reality. All I can say is that this year is an awful lot better than the forward year projections from 3 or 4 years ago. So I have confidence that these forward year projections for 2004, 2005, 2006, and 2007 are going to play out and that there is a very broad and deep feeling in the Department and in the administration that you are exactly right: we simply have to increase the number of ships in those out years, and we plan to do it.

Senator WARNER. Senator, will you yield me 2 seconds?

Senator COLLINS. Certainly.

Senator WARNER. I have been in this shipbuilding business I guess about as long as anybody in the room. Look at the research and development costs for the former DD-21, now DD(X). It is almost \$1 billion each fiscal year for the next 3 fiscal years. While that is not in the shipbuilding account as such, you cannot lose sight of that, and that is a contract I think you will have a great interest in the future, as you had in the past.

Senator COLLINS. You are certainly correct about my great interest in that contract. I see the research and development for that account as benefiting now a whole family of ships, given the change in direction.

General Myers, I visited the U.S.S. *Theodore Roosevelt* as part of my journey. The battle group had been at sea for 113 consecutive days when we visited the aircraft carrier because of security and mission requirements. I am told that normally they would be going into port every 14 days. This obviously has caused a lot of strain. But again, morale was very high.

But the operational tempo, the briefing that we got, was truly extraordinary. Could you comment further on the heavy use of our naval platforms in the war against terrorism and the impact of increased deployments on our naval forces?

General MYERS. You bet, Senator. I also visited U.S.S. *Theodore Roosevelt* and I think as of today they are over 135 days deployed, because, as I mentioned in my opening statement, we are a Nation at war. We are asking an awful lot of all our people, and our sailors are included in that group.

I too came away from my visit, which was I think just before yours, with an understanding of the high morale. They understood what they were doing. They understood the importance of it. There is nothing that the Joint Chiefs of Staff or the Secretary care more about than trying to maintain the operational tempo and the personnel tempo at acceptable levels, realizing that we are at war. So this will be more difficult perhaps than in peacetime for sure, and that is part of what we are seeing.

What we are trying to do in terms of carrier deployments, though, is to stay on the double force presence policy that we currently have today, that they rotate on the schedules that the Chief of Naval Operations has set up and that we do not disturb that, so we can have our naval assets ready for whatever comes next. So we will continue to press that very hard. It is very high on our list. It is something we talk about among the Joint Chiefs quite regularly.

Senator COLLINS. Thank you, Mr. Chairman.

Chairman LEVIN. Senator Cleland.

Senator CLELAND. Thank you very much, Mr. Chairman.

Mr. Secretary and General Myers, thank you both very much for your service to our country. I was just sitting here thinking that in the last 5 years I have been through two attacks on Saddam Hussein, the war in Bosnia, the war in Kosovo, and now the war in Afghanistan. I think one of the threads that certainly runs through our military engagements is the use of air power, particularly the use of high precision weapons. Others are the evolution on the battlefield of unmanned vehicles for reconnaissance and surveillance and the use of the Airborne Warning and Control System (AWACS) and the Joint Surveillance and Target Attack Radar System (JSTARS), for surveillance, intelligence, and reconnaissance capability.

I have seen that increased to a very fine level. I appreciate your budget, Mr. Secretary, which continues to add to our capability in terms of battlefield intelligence and in terms of our high use of precision weapons. I do think that the combination thereof saves lives on the battlefield. In our last two engagements, in Kosovo and now in Afghanistan, I think we can be very proud as an American military that we have kept our casualties so low and our effectiveness has been very high.

I also see that your budget does another thing that tracks with the way we go to war and that is the increased use of Special Operations Forces. I think that this war in Afghanistan has in effect combined massive use of intelligence with unmanned vehicles to seek out that intelligence, tremendous use of precision weapons, and the work of Special Forces.

Mr. Secretary, is there any doubt in your mind, since your budget certainly funds this to an increased level, that this is the way we go to war now and increasingly so?

Secretary RUMSFELD. Trying to look into the future is not easy. I think there is certainly a likelihood that you are right. However, we have to appreciate that the reason that we have not been faced with large armies, navies, or air forces is because we have such capable armies, navies, and air forces, and the deterrent effect is what drives people towards these asymmetrical activities that we need to deal with.

I think that you are correct that the future is more likely to not repeat Afghanistan, but present more unusual situations. Let us put it that way. We certainly cannot forget that North Korea has a massive army and is a country that is just terribly repressive to its people and doing what it is doing with weapons of mass destruction, and there is no question but that Iraq has large conventional capabilities as well as an appetite for weapons of mass destruction.

I think what we have to do is what our new strategy suggests: look less at specific threats and more at the kinds of capabilities that are likely to come at us. Certainly, when one does that you are driven in the direction that your question suggests.

Senator CLELAND. Thank you very much.

In terms of changes and transformation of the American military to a new world and a new environment, to be leaner, meaner, more impactful and more mobile, may I say congratulations on your budget having money in it to begin the conversion of some Trident submarines from a strategic role in the Cold War. That was a role that provided for nuclear retaliatory response. The converted Trident submarines are tremendous platforms, stealth vehicles for more conventional use of high-level precision weapons, cruise missiles, and insertion of Special Forces. I think that conversion of those Tridents really fits in with where we are headed.

Again, General Myers, thank you very much for your service. May I just say as chairman of the Subcommittee on Personnel, I am pleased that your budget includes a nice pay increase for the troops who are doing a tremendous job around the world.

General Myers, every time I see you I think about our moment together on the morning of September 11, where we were together in my office at the very moment that the Pentagon itself was hit. You have done a tremendous job. You came in under tremendous pressure and we congratulate you for your service. Thank you all very much.

Thank you, Mr. Chairman.

General MYERS. Thank you, sir.

Senator WARNER. Thank you, Senator. We all remember your advances last year on behalf of the G.I. Bill. I was privileged to join you on that. It took 4 or 5 years, but I think it is going to be a retention asset.

If I might just say a few words before my chairman takes over, I noticed with great interest, Secretary Rumsfeld, that you listed cyberterrorism among the threats to this Nation. Indeed, when I was privileged to be chairman, I started a modest program buried down in the sinews of your system whereby, in return for educational benefits for young people who are willing to devote their lives at a university level in studying that subject, they would return to the Federal service, presumably either your Department or other Departments, and devote several years of obligated service.

That program that I started has had slight growth and maybe you might want to take a look and see if it could not be augmented a bit. I think it is going to work out quite successfully for you.

Also, on the subject of spectrum policy, I am privileged to have a number of high tech operations in my State that are carefully following this issue. I had the Chairman of the Federal Communications Commission, Mr. Powell, up the other day. We went over it, and in due course your administration and the Department of Defense will be working with the Commerce Department and other relevant agencies and departments in reviewing those allocations.

I know that you will, of course, have the emphasis on national security, but I do hope that there can be some flexibility for the private sector, which really is in desperate need of some additional spectrum.

Lastly on the question of missile defense funding, I think we have an appropriate budget this time. Even though that risk seems to be *de minimis* in the minds of some, in my judgment, it would only take one to cause devastation of just unacceptable proportions to the United States, be it an accidental firing or one done in anger by virtue of terrorism. So I think you have stepped out very well on that.

Lastly, I would like to speak about military commissions. It is interesting that you have a study going on about the President's order of November 13, and I hope that that comes out. I think that we should go back and look at how that was done under our former chairman, Senator Nunn, at the time. Maybe at the time it was the right thing to do as these young men and women graduate from the academies, but I think it is something that should be looked at very carefully.

Thank you again. It has been a very good hearing this morning. I commend you, the Chairman, General Myers, and Dr. Zakheim. Job well done, gentlemen.

Secretary RUMSFELD. Thank you very much, Senator Warner.

Chairman LEVIN. Thank you, Senator Warner.

Just a few questions to close up. First, on the proposal that will be forthcoming to establish a new unified combatant command for homeland security, do you think it is likely that you will be seeking a change in the Posse Comitatus Act?

Secretary RUMSFELD. No, sir. At the moment it looks as though the role for the U.S. military would be a supporting role, and we are involved in some very temporary activities that we have, as I indicated earlier, a way to move out of and exit. So at the moment that is not something that the administration has thought necessary.

Chairman LEVIN. Let me go back, General, to the Philippines issue just for a moment. One of the reports quoted or stated that the U.S. Special Forces commander there said that U.S. soldiers would "take operational instructions from Filipino commanders."

Do you know whether that is a quote. Is that accurate? Is that our policy?

General MYERS. Senator Levin, I do not know if the quote is accurate, but it is not the instructions that they have been given. The command and control of U.S. forces will stay in the U.S. chain.

Chairman LEVIN. Including tactical control?

General MYERS. Absolutely.

Chairman LEVIN. The other thing he said, which is not a quote but a summary, is that if a U.S. soldier were captured, U.S. forces would defer to Philippine authorities before mounting a rescue operation. Is that accurate?

General MYERS. Well again, I cannot talk to the veracity of the quote. I think on those kind of tactical situations we would have to evaluate it. As the Secretary said, the rules of engagement give you the right to self-defense. I think we probably should not speculate on what would actually happen, but it does not sound totally accurate to me.

Chairman LEVIN. The question has been raised about the status of detainees at Guantanamo Bay and I want to ask about that issue. Am I correct that the President has not yet made a decision

as to whether or not the Geneva Conventions apply to those detainees?

Secretary RUMSFELD. I think the correct way to state it is that the United States, the President, and myself have made the statement that the detainees would be treated as if it did apply, and they have been in the past. They are currently being treated as such and they will be in the future.

The technical, legal question is being considered in the White House at the present time.

Chairman LEVIN. In this interim period until that decision is made, has the regulation of the Department of Defense relative to enemy prisoners of war, retained personnel, civilian internees, and other detainees been applied?

Secretary RUMSFELD. I do not know that I follow the question precisely, but, as I say, we are now and we will in the future, regardless of what decision is made in the White House as to whether or not the Geneva convention applies as a matter of law, treat detainees the way they have been treated since the beginning.

Chairman LEVIN. The specific question, which maybe you will need to answer then for the record, is in regards to Army Regulation 190-8, which says: "If any doubt arises as to whether a person having committed a belligerent act and having been taken into custody by U.S. Armed Forces belongs to any of the categories enumerated in article 4 of the Geneva conventions, such person shall enjoy the protection of the present convention"—and here is the critical language here—"until such time as their status has been determined by a competent tribunal."

Then it says that "competent tribunal shall determine the status of any person not appearing to be entitled to prisoner of war status who has committed a belligerent act or engaged in hostile activities and who asserts that he or she is entitled to treatment as a prisoner of war or concerning whom any doubt of a like nature exists."

So, under our regulations, there has to be a competent tribunal, and I am not talking about the military tribunal.

Secretary RUMSFELD. No, I understand.

Chairman LEVIN. This is a different issue. My question is has this tribunal been convened for any of the prisoners, any of the detainees so far?

Secretary RUMSFELD. My recollection of the details of the convention is that there is very little definition as to the phrase "tribunal" as you are using it in this context.

Chairman LEVIN. In what sense little definition?

Secretary RUMSFELD. That is to say there is no formal prescription as to exactly what would constitute such a tribunal.

Chairman LEVIN. No, it is laid out in procedures. The membership is laid out. That is why maybe you better answer this for the record. But it sets forth the following procedures: the members of the tribunal; the recorder shall be sworn; who the president is; a written record shall be made of the proceedings; they shall be open except for deliberation; and who the officers are. It goes through great details.

That is why, Mr. Secretary, rather than trying to answer this here now, if you feel better doing it, you could perhaps take a look at this Regulation 190-8 and let us know for the record if it is

being applied, and if not, why not. I think that may be the short way to do it.

[The information referred to follows:]

Article 4 of the 1949 Geneva Convention relative to the Treatment of Prisoners of War specifies the categories of people who fall into the hands of the enemy who are entitled to be treated as prisoners of war (POWs). If a detainee falls within one of the Article 4 categories of persons entitled to POW status, then he is a POW. If a detainee clearly does not fall within one of the Article 4 categories, then the detainee does not receive POW status. When there is doubt, then a tribunal under Article 5 of the Convention is appropriate to determine the status of the detainee.

The President has determined that the conflict with the al Qaeda is not covered by the Geneva Convention. The President has further determined that although the conflict with the Taliban is covered by the Geneva Convention, the Taliban detainees are not entitled to POW status under the terms of Article 4. Based on the President's determinations, there is no doubt regarding whether al Qaeda or Taliban detainees are entitled to POW status.

The joint services regulation, *Enemy Prisoners of War, Retained Personnel, Civilian Internees and Other Detainees* (AR 190-8) (1 Oct 1997), provides procedures for Article 5 tribunals should they be required. For example, the AR 190-8 procedures call for a three-officer panel. As noted, an Article 5 tribunal is only required "should any doubt arise" Regarding a detained individual's entitlement to POW status. No doubt has arisen regarding the POW status of al Qaeda and Taliban detainees.

Despite the fact that al Qaeda and Taliban detainees are not entitled to POW status, we continue to treat them humanely and in a manner consistent with the principles of the 1949 Geneva Convention Relative to the Treatment of Prisoners of War.

Secretary RUMSFELD. We will do that for the record.

Chairman LEVIN. Is that okay? I do not mean to cut you short, either.

Secretary RUMSFELD. No, that is fine.

My comment, just for clarification, is when I said that my recollection of the convention, not the Army regulation—is that the convention is quite open as to what that is. What we have been doing, so that the record will be clear, is having the teams of people who interview these detainees make a judgment about them. There has not been doubt in the sense that the convention would raise about these people that I know of, and they have been then categorized as detainees as opposed to prisoners of war.

I do not know that there is anyone who believes that they merit the standing of prisoner of war, anyone in the administration or anyone I have talked to.

Chairman LEVIN. I thought that the President was deciding whether or not they are prisoners of war legally.

Secretary RUMSFELD. No. Let me clarify that. This is an enormously complex issue, for me anyway. We believe in the Geneva convention very strongly. It is important. It provides protection for our soldiers because our soldiers behave as soldiers. They do not go around without uniforms, hiding their weapons, or killing innocent people intentionally.

The convention was designed among countries to deal with conflicts between nations. The situation that we are in is that there is a technical question, a legal question, as to whether or not the United States should say that as a matter of law we interpret the convention to apply in the case of, for example, al Qaeda, which is not a nation. It is a terrorist organization. It was not a party to these conventions in any sense.

The problem with doing that is it could cause some precedents that would be conceivably unfortunate. It is sufficiently complex that the administration is taking its time to look at it. In the event

that the convention were to apply, then one would look at lawful combatants, noncombatants, and unlawful combatants. They are very different. Noncombatants are civilians; unlawful combatants do not merit being treated as prisoners of war; and lawful combatants, like U.S. soldiers or the soldiers of any other country, do merit being treated as prisoners of war.

In this instance, it is very clear that these were unlawful combatants, and as a result there has not been much debate that I have heard that these people would rise to the standing of prisoners of war. That is not to say that the Geneva convention does not apply. It could still apply as a matter of law, and that is the issue being discussed.

There are three ways it could be tackled. One is the administration could say that they believe as a matter of law that the Geneva convention applies. They could, second, say that as a matter of law they have decided it does not, or it does not with respect to al Qaeda or Taliban. Third, they could say they do not need to address it because we have decided to treat the detainees as if it did apply, and we are not going to create a precedent by making a judgment.

It is those options that are currently being considered by the White House, none of which would change their status as detainees. Nor would it change in any way the way they are being treated, because we are already treating them as if it does apply.

Chairman LEVIN. The question for the record would then be, under our regulations, about when a tribunal must be triggered. If it does not apply, let us know why it does not apply.

[The information referred to follows:]

Article 4 of the 1949 Geneva Convention relative to the Treatment of Prisoners of War specifies the categories of people who fall into the hands of the enemy who are entitled to be treated as prisoners of war (POWs). If a detainee falls within one of the Article 4 categories of persons entitled to POW status, then he is a POW. If a detainee clearly does not fall within one of the Article 4 categories, then the detainee does not receive POW status. When there is doubt, then a tribunal under Article 5 of the Convention is appropriate to determine the status of the detainee.

The President has determined that the conflict with the al Qaeda is not covered by the Geneva Convention. The President has further determined that although the conflict with the Taliban is covered by the Geneva Convention, the Taliban detainees are not entitled to POW status under the terms of Article 4. Based on the President's determinations, there is no doubt regarding whether al Qaeda or Taliban detainees are entitled to POW status.

The joint services regulation, *Enemy Prisoners of War, Retained Personnel, Civilian Internees and Other Detainees* (AR 190-8) (1 Oct 1997), provides procedures for Article 5 tribunals should they be required. For example, the AR 190-8 procedures call for a three-officer panel. As noted, an Article 5 tribunal is only required "should any doubt arise" regarding a detained individual's entitlement to POW status. No doubt has arisen regarding the POW status of al Qaeda and Taliban detainees.

Despite the fact that al Qaeda and Taliban detainees are not entitled to POW status, we continue to treat them humanely and in a manner consistent with the principles of the 1949 Geneva Convention Relative to the Treatment of Prisoners of War.

Secretary RUMSFELD. Good.

Chairman LEVIN. Because the stakes here are great, as you point out, also for our own personnel.

Secretary RUMSFELD. You bet.

Chairman LEVIN. We have people who are not in uniform who are captured and we want to make sure that they are treated properly as well. So how we treat people and how we are perceived as treating people, because those can be different at times, becomes

important in that regard, too, to protect our own people in circumstances where they may be captured and not in uniform.

We thank you.

Senator DAYTON.

Senator DAYTON. Thank you, Mr. Chairman.

I have two questions. Because of the hour I would be glad to take replies for the record, or you can answer them now, whatever you prefer. The first goes back again to the Reservists and members of the National Guard. As you indicated, Mr. Secretary, some 70,000 Reservists and members of the National Guard have been called up because of the war in Afghanistan. I think they are being called up for longer periods of time as well. So the financial sacrifices which they are making become, obviously, exacerbated by those increasing lengths of time.

I commend you for what you are doing to increase military pay and benefits, but I would like to know specifically how that will apply to Reservists and members of the National Guard.

Secretary RUMSFELD. I am advised that the pay increase applies to all. Just so the record will be very clear, the total number is 70,000. My understanding is that it is something like 60,000 Guard and Reserve and 10,000 that are being retained in the service past their normal discharge date.

Senator DAYTON. Your testimony implies that there is a targeted pay raise. The 4.1 percent pay raise is across-the-board, but it is then targeted for certain categories. Is there any targeting for the National Guard and Reserves, given the fact that some of the housing and the other benefits would not apply?

Secretary RUMSFELD. I do not believe there is any targeting that would particularly apply to the Guard and Reserve, except what would apply to everybody. My recollection on the targeted pay raise is that you are right: it is 4.1 percent across the board, plus or minus 2 percent for certain targeted pay grades that are particularly in short supply and where we need to improve retention.

Senator DAYTON. Thank you.

After meeting with the members of the National Guard in Minnesota and their spouses, particularly those who were called up to provide the airport security. I learned that because of the Posse Comitatus Act, the Governor, instead of the President, called up the Guard. Because of this they were not eligible for some of the pay and benefits as well as being denied protections that are afforded those who are called up by the President, including being evicted from rental or mortgaged property and the cancellation of life insurance.

Senator Wellstone and I introduced an amendment to the Defense Appropriations Bill which was adopted in the Senate that would have addressed this. The Department of Defense, at the time, had concerns about that. We were doing this at the last minute and the House did not concur, so it was dropped in the conference report.

If you have any comments, fine. Otherwise, I would ask if the Department has specific objections to those remedies for the next go-around. I would certainly like to work with you. Otherwise, it seems to me that we are just taking care of some basic inequities, and I would ask if you would take another look at that, please.

Secretary RUMSFELD. Senator, the interest is certainly a fair one. The decisions as to whether or not the Guard is called up by the State or by the Federal Government is based on the function that they are to perform. When the States call them up for State functions, as opposed to Federal functions, we have always felt, and continue to feel, that that is a State responsibility and the State legislation would be the proper place to change those circumstances.

It does appear externally to look like an anomaly. If they are called up by the Federal system they are treated one way, and if they are called up by the State they are treated another way. There is good reason for that. It is because they are basically fulfilling a State function.

Senator DAYTON. I would agree with you, Mr. Secretary, and typically that is the case. I do not know whether there is a lesson. This might have just been an aberration in this circumstance. But given the length of time they have been called up now, to the extent those inequities apply to what is essentially service at the request of the President or the urging of the President, it might be something to look at as another one of these inequities that perhaps could be addressed. The financial penalties they pay for their service have been very significant, and they are doing an extraordinary job.

Chairman LEVIN. I would like to thank our witnesses for, among their many extraordinary qualities, their staying power.

We will stand adjourned. Thank you.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

PHILIPPINES

1. Senator LEVIN. Secretary Rumsfeld, there is a fair amount of confusion concerning the U.S. military presence in the Philippines. In the past, the Department has characterized our activity there as "an operation" or a "mission." Yet, last Wednesday you referred to it as "an exercise" and the Philippine government calls it an exercise. Exercises involve training and simulations, but in this case, U.S. troops are authorized to engage a real enemy. Is this an operation or an exercise?

Secretary RUMSFELD. We have deployed forces to the Philippines as part of the global war on terrorism to help the AFP (Armed Forces of the Philippines) to combat terrorism. This exercise is known as Balikatan 02-1. U.S. forces will train, advise, assist, and assess their AFP counterparts' capabilities. Because this training deployment is taking place near locations where there are hostilities, U.S. forces are authorized to exercise the right of self-defense. But they are not allowed to engage with the enemy outside of self-defense.

[Deleted.]

2. Senator LEVIN. Secretary Rumsfeld, regardless of what you call our activity in the Philippines, if U.S. troops are in a combat zone, the rules of engagement and command relationships must be clear. However, press reports indicate that U.S. and Philippine commanders have been unable to agree on "terms of reference" governing command relationships. Indeed, Philippine officials assert that U.S. forces will be under Philippine command and will not take independent action. Meanwhile, U.S. military spokespersons insist that U.S. troops will not be under Philippine command and will have authority to act independently, if necessary. How can we possibly resolve this impasse? How is it that we are currently deploying troops (220 out of the expected 650 total) to the area without such an agreement in place?

Secretary RUMSFELD. The Terms of Reference (TOR) was signed before any U.S. forces were deployed to Basilan and before Exercise Balikatan 02-1 began on February 14, 2002. On February 9, 2002, General Diomedio Villanueva (Chief of Staff of the AFP) and Rear Admiral W.D. Sullivan (J5 USCINCPAC) signed the TOR, which clearly states that U.S. forces will be under the command of U.S. officers at

all times. The TOR also notes that U.S. forces will not unilaterally engage in combat, and they will respond to operational instructions from AFP commanders during field training exercises. These statements do not contravene U.S. command and control, but simply acknowledge that the AFP will provide instructions to the AFP and U.S. personnel operating together.

3. Senator LEVIN. Secretary Rumsfeld, the Commander in Chief of the Pacific Command, Admiral Blair, was quoted in a *New York Times* article last week stating that the goal of U.S. military involvement in the fight against the Abu Sayyaf terrorist group is to help make Asia less hospitable to al Qaeda terrorists. Yet, this terrorist group is not the only insurgency in the Philippines, nor is it considered the strongest. Is the administration considering, or are we prepared to consider staying on in the Philippines to fight other insurgent or "terrorist" groups that threaten the Philippine government?

Secretary RUMSFELD. The current deployment is focused on the southern Philippines, particularly the island of Basilan, where the Abu Sayyaf Group (ASG) continues to hold three hostages, including two American citizens, Martin and Gracia Burnham. The ASG has been on the State Department Foreign Terrorist Organization list since 1997. It is one of the missions of this deployment to help the AFP defeat the ASG. We currently have no plans to expand beyond this mission. We will continue, however, to work closely with Manila to combat terrorism in the Philippines and the region.

4. Senator LEVIN. Secretary Rumsfeld, Admiral Blair also reportedly stated that the U.S. military involvement in the fight against the Abu Sayyef terrorist group "would last months but not years." President Arroyo stated that the exercise will last no longer than 6 months. Are we prepared to leave at the 6-month mark regardless of whether we have achieved our objectives?

Secretary Rumsfeld, is there a definitive end-date to the current "exercise" or operation, or is this an open-ended commitment that we have assumed?

Secretary RUMSFELD. This initial deployment will clearly last no longer than 6 months, as stated in the Terms of Reference. Within that period, USCINCPAC will provide an assessment and recommendations for any follow-on operations depending on the progress of current efforts. We will then work with the Government of the Philippines to see if any follow-on deployments would serve our purposes.

5. Senator LEVIN. Secretary Rumsfeld, is there a definitive end-date to the current "exercise" or operation, or is this an open-ended commitment that we have assumed?

Secretary RUMSFELD. See above (question #4).

HOMELAND SECURITY

6. Senator LEVIN. Secretary Rumsfeld, you have reportedly forwarded to the President a proposal to establish a unified command for homeland security that would involve Canada and Mexico. Have you begun discussions with the Canadian and Mexican governments about this new command and any associated agreements that may need to be established with them?

Secretary RUMSFELD. Yes, we have begun discussions with both the Canadian and Mexican governments in regards to the new Northern Command.

7. Senator LEVIN. Secretary Rumsfeld, you have been discussing reorganizing the Department of Defense to better address homeland security challenges. Yet, there is still no proposal to replace the interim arrangement with Secretary White as the coordinator of such efforts. Given the increased funding for combating terrorism, who is ensuring that the right strategy is in place and that the budget addresses real priorities?

Secretary RUMSFELD. In addition to his role as the interim DOD Executive Agent for Homeland Security, Secretary White was also directed by the President to serve as the acting Assistant Secretary of Defense for Special Operations/Low Intensity Conflict. The Office of the Assistant Secretary of Defense for Special Operations/Low Intensity Conflict compiled the combating terrorism inputs for the fiscal year 2003 budget. Following September 11, 2001 and the initial prosecution of the Global War on Terrorism, the Department began a process of reviewing its strategy, analyzing its missions, and identifying its resource priorities. The Department is using this analysis in preparation for our fiscal year 2004 budget input for combating terrorism.

On March 8, 2002, I signed a memorandum directing the Deputy Secretary of Defense to lead a transition effort to establish a staff, at the appropriate level within the Office of the Secretary of Defense, that will assume homeland defense and civil support responsibilities from Secretary White. This new staff will, among other duties, be responsible for coordinating with Governor Ridge's Office of Homeland Security on addressing priorities consistent with the National Homeland Security Strategy. When established, this new staff for homeland defense and civil support will also work with the Office of the Assistant Secretary of Defense for Special Operations/Low Intensity Conflict in the development of the fiscal year 2004 combating terrorism budget inputs.

8. Senator LEVIN. Secretary Rumsfeld, did Secretary White provide input on combating terrorism to the budget and will he coordinate the implementation of the policies driving spending on procurement, research and development, and training?

Secretary RUMSFELD. In addition to his role as the interim DOD Executive Agent for Homeland Security, Secretary White was directed by the President to serve as Acting Assistant Secretary of Defense for Special Operations/Low Intensity Conflict. The Office of the Assistant Secretary of Defense for Special Operations/Low Intensity Conflict compiled the combating terrorism inputs for the fiscal year 2003 budget. Until the new staff for homeland defense and civil support is established, Secretary White will continue in both capacities to coordinate, with the appropriate OSD offices, the implementation of the policies driving spending on procurement, research and development, and training.

SPECIAL OPERATIONS—COMMANDO SOLO

9. Senator LEVIN. Secretary Rumsfeld, our operations in Kosovo and Afghanistan have demonstrated that psychological operations are a crucial component of our efforts to defeat our enemies. Commando Solo overflight missions have broadcast messages to the populations in Afghanistan and the Balkans to explain our actions and recruit allies to our cause. I have no reason to believe that you and the Department disagree. Yet, I note that your budget does not include funding to continue the transition of the Commando Solo aircraft to the EC-130J. Without this continued annual support, the fleet will be divided in terms of training and deployment, substantially reducing unit responsiveness, and readiness. How do you justify the lack of funding for this critical asset?

Secretary RUMSFELD. I am very proud of job that has been done by our Commando Solo crews in Afghanistan and the Balkans. Commando Solos are unique, high demand/low density platforms and continue to be a valuable asset for the Department.

Transitioning from the EC-130E to the EC-130J model was a congressionally mandated program, and from fiscal year 1997-2001 funds were added to the Department's budget in support of this program. The original congressional intent was to fund eight EC-130Js as well as the modification of current Commando Solo special mission equipment. To date, funding has been provided for the conversion of five of eight EC-130J aircraft. The Department anticipated that congressional support for this program would continue however no funding was provided in fiscal year 2002.

While steps are being taken to remedy the disconnect between how this program was traditionally funded and future funding methods, due to the amount of time it takes to modify and crossdeck (transfer) the psychological operations (PSYOP) broadcast equipment to these aircraft, split fleet operations will have to be extended longer than expected. In an effort to mitigate some of the impact on the fleet, I directed the Department to address the issue in our program review and recently added funding to mitigate special mission equipment obsolescence and degraded capability.

USE OF SPECIAL OPERATIONS TO FIGHT TERRORISM

10. Senator LEVIN. Secretary Rumsfeld, given the demonstrated effectiveness of special operations forces in combating terrorism, what are your future plans for using these forces to fight global terrorism, and do such plans require an increase in special operations forces?

Secretary RUMSFELD. There will always be a need for specially organized, trained, and equipped forces to perform missions critical to the U.S. It is safe to assume that Special Operations Force's unique capabilities will continue to be used in our fight against global terrorism. Currently, the Pentagon is conducting an in depth study

to determine how Special Operations Forces should transform to meet the expanding war on global terrorism.

QUESTIONS SUBMITTED BY SENATOR MAX CLELAND
TRANSFORMATION

11. Senator CLELAND. Secretary Rumsfeld, we are all in agreement that the transformation of the military is necessary to provide a more responsive and flexible force. I think we would also agree that in the area of transformation, the Department of Defense's ability to properly and accurately account for every defense dollar also needs to be addressed. The President's budget request calls for spending over \$12,000 per second or over \$1 billion per day on defense. Every dime may be necessary, but the recent collapse of Enron and the loss of many investors life savings, highlights the need for stringent accounting practices to ensure every dollar spent is done so in a responsible manner. We are all investors in this effort and the country deserves nothing less. As we prepare this year's defense budget, what accounting transformation has occurred or will occur regarding how the Department of Defense accounts for the \$379 billion requested by the President?

Secretary RUMSFELD.

- First, we are keeping financial management issues at the top of the agenda; the Department's senior leadership is engaged in financial transformation on a routine basis.
 - I convened an Executive Committee, at the Under Secretary level, to provide strategic direction and a Steering Committee, at the Assistant Secretary level, to resolve the inevitable disagreements among the components.
 - The Executive Committee meets every quarter.
 - The Steering Committee meets every other month.
- Second, we are attacking the root cause of our reporting problems, i.e., an overly complex and outdated information system infrastructure.
 - To ensure financial transformation is accomplished, the Secretary established under my leadership, the Financial Management Modernization Program—a comprehensive program that has been fully funded, staffed, and strategically planned (critical milestones and schedule).
 - For the first time ever, we developed a Department-wide systems inventory. With this effort 85 percent complete, we have identified 673 information systems. The inventory will be completed March 2002.
 - I am reviewing components information systems initiatives to ensure they are smart investments and are consistent with our transformation goals.
- Third, we are using performance data and measures to improve or resolve continuing problems such as untimely payments, problem disbursements, and inadequate recordkeeping.
 - From April 2001 to October 2001, we reduced by 41 percent the backlog of commercial payments.
 - We improved travel card management—reducing delinquencies by 34.
 - We are also measuring the quality and accuracy of financial information and have seen a 57 percent reduction in payment recording errors since October 2000.

PHILIPPINES

12. Senator CLELAND. Secretary Rumsfeld, I applaud the President in pursuing terrorism and evil wherever it is found. However, I am concerned that in our search for evil, we may fail to clearly define the mission, objectives, and end-state of proposed military actions. Media reports attribute comments to the Department of Defense officials as stating that U.S. soldiers in the Philippines would not be engaged in combat, yet, they would be assigned to accompany Philippine soldiers on patrols. Philippine officials have also given conflicting accounts of the U.S. troop mission. If there is confusion at the senior level, there is bound to be confusion at the soldier level. What is the mission of our forces in the Philippines? What is the timeline for completing the "training"? What is the end-state of this training exercise?

Secretary RUMSFELD. As part of the global war on terrorism, the Secretary of Defense has approved the deployment of U.S. forces to train, advise, assist, and assess

the Armed Forces of the Philippines' (AFP) capabilities to combat terrorism. The mission of the deployment is to help the Government of the Philippines:

- continue the war on terrorism;
- defeat the Abu Sayyaf Group (ASG);
- help secure the release of U.S. hostages; and
- ensure that the Philippines does not become a haven for terrorists.

To achieve this mission, U.S. forces will deploy to the AFP's Southern Command Headquarters through the battalion level where they will train, advise, assist, and assess their AFP counterparts. At this operational level, we do not expect U.S. forces to go out on patrols with AFP units.

This phase of our deployment will last no longer than 6 months, as is stated in the Terms of Reference. Within that period, USCINCPAC will provide an assessment and recommendations for any follow-on operations depending on the progress of current efforts. We will then work with the Government of the Philippines to see if any such follow-on deployments would serve our purposes.

WAGE SCHEDULES

13. Senator CLELAND. Secretary Rumsfeld, I would appreciate your thoughts on implementing Section 1113 of Public Law 107-107 (Fiscal Year 2002 National Defense Authorization Act) as it relates to the establishment of wage schedules and rates for prevailing rate employees.

Secretary RUMSFELD. The Federal Wage System (FWS) uses wage surveys of local prevailing rates to determine blue-collar pay in a given wage area (132 wage areas in the United States). Section 1113 of Public Law 107-107 provides a means for importing supplemental wage data from outside the local area and including it with local survey results (this is also known as the "Monroney" provision). These combined wage data are then used as a basis for establishing local wage rates in selected areas. While this survey process applies only to wage areas identified with significant production or repair in such specialized industries as aircraft, ammunition, artillery and combat vehicles, guided missiles, and shipbuilding, the wage survey results are applied to all blue-collar positions in the area, regardless of any industry affiliation.

The Monroney provision is contrary to the principles of the FWS, since wage information imported into the wage area contravenes and distorts local survey results. The artificial increase of Federal wages in certain wage areas not only adds to payroll costs (estimated at an additional \$14 million annually) but also enhances the possibility that government jobs will be less competitive than contractors in the area. While Public Law 99-145 granted the Department of Defense exemption from Monroney provisions from 1985 until 2002, the reinstatement of those provisions creates an ongoing and contentious issue. The Department asked that the exemption be continued; however, our request was not approved. Nevertheless, the Department continues to question whether use of the Monroney provision is appropriate, especially given the existence of several administrative remedies (special rates, increased minimum rates, unrestricted rates, and others) that are available to fully address local pay issues.

ACTIVE DUTY STRENGTHS

14. Senator CLELAND. General Myers, did any of the services request increases in their active duty strengths as part of their fiscal year 2003 budget requests and what is your view on the need for such increases?

General MYERS. The Marine Corps requested an increase of 2,432 active duty military strength as part of their fiscal year 2003 budget to establish a new 4th Antiterrorism Marine Expeditionary Brigade (MEB). The Army, Navy, and Air Force did not request an increase in their active duty strengths. As we move forward in the war on terrorism and protecting the homeland, the services should continue to review their short-term and long-term end strength requirements and make the necessary recommendations to the Department of Defense.

QUESTIONS SUBMITTED BY SENATOR MARY L. LANDRIEU

TRANSFORMATION OF THE MILITARY

15. Senator LANDRIEU. Secretary Rumsfeld, all four services under the Department of Defense and the Coast Guard face sweeping changes and new challenges

to which they must rise in the coming years. In this time of threats from many non-state actors, it makes sense to pursue a capabilities-based approach to our warfighting strategy. This should not negate, however, many of the technologies we currently have in place. Will you make a concerted effort to fully utilize those currently employed systems which can be integrated into the transformation process, such as the B-52, which has proven time after time its worth in achieving very specific national security goals?

Secretary RUMSFELD. To ensure we have the resources to prepare for the future, and to address the emerging challenges to homeland security, we need a more realistic and balanced assessment of our near-term warfighting needs. Looking to the future, it's important that we move away from the so-called threat-based strategy that had dominated our country's defense planning for nearly a half-century and adopt what we characterize as a capability-based strategy, one that focuses less on who might threaten us or where we might be threatened, and more on how we might be threatened. Instead of building our Armed Forces around plans to fight this or that country, we need to examine our vulnerabilities, asking ourselves what must be done to deter and defeat those threats. We need to change not only the capabilities at our disposal, but also how we think about war. All the high-tech weapons in the world will not transform U.S. Armed Forces unless we also transform the way we think, the way we train, the way we exercise, and the way we fight. As we consider the transformational steps ahead, we will certainly look at our existing technologies and capabilities, and determine their future role in our national security strategy.

16. Senator LANDRIEU. Secretary Rumsfeld, do the plans for increasing military expenditures to \$451.4 million by fiscal year 2007 call for the full modernization of the B-52 fleet, including the 'Ready Reserve' B-52s at Minot Air Force Base? After all, the B-52 has been a stalwart in Operation Enduring Freedom and is expected to remain in service until fiscal year 2040.

Secretary RUMSFELD. The increased funding for B-52 modernization includes upgrades to aircraft navigation, avionics, computers, situational awareness, and electronic countermeasure systems for the required B-52 fleet. The Air Force maintains a requirement for 76 B-52 aircraft as stated in the 2001 U.S. Air Force Long-Range Strike Aircraft White Paper and the 1998 Report of the Panel on Long-Range Airpower.

HOMELAND SECURITY

17. Senator LANDRIEU. General Myers, you mentioned that the Unified Command structure may be modified to establish a combatant command responsible for homeland security. Can you share any preliminary models?

General MYERS. Yes, Senator. A preliminary model already exists. Since September 2001, U.S. Joint Forces Command has executed its assigned mission as supported CINC for land and maritime defense and for the civil support portions of the homeland security mission. U.S. Joint Forces Command has activated a 67-person provisional Joint Force Headquarters—Homeland Security (JFHQ-HLS), as well as supporting an implementation team to facilitate a future Unified CINC dedicated to the HLS mission.

18. Senator LANDRIEU. General Myers, do you envision a homeland CINC?

General MYERS. Senator, we are currently studying the feasibility of creating a command to oversee homeland responsibilities. Additionally, we are drafting a terms of reference document that will help us in this effort.

RESERVE AND GUARD READINESS

19. Senator LANDRIEU. Secretary Rumsfeld, you are of course, aware that over the past 10 years the number of days reservists have served on active duty has soared to levels which endanger their civilian employment. With the onset of Operations Enduring Freedom and Noble Eagle, over 7,000 Guardsmen stand watch in more than 440 airports around the country. Countless reservists have not only deployed overseas, but kept our shores and skies safe. They perform duties ranging from humanitarian and peacekeeping missions to assuming new responsibilities in responding to domestic incidents involving weapons of mass destruction. Do you see a resistance from employers to support this increase of Reserve and Guard duties and if so, do you have any recommendations to ease the burden on employers?

Secretary RUMSFELD. The use of the National Guard and Reserve has changed significantly over the past decade, with members not only performing required training, but also supporting operations on a day-to-day basis. Employer support is critical to an individual's decision to remain in the selected Reserve. That support is even more important in a time of mobilization, when employees are absent from their employer for more extended periods of time. These absences create work problems and increased costs for both the employers and employees.

At this time I do not see a resistance from employers to support this increased use of the Reserve components. I see our Nation's employers, both public and private, in full support of their employees. They have, as a general rule, been more than just supportive. Hundreds of employers have extended continued medical care, continued salaries, established support mechanisms for the families, and have taken extraordinary steps to show corporate support for all Reservists. However, as the period of the current call-up continues, sustaining the displays of employer patriotic support may become more of a challenge.

The Department has programmed a significant increase in funding for employer support programs to strengthen the partnership between employers and the military, facilitate targeting of information to employers, enhance communications with industry, and to survey and improve overall attitudes of employers toward participation of their employees in the Guard and Reserve. We have taken positive steps to provide as much relief to employers as possible, primarily by restricting the length of involuntary call up to, in most cases, 1 year. Some Reserve members may be recalled for longer periods, and some Reservists may volunteer for duty beyond the period of the involuntary call up. We want to ensure that no recalled reservist is kept on active duty for longer than required, and we are continuously reviewing our requirements to maintain that equilibrium.

20. Senator LANDRIEU. Secretary Rumsfeld, is it your opinion that the Reserve component can maintain readiness, retention, and remain a force multiplier with this increasing demand, without a significant increase in their budget?

Secretary RUMSFELD. I anticipate that there will be some level of increased Reserve component funding requirement based on the unexpected, unplanned, and unbudgeted utilization of the Reserve components. After the call-up, many of these personnel will still be required to perform their annual Reserve component military training requirements to stay current and qualified for their primary military assignments. Other members may be performing in their specialty and not need any additional event training. We are assessing the appropriate size of the funding increase driven by this greater-than-budgeted utilization, and plan to request that increase as part of the Fiscal Year 2002 Supplemental request.

JSTARS

21. Senator LANDRIEU. Secretary Rumsfeld, recent events have certainly shown the relevance of having flawless intelligence and integrated intra-theater operations. One platform that has become a cornerstone of our intelligence gathering efforts is JSTARS. Can we expect to see more technological growth and more airframes for this particular weapon system in the out-years?

Secretary RUMSFELD. The Air Force currently operates 12 JSTARS aircraft and is funded to field 5 more by fiscal year 2005. These aircraft are based on the older Boeing 707 airframe. We are currently developing a new acquisition plan to upgrade and migrate the JSTARS ground surveillance mission and battle management mission to a newer, larger airframe. The Boeing 767 has been chosen and will host the next generation Active Electronically Scanned Antenna (AESA) radar as the first development spiral of a Multi-sensor Command and Control Aircraft capability. This 4th generation radar, known as the Multi-Platform Radar Technology Insertion Program (MP-RTIP), will provide 20-fold increase in power, 6-fold increase in the number of targets processed, a 300-fold increase in the number of tracks, and 10-fold increase in Synthetic Aperture Radar resolution. Furthermore, the MP-RTIP sensor will provide focused air-to-air surveillance for cruise missile defense. Subsequent development spirals would expand mission capabilities to include air surveillance missions. We plan to have the first MP-RTIP equipped aircraft operational by 2010.

PUBLIC PRIVATE VENTURE AND MILITARY CONSTRUCTION

22. Senator LANDRIEU. Secretary Rumsfeld, some recent estimates say that it will take \$30 billion and more than 30 years just to fix the current backlog of military housing deficiencies. The National Defense Authorization Act for Fiscal Year 1996

included a series of new authorities allowing the Department of Defense to work with the private sector to build or renovate military housing by obtaining private capital to leverage government dollars, and use a variety of private sector approaches to create military housing faster and at less cost to American taxpayers. This legislation was extended to December 2004. Why has the military construction budget decreased by 10 percent in fiscal year 2003, yet the overall budget has increased by 10 percent?

Secretary RUMSFELD. While the fiscal year 2003 military construction request is less than last year's request, it focuses funding on improving quality of life and resolving critical readiness shortfalls. With respect to quality of life, we have increased the military construction budget for family housing by \$227 million from the President's fiscal year 2002 budget request. Furthermore, this budget maintains our commitment to single service members by requesting \$1.2 billion for barracks, and to those living off base by reducing their out of pocket housing costs from 11.3 percent to 7.5 percent. In addition to these budgetary changes, we also accelerated the goal for eliminating inadequate housing from 2010 to 2007, an improvement of 3 years.

You also mention our Military Housing Privatization Initiative (MHPI), the availability of which Congress extended from December 31, 2004 to December 31, 2012. These authorities allow the Department to leverage the capital and expertise of the private sector to improve the condition of military family housing sooner and at less cost (both up front and over the life cycle of a project). As I mentioned, we are committed to eliminating inadequate military family housing by 2007. The extension of these authorities gives the Department an important tool to meet that commitment.

23. Senator LANDRIEU. Secretary Rumsfeld, do you support a broader expansion of this initiative to include permanent authority?

Secretary RUMSFELD. The Department is interested in making the Military Housing Privatization Initiative authorities permanent, which is why we submitted legislation to that effect as a part of our fiscal year 2002 National Defense Authorization Bill. Congress instead elected to extend the availability of our privatization authorities from December 31, 2004 to December 31, 2012. Although not what we requested, the extension of these authorities does allow us to maintain our momentum. We will continue to aggressively pursue housing privatization and, when appropriate, work with Congress to make the housing privatization authorities permanent.

TECHNOLOGY TRANSITION ISSUES

24. Senator LANDRIEU. Secretary Rumsfeld, the Comptroller General has found that private industry fields new products faster and more successfully than the Department of Defense because they are able to spend more time in research and development before incorporating them. Do you agree that problems with immature technologies contribute to slowing down the entire acquisition cycle?

Secretary RUMSFELD. We believe that using mature technologies contributes to cycle time reductions. The revised DOD 5000-series documents that govern the DOD acquisition system now require that key technologies be demonstrated in a relevant environment before a program begins system development and demonstration, unless there is an overriding reason to move forward with less mature technologies.

25. Senator LANDRIEU. Secretary Rumsfeld, do you believe "spiral development" or sequential integration of new technologies as they mature is an appropriate response to this problem?

Secretary RUMSFELD. Yes. Spiral development calls for using available, more mature technologies to produce weapon systems that meet each time-phased increment of required capability. The first increment of capability (or block) will meet many, but not necessarily all, of the system's operational requirements when the system is first deployed. Each additional increment or block will incorporate newer technologies that have matured after the first increment or block was developed and fielded. The series of blocks represent the "spirals" that provide for increasing capabilities over time.

LPD-17

26. Senator LANDRIEU. General Myers, our Navy faces the same challenge as our other services, and that is the age of the fleet. The LPD-17 which would provide some needed relief to aging amphibious lift vehicles has short-sightedly, in my opin-

ion, been reduced to one per production year. Why was this cut made, and isn't replacing aging vessels a number one concern in the overarching theme of transformation?

General MYERS. The Navy decided to reduce shipbuilding procurement in fiscal year 2003 because the average age of surface ships is relatively low, and that they were better off making choices to fund higher priorities. Given the Global War on Terrorism, the Department's first priority is funding readiness accounts. The Navy could better answer the broader question of exactly why the cut was made and the effect it will have on transformation.

SCIENCE AND TECHNOLOGY FUNDING

27. Senator LANDRIEU. Secretary Rumsfeld, the Department's science and technology programs play a key role in our efforts to transform our military to meet the emerging threats of the 21st century. These programs fund scientific research at our Nation's universities, defense laboratories, and in industry—developing the technologies that will protect our warfighters and citizens at home in the future. Past investments by the Department of Defense have yielded the biological sensors, precision weapons, and unmanned vehicles that are playing such an important part in fighting our enemies in Afghanistan and defending our people at home. The Quadrennial Defense Review highlighted the need for science and technology investments, calling for “funding for science and technology programs to a level of 3 percent of the Department of Defense's spending per year.” Unfortunately, the President's budget request is nearly \$1.4 billion short of this goal. The request cuts funding for the Department of Defense's science and technology programs by nearly \$200 million from fiscal year 2002 appropriated levels. It also cuts funding for Army and Navy science and technology programs, as well as for basic research performed at small companies and universities around the country. How are these cuts consistent with the target and transformation vision set by the Quadrennial Defense Review?

Secretary RUMSFELD. The President's fiscal year 2003 budget Request seeks \$9.9 billion for science and technology (S&T) programs, including \$213 million in disaster relief funds for combating terrorism technology, a \$1.1 billion increase over the Fiscal Year 2002 Amended President's Budget Request of \$8.8 billion. It remains our goal to increase funding for science and technology (S&T) programs to a level of 3 percent of the Department's total budget. Current efforts within the Department are focused upon aligning S&T investment with the capabilities outlined in the QDR, with increased emphasis on joint, transformational, and counter-terrorism technologies.

28. Senator LANDRIEU. Secretary Rumsfeld, how will these cuts affect our efforts at transforming the military to meet the new terror, weapons of mass destruction, cyber, and other threats in the next century?

Secretary RUMSFELD. Current efforts within the Department are focused upon aligning S&T investment with the capabilities outlined in the QDR, with increased emphasis on joint, transformational, and counter-terrorism technologies. This reflects a shift to capabilities based planning to address a broad range of potential challenges in the future.

29. Senator LANDRIEU. Secretary Rumsfeld, when do you expect the Department to achieve the 3 percent goal established by the Quadrennial Defense Review?

Secretary RUMSFELD. It remains our goal to increase funding for science and technology programs to a level of 3 percent of the Department's total budget. Providing a precise time line for achieving that goal is very difficult at this time because of the needs to fight the war against terrorism. Our current budget request achieves a balanced and affordable defense program which includes a substantial increase for science and technology over the fiscal year 2002 request.

ROLE OF THE DEPARTMENT OF DEFENSE IN HOMELAND DEFENSE AND HOMELAND SECURITY

30. Senator LANDRIEU. Secretary Rumsfeld and General Myers, last year the Defense Department was considering reorganization initiatives to improve the Department's ability to contribute to the homeland security mission. I gather we still have not seen a final proposal on such reorganization. As I see it, the Department has two roles in this regard. First, it has the primary responsibility for defending the United States against attack from outside threats. That is the primary mission of our military forces. I understand that there has been some thought to revising the

division of responsibilities among our commands, the Unified Command Plan, to improve our capabilities to defend against external attacks. Second, the Department plays a supporting role to the rest of the Federal Government for homeland security. This is a more complicated area because of the different missions of civilian agencies that have law enforcement roles and responsibilities here at home. In this second case, the Department would play a supporting role, rather than a leading role. Can you share with me your views on the appropriate roles for the Department of Defense in each of these missions, and what changes you believe would be useful in helping the Department play the appropriate role?

Secretary RUMSFELD. In Public Law 107-107, the National Defense Authorization Act for Fiscal Year 2002, Congress directed me to "conduct a study on the appropriate role of the Department of Defense with respect to homeland security." The Department of Defense is currently conducting this study, examining roles and missions in light of the Global War on Terrorism and the evolving National Homeland Security Strategy, and will report the results this summer.

General MYERS. Certainly, Senator. While the primary mission of our Armed Forces will continue to be the defense of our homeland against external attacks, our defense policy must evolve to meet new threats. For this reason, a new homeland CINC is being studied. But I want to emphasize that our best defense is still a good offense. We intend to strike the enemy on their soil and on our terms, and this is what our combatant commanders are doing around the world right now.

In terms of how we support civil authorities, we are currently reviewing how best the Armed Forces can assist these authorities. I believe the current role of the Armed Forces is appropriate, but, given the new threat environment, we may need to reexamine the Armed Forces' relationship with local, State, Federal, and civilian agencies in terms of prevention, preemption, and consequence management. If a determination is made that non-DOD agencies lack a specific capability, the Armed Forces may be called upon to help on an interim basis to fill a specific voids. One example in which the Armed Forces would provide an appropriate supporting role is in response to an attack of weapons of mass destruction. In any situation, the Armed Forces would be in a supporting role to Federal or State lead agencies. I do not believe that we should engage in law enforcement or domestic intelligence-gathering activities. Not only are we generally precluded from engaging in these sorts of activities as a matter of long-standing law and policy, but also these are activities for which non-Department of Defense agencies are clearly and appropriately responsible. Any capability shortfalls in these areas should, therefore, be addressed by the appropriate agency.

CHEMICAL AND BIOLOGICAL DEFENSE EFFORTS

31. Senator LANDRIEU. Secretary Rumsfeld, last October, somebody sent highly concentrated spores of deadly anthrax in the mail to a number of Senate offices, including those of Majority Leader Tom Daschle and Senator Pat Leahy. After these terrorist attacks, we found that there was much we did not know about anthrax, which is considered the most likely biological weapon threat our military faces. It was only about a week ago that the Hart Senate Office Building reopened after months of efforts to decontaminate the anthrax and make the building safe again. What lessons have you learned as a result of the anthrax attacks, and what is the Department doing to improve its ability to defend and protect against biological and chemical attacks?

Secretary RUMSFELD. For operational responses to biological terrorism, the Department of Defense is working closely with the lead Federal agencies as defined in the Federal Response Plan to ensure a well coordinated response. For clean up of the Hart Senate Office Building, the Department of Defense supported the Environmental Protection Agency (EPA), which will issue its report on lessons learned from that cleanup effort.

The anthrax attacks late last year pointed out the real dangers of biological weapons. While these attacks have increased the priority of our efforts, the Department has been drawing upon our Nation's scientific expertise to develop and field an effective defense capability to protect our forces and nation from adversaries at home and overseas. Continuing advances in genetic engineering, biotechnology, and related scientific areas will require our continued vigilance to ensure that we are prepared for the threat and not caught by technological surprise.

An integrated approach, which incorporates capabilities for detection, identification, warning, protection, medical countermeasures, and decontamination, provides the basis for the Department's defenses against chemical and biological weapons threats. A detailed description of accomplishments and planned research, develop-

ment, and acquisition programs is provided in the "DOD Chemical and Biological Defense Program Annual Report to Congress," last submitted in April 2002.

32. Senator LANDRIEU. General Myers, I gather that the FDA just approved the license to produce anthrax vaccine last week. I understand that the Joint Chiefs believe it is important that our troops are protected against anthrax. What is the Department's plan to protect our forces against anthrax and other biological warfare threats?

General MYERS. The Joint Chiefs and I are concerned about the health and safety of all service members, especially those assigned or deployed to high threat areas. The Department of Defense is currently reviewing the Anthrax Vaccine Immunization Program to determine the best courses of action to provide protection to our service members. In addition to the anthrax vaccine, commanders have and will continue to employ other pillars of our Force Health Protection program to include the use of protective gear, biological agent detectors, ongoing medical surveillance, intelligence gathering, and stockpiling antibiotics for use in treatment should it be necessary.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. AKAKA

OPTEMPO

33. Senator AKAKA. General Myers, as you pointed out in your written statement, while our forces are bravely securing our homeland and conducting offensive operations on the war on terrorism, they also remain engaged in a number of other important missions. Could you please comment on the impact that maintaining the OPTEMPO has on military readiness for both the short-term and long-term?

General MYERS. While the current operations tempo from the war on terror is manageable, we should remember that this is wartime and it will cause us to necessarily push our forces harder. Sacrifices are being made and will have to continue to be made. This is particularly true for some of our specialized assets, called "low density/high demand" assets, which are being deployed at high operational levels.

That said, we continue to do everything we can to alleviate the stresses on these forces by ensuring balanced force rotations and providing appropriate rest, refit, and training periods. For the long-term, we will strive to address the fundamental causes of deployment stress. The fiscal year 2002 and 2003 budgets help fix some of our "low density/high demand" intelligence, surveillance, and reconnaissance assets. We've also made tremendous strides in recent years providing our people a comprehensive set of quality life improvements, especially in the areas of pay, housing, and health care. We have stocked our spare parts shelves, funded our maintenance depots, and enabled our training pipelines. We have established a system to track and compensate individuals who are frequently deployed, and are working to address all the issues involved in sustaining our military capabilities. These actions will help ensure America's military is ready to respond to the demands the war on terrorism puts on us.

RESERVE PERSONNEL

34. Senator AKAKA. General Myers, you mentioned the substantial contributions our Reserve personnel are making to current operations. How long does the Department expect to sustain this level of Reserve commitment? Will we be able to sustain an additional activation of Reserve personnel in similar numbers?

General MYERS. While the current operations are certainly demanding, our Reserve component forces are ready, willing, and more than able to answer the call. Our Reserve components (RC) are completely integrated into our war against terrorism. Under the current partial mobilization authority, we should be able to sustain our current level for several years. Only a small percentage of our RC forces have been mobilized and we can use members not currently mobilized to satisfy future requirements. Because we do have a large pool to draw from we are able to support an additional mobilization of similar numbers. We also plan to reduce our Reserve component forces as quickly as possible where they are used as an interim capability, such as airport security. We'll need the continued support of employers and families so our Reservists and Guardsmen can continue to serve their country.

QUESTIONS SUBMITTED BY SENATOR BILL NELSON

CONCURRENT RECEIPT

35. Senator BILL NELSON. Secretary Rumsfeld, the budget request does not include funding necessary to allow concurrent payment of retired pay and disability compensation (estimated to cost \$3 billion annually). Do you believe that offsetting military retired pay by Veterans Administration disability compensation is a just and fair treatment of our retirees and their families?

Secretary RUMSFELD. We are concerned about this important issue and are currently reviewing the matter as requested by Congress. We will provide any recommendations after that review is complete.

36. Senator BILL NELSON. Secretary Rumsfeld, why did President decide not to include this funding in his request this year?

Secretary RUMSFELD. The matter was under review, but the review is still pending. Once the review is complete, we will provide appropriate recommendations, if any.

37. Senator BILL NELSON. Secretary Rumsfeld, how did you advise the President with regard to this funding?

Secretary RUMSFELD. Once the review is complete, we will provide appropriate recommendations, if any.

JOINT PRIMARY AIRCRAFT TRAINING SYSTEM

38. Senator BILL NELSON. Secretary Rumsfeld, in your fiscal year 2003 budget request the Air Force buys 35 T-6A (Texan) aircraft for their Joint Primary Aircraft Training System (JPATS) program. In fiscal year 2002 they bought 45. The Navy has again failed to fund their share of this important modernization program in this request. Congress has urged the Navy to get this program back on track as a matter of pilot safety, quality training, and reduced operating costs. The older Navy trainers are much less safe and a 4-year delay in procurement is not trivial. Please explain the apparent contradiction in Department of Defense's position that accelerates the retirement of legacy aircraft such as Huey Helicopters and Navy F-14 Tomcats, but specifically allows the Navy to ignore the benefits of accelerating its own training aircraft modernization program.

Secretary RUMSFELD. As part of the fiscal year 2003 submission process, a prioritized review of Navy programs was conducted similar to that conducted in fiscal year 2002 when JPATS procurement was initially deferred. The Navy remains committed to the decision to maximize the remaining service life of the T-34C with a "just in time" procurement strategy for transitioning to JPATS. The T-34C aircraft has an excellent safety record; it is reliable and economical to operate and has service life remaining to meet current and future training commitments. The Air Force has a legacy trainer, the T-37 that is at the end of its useful service life and it needs to procure JPATS now. The Air Force bought 40 T-6s in fiscal year 2002, and recently accelerated its planned buys for fiscal year 2004-2007.

MILITARY CONSTRUCTION

39. Senator BILL NELSON. Secretary Rumsfeld, the budget request reduces funding for "low priority" new construction that was planned in previous years. It also attempts to reduce some of the backlog of facilities maintenance and repairs. New construction has been slowed obviously in anticipation of BRAC authority in fiscal year 2005. What specific guidance have you provided the services and CINCs with regard to planning, programming, and budgeting for new military construction and what kinds of projects are acceptable or not?

Secretary RUMSFELD. BRAC was not a consideration when determining construction projects. The military construction projects in our fiscal year 2003 request were based on mission criticality without regard to specific installations.

Our guidance to the components was to plan, program, and budget in such a way as to: improve, over time, the recapitalization rate to meet relevant life expectancy benchmarks with our goal being 67 years on average; restore the readiness of facilities to minimum C-2 status; and constrain "new footprint" facilities while eliminating any remaining excess capacity so we can achieve a net reduction in capacity.

MILITARY CONSTRUCTION PLANNING

40. Senator BILL NELSON. Secretary Rumsfeld, how long a view is reflected in this MILCON request—that is, are you trying to avoid committing to construction at installations that may change after 2005, or are you looking well into the future, carefully considering how to station the force into the century? For example, all Atlantic Fleet nuclear aircraft carriers are crowded into Naval Station Norfolk. Is it wise to allow this concentration of valuable, somewhat vulnerable ships to continue, or would it be more prudent to have the flexibility to station our nuclear aircraft carriers at other locations?

Secretary RUMSFELD. The services assessed both short- and long-term factors in developing their fiscal year 2003 military construction requests. All the military services are continually assessing the risk of attacks on our forces and continually planning to optimize protection for our people, our ships, and the other components of our defense force. The advantages of concentration include economics, the efficient and effective use of available infrastructure, and improving the effectiveness and efficiency of antiterrorism protection. As you infer, however, there are certainly some potential disadvantages as well.

Thus, the services will continue to consider facility investments in light of operational requirements as well as many other factors. We must ensure that our infrastructure appropriately supports those requirements. Specifically, the fiscal year 2003 military construction request is focused on resolving critical readiness shortfalls as determined by the services.

NORTHERN COMMAND

41. Senator BILL NELSON. Secretary Rumsfeld, Gen. Peter Pace, Vice Chairman of the Joint Chiefs of Staff, disclosed plans at the National Defense University last week to create a new “Northern Command” that would be responsible for defending the borders, coasts, and airspace of the United States. We understand that you plan to present to President Bush a new unified command structure for just such a headquarters. Do you envision that this command will be a regional combatant command like Central Command, a functional command like Transportation Command, or both, like our Special Operations Command?

Secretary RUMSFELD. I envision that Northern Command (NORTHCOM) will be a regional combatant command.

42. Senator BILL NELSON. Secretary Rumsfeld, what will be the role of the National Guard in this concept?

Secretary RUMSFELD. DOD is studying the missions and associated force requirements for NORTHCOM, including the appropriate relationship between NORTHCOM and National Guard forces.

43. Senator BILL NELSON. Secretary Rumsfeld, do you contemplate recommending change to National Guard structure?

Secretary RUMSFELD. DOD is studying the missions and associated force requirements for NORTHCOM including any proposed changes in National Guard structure.

44. Senator BILL NELSON. Secretary Rumsfeld, will their relative priority for resources increase as a function of this increased allocation to CINC operational plans?

Secretary RUMSFELD. As the defense strategy makes clear, the highest priority for the U.S. military is to fulfill its specified responsibilities to defend the U.S. homeland. Having appropriate Active and Reserve component forces ready for homeland defense missions is therefore a first concern for the Department. Once the Combatant Commander for Northern Command is in place, he or she will develop plans within the Command’s area of responsibility for my review and consideration. All Active and Reserve component units apportioned to those plans must be adequately resourced for their assigned missions.

45. Senator BILL NELSON. Secretary Rumsfeld, over the years, our National Guard’s support for state counterdrug efforts has paid huge dividends in reducing drug traffic and terrorist threats along our borders. The counterterror benefits of these programs are apparent; however, the Department of Defense consistently under funds this effort in annual budget requests. Will this new command also take

on responsibility for the Department of Defense's support for counterdrug operations?

Secretary RUMSFELD. The Department is currently reviewing the missions that U.S. Northern Command will undertake with regards to homeland defense and civil support. The Department provides considerable support to civil authorities in the area of counternarcotics. We are also currently reviewing DOD counternarcotics policy. Therefore, it would be premature to commit to any future role the new command may have in the counterdrug program.

46. Senator BILL NELSON. Secretary Rumsfeld, what is your commitment to the National Guard's participation in counterdrug/counterterror operations in support of state law enforcement agencies?

Secretary RUMSFELD. The Department is currently reviewing our counternarcotics policy. Therefore, it is premature for me to commit to any future level of National Guard participation in counterdrug operations in support of state law enforcement agencies.

47. Senator BILL NELSON. Secretary Rumsfeld, how will this command be funded and have you considered giving this command the same somewhat independent budget authority as held by Special Operations Command?

Secretary RUMSFELD. The Department is examining various funding mechanisms for U.S. Northern Command as part of its ongoing planning process for the Command's establishment.

SPACE

48. Senator BILL NELSON. Secretary Rumsfeld, the Department of Defense budget request indicates a range of support for increased or improved capabilities in space to support military operations—particularly in intelligence, geo-location, and communications. The budget request also reflects significant disappointment that some important space programs have failed to progress adequately—such as reduced funding for Evolved Expendable Launch Vehicle. The Department of Defense's emphasis appears to be on the payload, but there is significant risk to our national capacity to reliably get our critical defense systems into space without support for the launch programs, such as NASA's Space Launch Initiative, and our human space programs. Sen. Mikulski recently (January 28, 2002, *Aviation Week*) "cautioned" NASA to maintain the "firewall" between military and civil space activities. This cautious approach to NASA-Department of Defense cooperation ignores the reality of urgent requirements for greater inter-agency integration to save money, and denies NASA a critical and appropriate role in supporting public safety and global security. I have argued that a national space policy that limits the Department of Defense's role in reusable launch vehicle development may need to be revisited to allow significant Department of Defense contribution to NASA's Space Launch Initiative. What is your position on the future of cooperation with NASA for critical common space functions such as space lift?

Secretary RUMSFELD. The Department of Defense is currently working directly with NASA in developing a long-term investment strategy for next-generation reusable launch vehicles. This strategy identifies opportunities for investment by the Department of Defense to develop critical technologies to support military unique requirements as well as partner with NASA's Space Launch Initiative to develop technologies that would address both agencies requirements for a next-generation space launch system.

49. Senator BILL NELSON. Secretary Rumsfeld, because of the decision to reduce funding for Evolved Expendable Launch Vehicle (EELV), are you planning to use future space shuttle missions for military payloads?

Secretary RUMSFELD. The reduction in the request for the Evolved Expendable Launch Vehicle program in our fiscal year 2003 budget was a result of satellite schedules for Department of Defense satellites moving to the right. Given the recent success of the heritage launch programs and the progress of the Evolved Expendable Launch Vehicle (Atlas V, Delta IV) development, the shuttle option is not being considered for primary military payloads. However, DOD will continue to use the shuttle for a variety of space experiments and small payloads. As you are aware, the EELV strategy is predicated on dual compatibility of the two vehicle systems, providing back up for each other. At this time, none of the DOD primary payloads are configured for space shuttle flight and no funding identified for requisite shuttle-based upper stages.

50. Senator BILL NELSON. Secretary Rumsfeld, how does this budget request specifically reflect progress toward accomplishing the recommendations of the Space Commission you chaired recently?

Secretary RUMSFELD. The Department of Defense is currently working to implement the recommendations of the Space Commission. With respect to this budget, the Department has established a "virtual" Major Force Program for Space to increase the visibility into the resources allocated for space. This "virtual" Major Force Program is identified in this budget and in the Future Years Defense Plan by specific and exclusive program elements.

51. Senator BILL NELSON. Secretary Rumsfeld, what significant organizational changes and program priorities are captured in this request?

Secretary RUMSFELD. The Department of Defense, in response to the recommendations of the Space Commission, has made several organizational changes. The Department has nominated a four-star general officer to be the Commander of Air Force Space Command and has assigned responsibility for the Command of Air Force Space Command separately from CINCSPACE. The newly confirmed Under Secretary of the Air Force has been appointed as the Director, National Reconnaissance Office. The Secretary of the Air Force has been delegated milestone decision authority for all Space Major Defense Programs with the authority to redelegate to the Under Secretary of the Air Force. The Secretary of the Air Force has been delegated authority, in coordination with the Secretaries of the Army and the Navy, to implement actions with regard to space acquisition streamlining. The Air Force has reassigned Space and Missile Systems Center from Air Force Materiel Command to Air Force Space Command. Upon confirmation of the Under Secretary of the Air Force, the Air Force disestablished the position of the Assistant Secretary of the Air Force. The Air Force has assigned the Space and Missile Systems Center Commander as the Program Executive Officer for Space and has assigned the Program Executive Officer directly to the Under Secretary of the Air Force. The Department of Defense is currently working to implement the additional recommendations of the Space Commission which will result in further organizational changes.

With respect to this budget, the Department's space program priorities consist of military satellite communications (MILSATCOM) satellites and terminals including the Mobile User Objective System, laser communication capability, Global Positioning System modernization, and Space Based Radar.

QUESTIONS SUBMITTED BY SENATOR JEFF BINGAMAN

NUCLEAR WEAPONS

52. Senator BINGAMAN. Secretary Rumsfeld, the Nuclear Posture Review reduces the count of nuclear weapons to about 1,700, but essentially keeps intact the number of warhead systems that will be deployed. Will the Department of Defense work to ensure that through the Nuclear Weapons Council that a reduction in the number of warheads as called out by the Nuclear Posture Review does not necessarily translate into a reduction of the stockpile stewardship program whose purpose is to maintain the warhead systems without resorting to testing?

Secretary RUMSFELD. The reduction in the number of operationally deployed strategic nuclear warheads to 1,700–2,200 does not in any way reduce the requirement that the U.S. nuclear stockpile remain safe and secure. Indeed, reductions in operationally deployed warheads increase the need to assure reliability of remaining forces since a technical problem could have greater significance than at current levels.

The Defense Department relies on the Department of Energy (DOE) to ensure that U.S. nuclear weapons are safe and reliable, thereby maintaining the credibility of our nuclear forces. DOE's stockpile stewardship program monitors the status of existing warheads to verify their safety and reliability. DOD participates in this activity through the Nuclear Weapons Council.

53. Senator BINGAMAN. Secretary Rumsfeld, the ongoing Afghanistan situation has shown that the conflicts of the future will involve a close merger between Special Forces, our "5th uniformed service," and our civilian intelligence agencies. What is the Department doing to understand and institutionalize the organizational relationship that has evolved between the civilian intelligence agencies and Special Forces so that it becomes more mainstream?

Secretary RUMSFELD. The relationship between the Special Operations Force's community and civilian intelligence agencies has always been a strong one. This has

been reinforced and strengthened by our efforts in Afghanistan and through better interagency cooperation. DOD is providing senior Special Operations Forces officers on rotation to key positions in civilian agencies to bridge the cultural gap and enhance support relationships. DOD, with the help of the interagency, is resourcing Joint Interagency Task Forces on the staff of the combatant commanders to better plan and prioritize the application of DOD and interagency resources. DOD is also actively studying ways to enhance Special Operations Force's organic capability to plan and operate with civilian intelligence agencies in a more effective manner.

54. Senator BINGAMAN. Secretary Rumsfeld, would the Department be adverse to establishing a Service Secretary equivalent (in rank) for Special Forces?

Secretary RUMSFELD. Consideration of such a proposal for Special Operations Forces would have to be based upon a comprehensive analysis of all aspects—resource, policy, legal, and organizational efficiency. Without such a foundation on which to base an evaluation, the Department has not established a definitive position.

QUESTIONS SUBMITTED BY SENATOR STROM THURMOND

ROLE OF THE QUADRENNIAL DEFENSE REVIEW

55. Senator THURMOND. Secretary Rumsfeld, at the conclusion of last year's Quadrennial Defense Review, you and your staff suggested that the fiscal year 2003 budget request would reflect the recommendations of the QDR. How does this budget request support the recommendations of the QDR?

Secretary RUMSFELD. The answer to this question is detailed in the middle half of my statement for the record on the fiscal year 2003 budget request. To summarize, this request supports the QDR's recommendations by funding the priorities and changes reflected in the new defense strategy developed by the QDR and by emphasizing transformation and the six objectives detailed in my statement.

PRECISION GUIDED AMMUNITION

56. Senator THURMOND. Secretary Rumsfeld, the strikes against targets in Afghanistan have again demonstrated the value of precision-guided ammunition. Unfortunately, we have not learned from experiences in that we are expending ammunition faster than we can replace it and must rely on war reserves. I am also informed that the industrial base for this type of ammunition is limited and having a hard time keeping up with the demand. What is the Department doing to ensure we have and will continue to have a readily available stock of precision ammunition?

Secretary RUMSFELD. Success in the War on Terrorism can be partially attributed to the accuracy of precision guided munitions, both laser guided and GPS guided. The fiscal year 2003 budget request and emergency funding have enabled facilitation of the contractors, and accelerated procurement of greater quantities of these munitions to replace depleted stocks.

The Under Secretary of Defense for Acquisition, Technology, and Logistics directed an increase in production rates of both the Joint Direct Attack Munition (JDAM) and the Laser Guided Bomb (LGB) kits. The JDAM contractor was facilitated to a production rate of 2,800 units per month, tripling the existing contract rate. The two LGB contractors were facilitated to a production rate of 1,450 units per month, more than doubling existing production rates.

MILITARY CONSTRUCTION

57. Senator THURMOND. Secretary Rumsfeld, you have testified several times that we need to improve our infrastructure and make sufficient investments to reduce the recapitalization rate of our infrastructure from the current more than 100 years to a goal of 67 by fiscal year 2006. I am especially interested in our depot system and materiel readiness. After reviewing the military construction program, I found that construction funding for "Maintenance and Production Facilities" was slashed by 59 percent. Does this funding level support your recapitalization goal and improve the working conditions of our men and women in uniform?

Secretary RUMSFELD. Our fiscal year 2003 military construction request focuses investments on critical military requirements and resolving readiness shortfalls, as determined by the services, without regard to specific installations or types of facilities.

Funding for maintenance and production facilities in fiscal year 2002 was higher than the historical average. We have invested about \$338 million (or 3.8 percent) of the military construction budget in maintenance and production facilities, over the past 6 years. For fiscal year 2003, we have requested \$430 million, or 4.8 percent of the military construction request.

DEFER PROJECTS DUE TO DELAY IN BRAC

58. Senator THURMOND. Secretary Rumsfeld, according to the budget presentation documents, a justification for the reduction in military construction funding is a reflection of the “delay in an additional round of base closures.” Based on this statement, one could assume that you are deferring construction at installations that could be closed by another round of BRAC. We have been assured repeatedly that the Department does not have a list of bases that will be considered for closure. Yet, the briefing documents could lead to such a conclusion. Why have you reduced construction funding due to the delay in BRAC?

Secretary RUMSFELD. We did not reduce construction funding due to BRAC, and there is no list of bases to be closed or realigned. The fiscal year 2003 military construction request reflects our priority to improve quality of life and resolve critical readiness shortfalls, as determined by the services. Military construction projects were based on mission criticality without regard to potential BRAC actions or specific installations.

OVERARCHING SET OF CAPABILITIES

59. Senator THURMOND. General Myers, your statement for the record states that the blueprint for the transformation of our Armed Forces will include five considerations. The first consideration is that we must base the process of change on an overarching set of capabilities we believe our forces must possess to support the National Security Strategy now and in the future. What do you consider these overarching capabilities?

General MYERS. Our discussion of an overarching set of capabilities is designed to focus DOD’s transformation efforts on the primary purpose of our Armed Forces—to fight and win our Nation’s wars. Transformation is about keeping our Armed Forces superior to any other nation’s in a complex and ever changing environment.

To provide focus to DOD’s transformation agenda, the Department has identified the following six critical overarching capabilities or operational goals that it must secure:

- Protecting critical bases of operations (U.S. homeland, forces abroad, allies, and friends) and defeating weapons of mass destruction and their means of delivery;
- Projecting and sustaining U.S. forces in distant anti-access or area denial environments and defeating anti-access and area-denial threats;
- Denying sanctuary to enemies by providing persistent surveillance, tracking, and rapid engagement with high-volume precision strike, through a combination of complementary air and ground capabilities, against critical mobile and fixed targets at various ranges and in all weather terrains;
- Assuring information systems in the face of attack and conducting effective information operations;
- Enhancing the capability and survivability of space systems and supporting infrastructure; and
- Leveraging information technology and innovative concepts to develop an interoperable, joint command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR) architecture and capability that includes a tailorable joint operational picture.

INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE (ISR)

60. Senator THURMOND. General Myers, at a January 24, 2002 air and space power seminar, General Martin, the Commander of U.S. Air Forces in Europe, stated: “Our ISR posture as a Nation is woefully short of the needs, from space to HUMINT, [in] every bit of intelligence, reconnaissance, and surveillance capabilities.” The shortfall in IRS has been one of the more persistent issues, yet we always seem to have higher priorities when it comes to funding this area. How does the budget request address the problem?

General MYERS. This budget provides significant increases in both national and defense intelligence, surveillance, and reconnaissance (ISR) capabilities. National programs raised in your question are found in the National Foreign Intelligence Program (NFIP) submission. In the DOD request are significant investments in manned and unmanned airborne programs, space reconnaissance, and space control systems and processing, exploitation, and dissemination capabilities.

Following the tragic events of September 11, the Department's supplemental request to support Operation Enduring Freedom included both additional ISR aircraft, e.g., EP-3, additional sensors for the U-2, and replacement Predator air vehicles, as well as modifications to existing manned platforms to support operations in the Global War on Terrorism.

The fiscal year 2003 budget includes the most significant increases in ISR capabilities in years. Priorities for investment in this budget are counterterrorism and transformation. For example, the request accelerates investment in the high altitude UAV system, Global Hawk, and sustains an accelerated acquisition program across the FYDP. It accelerates acquisition of the Army short range UAV, continues acquisition of our workhorse Predator systems and replacement air vehicles, invests in an advanced air vehicle testbed, and continues preacquisition activities for a space based radar surveillance system. The budget sustains development and deployment of the Distributed Common Ground Station (DCGS), the multi-source deployed and shipboard systems that process and disseminate fused intelligence to forward forces and fleets. Imagery processing, exploitation, and dissemination received a substantial increase.

Investments included in this budget establish a solid foundation for critical improvements in ISR capabilities that provide our eyes and ears on the battlefield now and in the future.

CARRIER SUPPORT

61. Senator THURMOND. General Myers, I understand that at the height of our operations over Afghanistan, we had to pull the *Kitty Hawk* from its station in support of Korea to provide support for United States Central Command (USCENTCOM). Although they deployed appropriate aviation assets to Korea, there were some shortfalls in specific types of aviation support for the Korean operation plan. Was this change in mission for the *Kitty Hawk* due to a shortage of carriers in the number of carriers or due to the unique capabilities of the *Kitty Hawk*?

General MYERS. The U.S.S. *Kitty Hawk* and a portion of her Aircraft Carrier Battle Group (CVBG) deployed to the USCENTCOM Areas of Responsibility (AOR) from 10 Oct–10 Dec 01 as an Afloat Forward Staging Base (AFSB) for Special Operations Forces. All Aircraft Carriers and CVBGs have similar capabilities; however *Kitty Hawk* is home ported in Japan and the transit times from Japan to USCENTCOM AOR is appreciably quicker than from either the east or west coast of the United States.

OPERATIONAL TEMPO

62. Senator THURMOND. General Myers, Title 10 of the United States Code directs that effective October 1, 2002, the number of major headquarter activities personnel in the Department of Defense may not exceed 85 percent of the number in such positions as of October 1, 1999. Considering the current operational requirements, what is the impact of a 15 percent reduction in such headquarters as CINCPAC or CENTCOM?

General MYERS. Whether in peacetime or wartime, a 15 percent reduction will certainly impact the operational capability of the combatant commanders. However, the Department is committed to making further efficiencies within the management structure. All combatant command headquarters are impacted to some degree by the Global War on Terrorism, but the greatest impact is on USCENTCOM headquarters. Additional operational headquarters support for Operation Enduring Freedom has driven increased augmentation requirements at USCENTCOM headquarters. At this time, USCENTCOM is exempted from the 15 percent major headquarters reduction to minimize the impact on the warfighting efforts. The other combatant headquarters are moving forward to execute the 15 percent reduction.

63. Senator THURMOND. General Myers, would you favor a waiver in this requirement beyond the current 7.5 percent authority?

General MYERS. No. However, congressional approval to defer reductions for a year or two would help us stand up USNORTHCOM while we focus on current operations and streamline our major headquarters.

CHANGE IN FORCE STRUCTURE

64. Senator THURMOND. General Myers, based on the current operation in Afghanistan and the needs of any further operations in our Nation's war on terrorism, what changes would you recommend to the force structure of our military services?

General MYERS. Although we have several on-going studies examining the impact of our forward presence and engagement levels, I do not believe it is necessary to make any major changes to the force structure at this time. During development of the Quadrennial Defense Review (QDR), we spent a significant portion of our effort reconciling the mismatch between strategy and resources. The new strategy calls for, among other things, the ability to defeat the efforts of one adversary while decisively defeating another. The War on Terrorism, including our operations in Afghanistan, approaches a level of effort and commitment from our force along the lines of the forces QDR would call "defeat the efforts." As the war's requirement for military forces matures, and our on going studies near completion, we may have more insight into any emerging requirements in terms of additional force structure.

QUESTIONS SUBMITTED BY SENATOR RICK SANTORUM

ARMY LEGACY PROGRAMS

65. Senator SANTORUM. General Myers, the Army has terminated 18 programs and/or systems as part of the fiscal year 2003 request. Among the terminations are: TOW Fire-and-Forget, M113 recapitalization, Armored Combat Earthmover, Wolverine, Hydra Rocket, Improved Recovery Vehicle, and Bradley Fire Support Team. Is the Army or the Office of the Secretary of Defense expecting Congress to "buy back" these terminations? Put another way, should Congress expect to see these programs and/or systems on the Army's unfunded requirements list? While 18 programs and/or systems have been terminated, have the requirements that supported these programs gone away?

General MYERS. The full promise of transformation will be realized over time as we divest some legacy systems and transfer those resources toward new concepts, capabilities, and organizational arrangements that maximize the warfighting effectiveness and lethality of our men and women in uniform. Any discussion pertaining to termination of legacy systems can best be articulated by the services.

EFFICIENCIES

66. Senator SANTORUM. Secretary Rumsfeld, a recent report indicated that the Department of Defense is in the final stages of crafting an incentive plan that would allow defense contractors to keep some of the savings they achieve when they cut costs, reduce overhead, and consolidate operations. In other industries, companies slash costs and benefit when profits jump. But when a military contractor consolidates facilities, implements cost-savings technologies, or adopts other efficiencies, the government reaps the benefits by deducting the amount saved from what it pays the contractor for the product. Military contractors have argued that such a system gives them little incentive to make the hard, and sometimes costly, decisions to boost efficiencies. Can you elaborate on the plan and when you hope to implement these changes? Will these changes require legislative changes to current statute?

Secretary RUMSFELD. We agree that the Department needs a policy to encourage contractors to undertake aggressive cost reduction programs at business segments that contain a large proportion of DOD cost-based contracts. Our plan is to publish a proposed policy by the end of April for public comment. The policy will be structured to permit the sharing of savings over a 5-year period when DOD will achieve savings of at least \$2 for every \$1 in costs it pays to generate cost efficiencies. We do not need legislative changes to implement a policy to share savings.

INTERIM BRIGADE COMBAT TEAMS

67. Senator SANTORUM. General Myers, the Army is already forming two Interim Brigade Combat Teams (IBCT), the 3rd Brigade of the 2nd Infantry Division (Medium) and the 1st Brigade of the 25th Infantry Division (Light), at Fort Lewis,

Washington. Yet when it came time this past November to insert ground forces into Afghanistan, it was the Marines that were tasked the responsibility of taking control of a base near Kandahar. Some have commented that these Marine forces combine more tactical maneuver capability and more firepower to sustain themselves than the Army's comparable rapid-deployment forces. Why were the two Interim Brigade Combat Teams—currently using surrogate equipment similar to the Marine Corps' equipment—not deployed to Afghanistan? Wouldn't a deployment to Afghanistan offer the perfect opportunity to demonstrate the training, tactics, and doctrine that are inherent to the Interim Brigade Combat Teams?

General MYERS. The two IBCTs at Fort Lewis have not yet reached their initial operating capability. The first IBCT has received a limited number of surrogate vehicles, but there are not enough for the entire brigade, thus limiting combined arms training at the battalion and brigade level. The focus thus far has been on small unit training, battle drills, and developing the new capabilities. The second IBCT has just initiated its transformation process in January 2002. If the brigades had attained initial operational capability, they would have been candidates for deployment to Afghanistan and this certainly would have demonstrated their capabilities.

[Whereupon, at 1:12 p.m., the committee adjourned.]

**DEPARTMENT OF DEFENSE AUTHORIZATION
FOR APPROPRIATIONS FOR FISCAL YEAR
2003**

TUESDAY, FEBRUARY 12, 2002

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

SERVICE SECRETARIES

The committee met, pursuant to notice, at 9:38 a.m. in room SH-216, Hart Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Lieberman, Landrieu, E. Benjamin Nelson, Carnahan, Dayton, Warner, McCain, Inhofe, Santorum, Allard, Sessions, Collins, and Bunning.

Committee staff member present: David S. Lyles, staff director.

Majority staff members present: Daniel J. Cox, Jr., professional staff member; Kenneth M. Crosswait, professional staff member; Richard D. DeBobes, counsel; Creighton Greene, professional staff member; Jeremy Hekhuis, professional staff member; Maren Leed, professional staff member; Gerald J. Leeling, counsel; and Peter K. Levine, general counsel.

Minority staff members present: Judith A. Ansley, Republican staff director; Charles W. Alsup, professional staff member; L. David Cherington, minority counsel; Ambrose R. Hock, professional staff member; George W. Lauffer, professional staff member; Patricia L. Lewis, professional staff member; Thomas L. MacKenzie, professional staff member; Ann M. Mittermeyer, minority counsel; Joseph T. Sixeas, professional staff member; Scott W. Stucky, minority counsel; and Richard F. Walsh, minority counsel.

Staff assistants present: Daniel K. Goldsmith, Thomas C. Moore, and Nicholas W. West.

Committee members' assistants present: Frederick M. Downey, assistant to Senator Lieberman; Andrew Vanlandingham, assistant to Senator Cleland; Jeffrey S. Wiener, assistant to Senator Landrieu; William K. Sutey, assistant to Senator Bill Nelson; Eric Pierce, assistant to Senator Ben Nelson; Neal Orringer, assistant to Senator Carnahan; Brady King, assistant to Senator Dayton; Benjamin L. Cassidy, assistant to Senator Warner; Christopher J. Paul and Mark Salter, assistants to Senator McCain; John A. Bonsell, assistant to Senator Inhofe; George M. Bernier III, assistant to Senator Santorum; Robert Alan McCurry, assistant to Senator Roberts; Douglas Flanders, assistant to Senator Allard; James

P. Dohoney, Jr., assistant to Senator Hutchinson; Arch Galloway II, assistant to Senator Sessions; Kristine Fauser, assistant to Senator Collins; and Derek Maurer, assistant to Senator Bunning.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody. The committee meets this morning to receive testimony from the Secretary of the Army, Secretary of the Navy, and Secretary of the Air Force on the fiscal year 2003 budget request and on management and organizational issues facing the military departments. Secretary White, Secretary England, Secretary Roche, we welcome you back to the committee and look forward to your testimony.

Secretary WHITE. Thank you.

Secretary ENGLAND. Thank you.

Chairman LEVIN. As we meet today, the new administration has been in office for just over a year and our three service secretaries have been in office for slightly less time than that. Much of their tenure in office has necessarily been taken up by the pressing issues of the war in Afghanistan and the effort to respond to terrorism here at home. The performance of our men and women in uniform has been exemplary and is a tribute to the entire leadership of the Department of Defense, including our three witnesses here today.

The three service secretaries have played a central role in the formulation of the administration's budget request for fiscal year 2003, which includes the largest proposed increase in military spending in 2 decades. This increase comes without a comprehensive strategy or a detailed plan to guide that spending. A year into office, the administration has not yet issued a national security strategy, a national military strategy, or detailed plans for the size and structure, shape, or transformation of our military.

As Secretary Rumsfeld testified last week, few of the investments that this administration will ask Congress for will benefit our national defense during this presidential term. These are long-term investments. The investments that we make today are needed to ensure that our military is as prepared for future wars as it has proven to be for Operation Enduring Freedom.

So we are going to be particularly interested in the tradeoffs that our witnesses have made between investments in our legacy forces and investments in the military transformation and the basis upon which they have made these tradeoffs.

Last summer Secretary Rumsfeld designated the three service secretaries to serve on two new committees, a Senior Executive Council and a Business Initiative Council, with broad responsibility for planning and implementing improved management practices across the entire Department of Defense. The Secretary has set a goal of achieving savings of 5 percent or more by bringing improved management practices from the private sector to the Department of Defense.

Longstanding problems in areas such as financial management, acquisition management, management of information technology, and personnel management have not disappeared just because we are fighting a war. If anything, heightened concerns about national security and increased levels of defense spending give us an even

greater obligation to ensure that the taxpayers' money is well spent. For this reason, the committee will be interested in hearing what steps our three service secretaries have taken to improve the management of the Pentagon and how much progress we have made toward achieving the 5 percent savings goal.

America's Armed Forces are performing superbly in their fight against terrorism. This committee will do all in its power to ensure that our forces have the resources, tools, and technologies to prevail in this fight. We are determined to preserve a high quality of life for our forces, for their families, to sustain their readiness, and to transform the Armed Forces to meet the threats and challenges of tomorrow, and we will continue to work with our service secretaries in seeking to achieve those goals.

Senator Warner.

STATEMENT OF SENATOR JOHN WARNER

Senator WARNER. Thank you, Mr. Chairman.

I welcome our witnesses this morning. I always look forward to this particular hearing with the service secretaries. I think you have the best jobs anybody can possibly have, in this administration or any other.

As the Chairman said, the President's budget request for fiscal year 2003 represents the largest increase, \$48 billion, for the Department of Defense in two decades. In light of the attacks our Nation suffered on September 11, this increase is urgently needed. These attacks were a defining moment for our Nation. They engendered a new sense of unity and purpose in the country. Speaking for myself, I have had an opportunity to observe this Nation, and over the years I cannot recall a period in our history since World War II when the Nation was more united behind the President and the men and women of the Armed Forces.

The President has brilliantly rallied this Nation, and indeed the world, to fight this global war against terrorists and those who harbor them. It is a war unlike any we have ever fought before. As Senator Levin and I visited our service men and women in the Afghan region in November, I was indeed struck by a recurring thought: They and we are writing a new chapter in military history with this operation, and we have to learn from it and plan for the future.

The war has truly been a joint operation—all services operating together as one and many coalition nations operating with our U.S. forces. Soldiers on horseback and afoot are directing twenty first century weapons with extraordinary precision. Maritime forces are operating hundreds of miles inland in a landlocked country. Old bombers are delivering new weapons with devastating accuracy. Decisions made in Washington or down at the headquarters in Tampa are received and executed instantly, 7,000 miles away. Agility, precision, lethality, and interoperability are the measures of success for our systems and organizations.

Last Tuesday Secretary Rumsfeld and General Myers appeared before this committee to outline the budget request in broad terms. The overriding themes of winning the war against terrorism, defending our homeland, improving quality of life for our service personnel, and transforming our forces to better counter new threats

are right on target. We now look to you to fill in the details about how you will prepare your respective departments, not only to defend America and win this war against terrorism, but also to be ready for what lies ahead.

I am supportive of this budget request, but I do have some concerns. Although the operation in Afghanistan highlighted the critical role of Navy platforms and aircraft, the budget request before us cuts both shipbuilding and naval aircraft. This is a matter you and I have discussed extensively in private in the last 30 days, Mr. Secretary, and we will discuss it in open session here today in some detail. At the current rate of shipbuilding, we will be well below a 300-ship Navy if we do not begin to take steps to reverse this decline. I wrote you to that effect about 3 weeks ago.

Mr. Secretary of the Army, Army plans to transform to a lighter, more deployable, more lethal force are complicated by the need to maintain costly and aging legacy forces. That poses quite a challenge to you.

In the Air Force, investment in new tactical aircraft is, I regret to say, somewhat overdue, but recent experiences demand increased investment in long-range, unmanned and space capabilities.

As we discuss and debate this budget request in the days and the weeks ahead, as is the duty of this committee and Congress, on one thing we can all agree: the commitment, the dedication, and the performance of the soldiers, sailors, airmen, marines, and their families, in service to this Nation has been remarkable. We are mindful of how well they have served in the spirit of generations that have rallied to their Nation's call before them. We are forever grateful for their willingness and readiness to serve and to accept the risks and sacrifices.

They exemplify the spirit of service our President has called for, as he reminded us recently, "The cost of freedom and security is high, but never too high."

The Nation is united in purpose and determination as seldom before in our history—united behind our President and united behind these selfless men and women and their families who proudly serve our Nation. We in Congress will do everything we can to provide the resources and capabilities they need to succeed.

Thank you.

Chairman LEVIN. Thank you, Senator Warner, very much. Senator Inhofe has requested that he be recognized for an opening statement.

Senator INHOFE. Thank you, Mr. Chairman, very much. I do have a special introduction to make this morning. Yesterday I had the honor of seeing someone I have gotten to know over the past 3 years quite well. She is a State Senator, a Puerto Rican State Senator, Miriam Ramirez. We have worked together for quite some time. She has always been a supporter of the Navy.

She brought two perspectives that I think certainly, Secretary England, I would hope that you would have a chance to visit with her and get directly from her. One is that since September 11 the tide has changed in terms of the attitude toward our Navy on the island of Puerto Rico; second, an awareness that if something should happen to the presence of the Navy on Puerto Rico it would

not happen in a vacuum, that things would happen that are written into the law. Roosevelt Roads would close, Fort Buchanan would close, other benefits enjoyed historically by Puerto Rico would cease to be.

The other is a recognition that those people who are still anti-Navy on the island of Puerto Rico, many of them are terrorists. Here we are in a war on terrorism. One of the leaders who is respected in the anti-Navy movement—they are a minority movement—is Lolita LeBrone, who is a terrorist who led a group of terrorists into the House of Representatives here on Capitol Hill and opened fire, wounding five of our Congressmen. So that is the type of thing that is taking place there.

I would like to ask that Senator Ramirez, who is with us here today, would stand and be recognized. Thank you, Senator.

Chairman LEVIN. We welcome you, Senator. (Applause.)

Secretary White, let us start with you.

STATEMENT OF HON. THOMAS E. WHITE, SECRETARY OF THE ARMY

Secretary WHITE. Thank you, Mr. Chairman, Senator Warner, members of the committee.

There are moments in history when events suddenly allow us to see the challenges ahead with a degree of clarity previously unimaginable. The events of 11 September created one of those rare moments. Now we see clearly the challenges facing our Nation and we are confronting them.

To succeed, the Army must accomplish three critical tasks at the same time: First, we must help win the global war on terrorism; second, we must transform to meet the challenges of future conflicts; and third, we must secure the resources needed to pursue both the war on terror and Army transformation.

Our first task is to help win the war on terrorism. We have seen remarkable progress in Afghanistan, where Army Special Forces have led the way, followed by elements of the 10th Mountain Division, the 101st Airborne Division, and other Army units. Today more than 14,000 soldiers are deployed in the U.S. Central Command's area of responsibility supporting Operation Enduring Freedom, from Egypt to Pakistan, from Kenya to Kazakhstan.

Together with our joint and coalition partners, we have defeated the Taliban, significantly disrupted the al Qaeda terrorist network, liberated the people of Afghanistan, and installed an interim government in Kabul, all within a few short months, in lousy terrain, in the depth of winter, over 7,000 miles away, in the graveyard of empires.

I know that Secretary Roche and Secretary England join me when I say our service men and women are nothing short of inspirational. They are accomplishing a complex and dangerous mission with extraordinary courage, skill, and determination. Some have been injured, others have given their lives. Our Nation is forever indebted to them and their families for their sacrifice.

As the war evolves, requirements for Army forces are growing, from assuring regional stability in Central Asia to stability and support operations in Afghanistan, to securing detainees at Guantanamo Bay, Cuba, to training counterterrorism forces in the Phil-

ippines. At the same time, the Army continues to deter potential adversaries in Southwest Asia and Korea, while upholding U.S. security commitments in Bosnia, Kosovo, Macedonia, the Sinai, and elsewhere. In fact, the Army Active, Reserve, and National Guard has over 179,000 soldiers and 38,000 civilians deployed or forward-stationed in 120 different countries.

At home, the Army continues its long tradition of support to homeland security. We have mobilized over 24,000 Army National Guard and Reserve soldiers, the rough equivalent of two Army divisions, for Federal service here and overseas. Another 11,000 Army National Guard soldiers are deployed on State-controlled missions securing critical infrastructure such as airports, seaports, reservoirs, and powerplants. We have also deployed 5,000 soldiers to help ensure the security of the 2002 Winter Olympic Games in Salt Lake City, Utah.

Our soldiers are answering the call of duty, but we must ensure that the force remains appropriately manned for the challenges ahead. As Secretary Rumsfeld testified last week, it is clear now in the midst of the war on terror, the final dimensions of which are unknown, that it is not the time to cut manpower.

Our second task is to transform to meet the challenges of the next conflict. Although Army transformation was well under way before the 11th of September, the attacks on our homeland and subsequent operations validated the Army's strategic direction and provided new urgency to our efforts. Consequently, we are accelerating development of the Objective Force, a capabilities-based, full spectrum force that will extend our advantage in dominant maneuver well into the future.

Next month we will designate a lead systems integrator for the Future Combat Systems (FCS). FCS is designed to be a system of systems that harnesses a variety of technologies to produce a new ground combat system of unparalleled power and mobility. While the actual form of FCS is still being defined, it will undoubtedly combine the best elements of existing manned systems with the promise of the new generation of unmanned and robotic combat capabilities. We anticipate equipping our first Objective Force units with FCS in 2008 and intend to achieve an initial operational capability (IOC) by 2010.

We are presently fielding an Interim Force to close the capabilities gap between our heavy and light forces. Organized into interim brigade combat teams, it will train, alert, and deploy as a self-contained combined arms force optimized for combat upon arrival in theater. The Interim Force will also provide a bridge to the Objective Force through leader development and experimentation.

For example, digital concepts tested and provided with the legacy force are being refined in the Interim Force and will be applied to the Objective Force. We are on schedule to fully equip the interim brigade with the interim armored vehicle by February 2003. That brigade will achieve its IOC by May 2003 and we intend to field five more interim brigades by 2007.

As our hedge against near-term risk, we are selectively modernizing and recapitalizing the legacy force to guarantee war-fighting readiness and to support the Objective Force as we transform.

The challenge, of course, is to effectively manage risk without sacrificing readiness.

Our third task is to secure the resources needed to pursue both the war on terrorism and Army transformation. This requires the continued support of Congress and the administration, a commitment to sustained investment over many years to offset the shortfalls of the past. The Army's 2003 budget request is fully consistent with our 2002 budget. It goes a long way toward funding the Army vision, taking care of people, assuring warfighting readiness, and sustaining the momentum of transformation to the Objective Force.

However, we are still assuming risk in the legacy force and longstanding shortfalls remain in installations and sustainment, restoration, and modernization. As good stewards, we are doing our part to free up resources for reinvestment in high priority programs. We have made tough tradeoffs, terminated 29 programs in the last 3 years, restructured 12 more, reduced recapitalization from 21 to 17 systems, and we will accelerate the retirement of 1,000 Vietnam-era helicopters.

We have also expedited our efforts to manage the Army more efficiently, starting at the top by restructuring the Army secretariat and Army staff into a more integrated headquarters that will streamline the flow of information and speed decisionmaking. The next phase of our headquarters realignment includes our field operating agencies and major commands. These initiatives will allow us to exceed the congressionally-mandated 15 percent reduction in headquarters staffs and reinvest manpower saved into other priorities. We will need your support to achieve similar efficiencies in the future.

Let me conclude by assuring the members of this committee that the Army is trained and ready to serve in its indispensable role as the decisive land component of America's joint warfighting team.

Thank you, Mr. Chairman, and I look forward to the committee's questions.

[The prepared statement of Secretary White follows:]

PREPARED STATEMENT BY THE HON. THOMAS E. WHITE

Mr. Chairman and distinguished members of the committee, I thank you for this opportunity to report to you today on the United States Army's readiness to provide for our Nation's security today and in the future.

Throughout our Nation's history, the Army has demonstrated that it is America's decisive ground combat force with capabilities sufficiently diverse to cover the full spectrum of operations demanded by the Nation—anytime, anywhere. The essence of the Army remains unchanged—an ethos of service to the Nation, the readiness to fight and win wars decisively, and a willingness to accomplish any mission the American people ask of us.

Today, we are engaged in a global war on terrorism and defense of our homeland. Soldiers, on point for the Nation, are protecting and promoting American interests around the globe. They are accomplishing these vital missions much as we have for over 226 years with little fanfare or attention. The Army is able to accomplish what is asked by relying on the strength of its soldiers—active, National Guard, Army Reserve—and civilians, who honorably and proudly answer the calls to duty.

The Army has no illusions about the challenges it faces. It must help win the global war on terrorism and prepare for future wars and conflicts by effectively using the resources you provide us to transform. With the continued support of Congress and the administration, our soldiers will continue to do their part to decisively win the global war on terrorism, rapidly transform themselves to fight and win new and different kinds of conflicts, meet our obligations to allies and friends, and maintain our readiness for the unexpected and unpredictable challenges that may arise.

THE STRATEGIC ENVIRONMENT

The attacks of 11 September provide compelling evidence that the strategic environment remains dangerous and unpredictable. Although we may sense dangerous trends and potential threats, there is little certainty about how these threats may be postured against America or her interests. Uncertainty marks the global war on terrorism, and our soldiers continue to be involved in smaller-scale contingencies and conflicts. Yet, the potential for large-scale conventional combat operations will continue to lurk just beneath the surface. Victory in battle will require versatile combat formations and agile soldiers, who can deploy rapidly, undertake a multiplicity of missions, operate continuously over extended distances without large logistics bases, and maneuver with speed and precision to gain positional advantage. Our soldiers must be capable of prosecuting prompt and sustained land operations across a spectrum of conflict resulting in decisive victory.

THE STRATEGIC FRAMEWORK

The 2001 Quadrennial Defense Review (QDR) established a new strategic framework for the defense of the Nation that struck a balance between near-term readiness and our ability to transform ourselves in order to meet current and future conflicts. The report outlined a new operational concept that gives continued priority to homeland defense, promotes deterrence through forward presence, and asks that we have the ability to conduct both smaller-scale contingencies and large scale, high-intensity combat operations simultaneously.

Our soldiers can defeat enemy armies, seize and control terrain, and control populations and resources with minimal collateral casualties and damage. They can operate across the spectrum of military operations, whether it is full-scale conventional conflict, fighting terrorists, or setting the conditions for humanitarian assistance. This multifaceted ground capability enables us to assure our allies and friends, dissuade future military competition, deter threats and coercion, and, when necessary, decisively defeat any adversary.

As the Army continues to work with other departments, agencies, and organizations, emerging requirements that are not fully defined in the 2001 QDR may require additional resourcing, whether technological, logistical, or force structure. Despite 10 years of downsizing, the Army has accomplished all assigned missions to a high standard. In short, we are doing more with less, and the strain on the force is real. Our soldiers continue to give us more in operational readiness than we have resourced.

While we fight and win the global war on terrorism, the Army must prepare itself to handle demanding missions in the future strategic environment. Over 2 years ago, the Army undertook transforming itself into a force that is more strategically responsive and dominant at every point on the spectrum of military operations. We have gained insight from previous deployments, operations, and exercises, along with leading-edge work in Army Battle Labs, joint and Army warfighting experiments, and wargames. With this insight, the Army embarked on initiatives to assure its dominance in a new contemporary operational environment by deterring and defeating adversaries who rely on surprise, deception, and asymmetric warfare to achieve their objectives against conventional forces. The attacks of 11 September 2001 and our subsequent operations overseas validated the Army's transformation. If anything, 11 September provided new urgency to our efforts. Thus, we are accelerating transformation to give our commanders the most advanced capabilities they need to ensure that we have the best led, best equipped, and best trained soldiers for the emerging global environment. To mitigate risk as we transform to meet future requirements, we will prioritize among the imperatives of meeting existing threats, safeguarding our homeland, and winning the war against terrorism.

SOLDIERS—ON POINT FOR THE NATION

Globally, soldiers offer tangible reassurance to our allies, build trust and confidence, promote regional stability, encourage democratic institutions, and deter conflict. Nothing speaks to the values of America more than soldiers on the ground providing comfort, aid, and stability at home and abroad. The Army, as part of a joint military team, provides a wide range of options to our leaders and commanders. As we have seen, in today's world we cannot win without the human dimension on the battleground. Whether it be gathering intelligence, challenging an adversary's ability to conceal and seek cover, or protecting innocent civilians, the American soldier remains the ultimate precision weapon during combat operations, particularly when legitimate targets are interspersed among non-combatants. In the final analysis, it

is the soldier on the ground who demonstrates the resilience of American commitment and provides the needed flexibility to decisively defeat our adversaries.

Since October 2001, Army conventional and special operations forces, as part of the joint force, have participated in Operation Enduring Freedom in the Afghanistan theater of operations. The range of their capabilities was extensive. These highly trained soldiers worked with local forces to forge a powerful alliance. They designated targets for air strikes, secured airfields, and performed reconnaissance and security missions that facilitated the safe introduction of follow-on forces. Supporting the war effort, they provide security to joint forces, critical facilities, and supply lines, and they receive and prepare both combat and humanitarian supplies for air delivery to Afghanistan. Currently, more than 12,000 soldiers are deployed—from Egypt to Pakistan, from Kenya to Kazakhstan. Although hostilities in Afghanistan are shifting focus, requirements for ground forces are growing—they are assuring regional stability in Afghanistan, directing humanitarian assistance and relief operations, securing detainees at Guantanamo Bay, Cuba, and deploying to the Philippines.

At home, the Army continues its long tradition of support to homeland security. Even before 11 September 2001, the Army had 10 trained and certified Weapons of Mass Destruction Civil Support Teams ready to assist civil authorities and had trained 28,000 civilian first responders in 105 cities. Since the attacks, we have mobilized over 25,000 Army National Guard (ARNG) and United States Army Reserve (USAR) soldiers for Federal service here and overseas. Nearly 11,000 soldiers are on state-controlled duty securing airports, seaports, reservoirs, power plants, the Nation's capital region, and serving at "ground zero" in New York City alongside the United States (U.S.) Army Corps of Engineers. To increase protection for our citizens and reduce vulnerability, we accelerated the safe destruction of the U.S. stockpile of lethal chemical agent and munitions while combating the proliferation of chemical weapons. Continuing a commitment to civil authorities, nearly 500 soldiers worked Super Bowl XXXVI, and over 5,000 soldiers are helping ensure the security of the 2002 Winter Olympics in Salt Lake City, Utah.

But, fighting the global war on terrorism in no way diminishes the requirements placed on the Army for support to missions and operations around the world—indeed, it expands it. While the Army remains engaged at home, it is prudently taking action for follow-on operations around the world, to include mobilizing some 2,000 ARNG soldiers to augment our missions in the European theater. In fact, the Army—active, ARNG, and USAR—has over 124,000 soldiers and 38,000 civilians stationed in 110 countries. Additionally, on any given day last year some 27,000 soldiers were deployed to 60 countries for operations and training missions. It is easy to forget that our soldiers have been on the ground conducting peacekeeping missions in the Balkans for 6 years, in Saudi Arabia and Kuwait for 11 years, and in the Sinai for 19 years. Our soldiers have been in Korea and Europe for over 50 years, assuring their peace and stability while, at the same time, providing the Nation with a rapid deployment capability to areas near those theaters of operations, as needed.

THE ARMY VISION: PEOPLE, READINESS, AND TRANSFORMATION

On 12 October 1999, the Army articulated its vision that defined how the Army would meet the Nation's requirements now and into the 21st century. The vision is comprised of three interdependent components: people, readiness, and transformation. It provides direction and structure for prioritizing resources to ensure the Army remains the most dominant and intimidating ground force in the world to deter those who would contemplate threatening the interests of America. Ultimately, it is about risk management, striking a balance between readiness today and preparedness for tomorrow. It is about having overmatching capabilities while simultaneously reducing our vulnerabilities in order to dominate those who would threaten our interests—now and in the future. It is about examining where we are now and where we need to be, and it is about achieving decisive victory—anywhere, anytime, against any opposition.

People

People—soldiers, civilians, retirees, veterans, and their families—are the Army. People are central to everything we do in the Army. Institutions do not transform; people do. Platforms and organizations do not defend our Nation; people do. Units do not train, they do not stay ready, they do not grow and develop leadership, they do not sacrifice, and they do not take risks on behalf of the Nation; people do. We must adequately man our force, provide for the well being of our soldiers and their families, and develop leaders for the future so that the Army continues to be a professionally and personally rewarding experience. Soldiers will always be the center-

piece of our formations. They are our sons and daughters. We are committed to recruiting and retaining the best people and giving them the finest tools to do their job so that they remain the world's best army.

- **Manning the Force**

Current and future military operations depend on an Army with the flexibility to respond quickly in order to rapidly meet changing operational requirements. The Army has approached its manpower challenge in a variety of ways. In fiscal year 2000, we implemented a personnel strategy to man units at 100 percent. Starting with divisional combat units, the program expanded in fiscal year 2001 and fiscal year 2002 to include early deploying units. The Army is currently assessing its ability to fill remaining units by the end of fiscal year 2004. The ARNG and USAR now make up more than 50 percent of the Army's force structure. Ongoing and expanded Reserve integration initiatives—to include full time support—have increased Reserve readiness and increased their ability to rapidly transition from a peacetime to a wartime posture.

A new advertising campaign in 2001—*An Army of One*—raised the awareness and interest levels of potential soldiers. The Army achieved 100 percent of its goal for all components in recruiting and retention for the second year in a row. To ensure that we recruit and retain sufficient quality personnel, we continue to examine innovative recruiting and retention programs.

- **Well-Being**

Army readiness is inextricably linked to the well being of our people. Our success depends on the whole team—soldiers, civilians, retirees, and their families—all of whom serve the Nation. The term well being is not a synonym with “quality of life,” but rather an expansion of the concept that integrates and incorporates existing quality of life initiatives and programs. Well being takes a multifaceted approach. We are working with the Office of the Secretary of Defense to improve TRICARE in order to provide better medical care for soldiers, families, and retirees and to continue to close the compensation gap between soldiers and the civilian sector. Our soldiers appreciate, more than you realize, your support this past year for pay increases of at least 5 percent and the 3.6 percent for the civilians who support them. Targeted pay increases for highly skilled enlisted soldiers and mid-grade officers, the online electronic Army University education program, and upgraded single-soldier barracks and residential communities further support and aid in maintaining the well-being of soldiers willing to put their lives at risk for our national interests. In turn, the attention to a soldier's well being helps the Army recruit and retain the best people. Our soldiers ask little in return, but they judge their Nation's commitment to them by how well it takes care of them and their families. It is a commitment we must honor.

- **Leader Development**

Civilian and military leaders are the linchpin of transformation. The leaders and soldiers who will implement the new warfighting doctrine must be adaptive and self-aware, capable of independent operations separated from friendly elements for days at a time, exercising initiative within their commander's intent to rapidly exploit opportunities as they present themselves on the battlefield. Leaders must be intuitive and capable of rapid tactical decision-making, and all soldiers must master the information and weapons systems technologies in order to leverage their full potential. But new technologies and new kinds of warfare will demand a new kind of leader. As part of our transformation process, the Army is taking a comprehensive look at the way we develop officers, warrant officers and non-commissioned officers through the Army Training and Leader Development Panels to review and assess issues and provide recommendations on how to produce the Army's future leaders. We have expanded these reviews to include Army civilians in anticipation of the need to replace the increasing number who will become retirement eligible after fiscal year 2003. The Army must have top-notch military and civilian people at all levels in order to meet the global, economic, and technological challenges of the future.

In June 2001, the Army published the most significant reshaping of Army warfighting doctrine since 1982. Field Manual 3-0, Operations, emphasizes the Army's ability to apply decisive force through network-centric capabilities and shows just how dramatically the Army must transform itself to fight both differently and more effectively. This doctrine will assist in the development of a new force—the Objective Force—that maximizes the technological advantages of equipment, leader development, and evolutionary warfighting concepts. The Objective Force will demand a generation of leaders who know how to think, not what to think.

Readiness

At its most fundamental level, war is a brutal contest of wills. Winning decisively means dominating the enemy. To be dominant, we must be not only organized, manned, and equipped, but also fully trained. Today, the Army is ready for its assigned missions, but sustained support from the Nation, Congress, and the administration is required to ensure that we maintain our readiness. To do so requires that we pay attention to training, installations, force protection, and readiness reporting.

- **Unit Training**

Tough, demanding training which is supported by an infrastructure that allows us to train, sustain, and deploy is essential to readiness. History has taught us and we have learned that, in the end, armies fight the way they train. The Army is committed to fully executing our training strategy—the higher the quality of training, the better the leaders and warfighters we produce. The result is an increased state of readiness to serve our Nation. To this end, we must fully modernize training ranges, combat training centers, and training aids, devices, simulators, and simulations to provide adequate and challenging training. The Army has funded the integration of virtual and constructive training capabilities to achieve realism and cost effectiveness.

As we move to greater network-centric warfare capability, our forces will operate with even greater dispersion, and maintaining sufficient maneuver areas for training these extended formations will become even more critical. Thus, the Army is implementing a sustainable program to manage the lifecycle of training and testing ranges by integrating operational needs, land management, explosives safety, and environmental stewardship. This program will ensure the continuing viability of training ranges by addressing the multiple aspects of encroachment: endangered species and critical habitats, unexploded ordnance and munitions, spectrum encroachment, airspace restrictions, air quality, noise, and urban growth. As we transform to a future force with new systems, organizational structures, and new doctrine to achieve full spectrum operational capability, our training enablers and infrastructure, along with realistic and relevant training venues, must be funded to match the timelines we have established to field a highly trained soldier—one whose unit is poised to fight new and different kinds of conflicts while maintaining traditional warfighting skills.

- **Installations**

Installations provide homes, family and training support, and power projection platforms for the Army. They are the bases where soldiers live, train, and from which they launch on their missions. Worldwide, we have physical plants worth over \$220 billion. For too many years, the Army has underfunded long-term facilities maintenance in order to fully fund combat readiness and contingency operations; thus, we now have first-class soldiers living and working in third-class facilities. Commanders currently rate two-thirds of their infrastructure condition so poor that it significantly impacts mission accomplishment and morale. The major investment in Sustainment, Restoration, and Modernization (SRM) in fiscal year 2002 will help improve only the most critical conditions in our crumbling infrastructure. Over the next 5 years, SRM shortfalls will continue to approximate \$3 billion annually as a result of our aging facilities. Exacerbating this situation is the fact that the Army has more facility infrastructure than we need. The cost of operating and sustaining these facilities directly competes with funding our warfighting capability. The realignment or closure of excess facilities will free funds for installations and bring the recapitalization rate closer to the Department of Defense's goal of 67 years by 2010. The Army is divesting itself of mothballed facilities and examining privatization alternatives. For example, we are capitalizing on the success of the Residential Communities Initiatives by expanding the program to 24 projects to more efficiently and effectively manage installations. Encompassing over 63,000 family housing units, the program allows the private sector to remodel, build, and manage housing on Army bases in order to provide the quality housing our soldiers and their families deserve. In fiscal year 2003, we will institute a centralized installation management organization that will improve our facilities and infrastructure through consistent funding and standards that promote the equitable delivery of base operation services and achieve efficiencies through corporate practices and regionalization.

- **Force Protection**

The missions and training we assign soldiers are not without risks, and soldiers must be able to live, train, and work in safe, secure environments. We minimize risks by proactively protecting our force. For example, we reevaluated force protection security programs and adjusted over \$800 million in fiscal year 2003 to further support controlled access to installations, in-transit security, counter-terrorism

training improvements, information assurance, situational awareness, crisis response, and force protection command and control. An additional \$1.8 billion is required for further force protection and security program requirements generated in the wake of the attacks on America.

- **Readiness Reporting**

Measuring readiness requires accuracy, objectivity, and uniformity. The Army is transforming its current readiness reporting system to achieve greater responsiveness and clarity on unit and installation status. The Strategic Readiness System (SRS) will provide senior leaders with an accurate and complete near real time picture representative of the entire Army (operating forces, institutional forces, and infrastructure). The SRS will be a predictive management tool capable of linking costs to readiness so resources can be effectively applied to near- and far-term requirements. A prototype SRS is being evaluated at selected installations, and its development will continue to ensure compliance with congressionally directed readiness reporting.

Transformation

Transformation is first and foremost about changing the way we fight in order to win our Nation's wars—decisively. The 21st century strategic environment and the implications of emerging technologies necessitate Army transformation. The global war on terrorism reinforces the need for a transformed Army that is more strategically responsive, deployable, lethal, agile, versatile, survivable, and sustainable than current forces.

Technology will enable our soldiers to see the battlefield in ways not possible before. *See First* enables leaders and soldiers to gain a greater situational awareness of themselves, their opponents, and the battle space on which they move and fight. Superior awareness enables us to *Understand First*, to assess and decide on solutions to the tactical and operational problems at hand faster than our opponents—to gain decision superiority over our opponents. Networked units are able to *Act First*, to seize and retain the initiative, moving out of contact with the enemy to attack his sources of strength or key vulnerabilities at a time and place of our choosing. The Army uses precision fires—whether delivered by joint platforms or soldiers firing direct fire weapons—to defeat the enemy as rapidly and decisively as possible. Army units will be capable of transitioning seamlessly from stability operations to combat operations and back again, given the requirements of the contingency. When we attack, we destroy the enemy and *Finish Decisively*.

The Army is taking a holistic approach to transformation, implementing change across its doctrine, training, leader development, organization, materiel, and soldier systems, as well as across all of its components. Transformation will result in a different Army, not just a modernized version of the current Army. Combining the best characteristics of our current forces, the Army will possess the lethality and speed of the heavy force, the rapid deployment mentality and toughness of our light forces, and the unmatched precision and close combat capabilities of our special operations forces—adopting a common warrior culture across the entire force. Transformation will field the best-trained, most combat effective, most lethal soldier in the world.

True transformation takes advantage of new approaches to operational concepts and capabilities and blends old and new technologies and innovative organizations that efficiently anticipate new or emerging opportunities. Transformation will provide versatile forces that have a decisive margin of advantage over potential adversaries and fulfill the Nation's full spectrum requirements. Transformed ground forces will dominate maneuver on the battlefield to gain positional advantage over the enemy with overwhelming speed while enhancing the capabilities of the joint force. This approach will contribute to the early termination of the conflict on terms favorable to the United States and its allies. Transformation will exploit network-centric capabilities to enable rapidly deployable and sustainable Army forces to quickly and precisely strike fixed and mobile targets throughout the depth and breadth of the battlefield.

Transformation consists of three interrelated elements—the Objective Force, the Interim Force, and the Legacy Force. We will develop concepts and technologies for the Objective Force while fielding an Interim Force to meet the near-term requirement to bridge the operational gap between our heavy and light forces. The third element of transformation is the modernization and recapitalization of existing platforms within our current force—the Legacy Force—to provide these platforms with the enhanced capabilities available through the application of information technologies. Several important initiatives that should produce even greater advances in 2002 are the production, testing, and delivery of the Interim Force vehicle early this year, and the development of mature technologies to achieve Objective Force capabilities.

Digitization concepts tested and proved with the Legacy Force are being refined in the Interim Force and will be applied to the Objective Force. These efforts, along with planned training and testing and joint exercises—such as the U.S. Joint Forces Command’s “Millennium Challenge 2002”—will enable the Army to stay ahead of current and future adversaries by providing the Nation and its soldiers with unmatched advanced capabilities. To achieve additional momentum, we will carefully concentrate research and development and acquisition funding on our most critical systems and programs.

- **The Objective Force**

The end result of transformation is a new, more effective, and more efficient Army with a new fighting structure—the Objective Force. The Army will field the Objective Force this decade. It will provide our Nation with an increased range of options for crisis response, engagement, or sustained land force operations. Instead of the linear sequential operations of the past, the Objective Force will fight in a distributed and non-contiguous manner. Objective Force units will be highly responsive, deploy rapidly because of reduced platform weight and smaller logistical footprints, and arrive early to a crisis to dissuade or deter conflict. These forces will be capable of vertical maneuver and defeating enemy anti-access strategies by descending upon multiple points of entry. With superior situational awareness, Objective Force soldiers will identify and attack critical enemy capabilities and key vulnerabilities throughout the depth of the battle space. For optimum success, we will harmonize our transformation efforts with similar efforts by other Services, business and industry, and our science and technology partners.

By focusing much of its spending in Science and Technology, the Army will create a new family of ground systems called the Future Combat Systems (FCS). This networked system-of-systems—a key to fielding the Objective Force—will allow leaders and soldiers to harness the power of digitized information systems. The FCS will allow commanders to bring a substantial, perhaps even exponential, increase in combat capabilities to the joint force without a large logistics footprint. Newer technologies will be inserted into the FCS as they become ready.

We owe our soldiers the best tools and equipment so they are not put at risk by obsolete or aging combat support systems. The Comanche helicopter, the Objective Force Warrior system, and Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C⁴ISR) initiatives are integral components of the network-centric operations of the Objective Force. They are the infrastructure that allows soldiers to do what they do best—fight and win our Nation’s wars. Comanche will provide an armed aerial reconnaissance capability critical for gathering intelligence for coordinated attacks against targets of opportunity. The Objective Force Warrior system will provide quantum improvements over our current soldier systems in weight, signature, information exchange capabilities, ballistics tolerance, and chemical, biological, and environmental protection for our individual soldiers on the battlefield.

Terrestrial systems alone will not enable full spectrum dominance. Space is a vertical extension of the battlefield and a key enabler and force multiplier for land force operations. Objective Force commanders will access and integrate the full spectrum of C⁴ISR and Information Operations capabilities, to include national agencies, strategic and operational units, tactical organizations, and joint or multinational forces. In short, commanders will draw upon a wide array of capabilities that enable not just overwhelming force projection, but the ability to out-think our adversaries.

Transporting and sustaining the Objective Force will require capabilities that are cost-effective, that adhere to rapid deployment timelines, and that have a smaller logistical footprint over longer distances without jeopardizing readiness. Materiel readiness will be maintained at reduced costs by increasing inventory visibility, eliminating artificial ownership barriers and integrating automated systems.

- **The Interim Force**

The Interim Force is a transition force that bridges the near-term capability gap between our heavy and light forces. It will combine the best characteristics of the current Army forces—heavy, light, and special operations forces. Organized into Interim Brigade Combat Teams (IBCTs), it will leverage today’s technology with selected capabilities of the Legacy Force to serve as a link to the Objective Force. Most importantly, the Interim Force—a combat ready force—will allow exploration of new operational concepts relevant to the Objective Force. The Army will field at least six of these new, more responsive brigade combat teams. These units comprise an Interim Force that will strengthen deterrence and expand options for the field commanders. Over the past 2 years, we have organized two brigades at Fort Lewis, Washington, and additional IBCTs are programmed for Alaska, Louisiana, Hawaii, and Pennsylvania. Leaders and soldiers of the IBCTs at Fort Lewis, Washington,

along with an Army coordination cell, have been working closely with all supporting agencies to develop wide-ranging iterative solutions to doctrine, training, logistics, organizations, material, and soldier systems required to field the Interim Force. The first IBCT has completed brigade and battalion level headquarters training with the Army's Battle Command Training Program and company level maneuver live fire training across the spectrum of conflict. The IBCT is training extensively for restrictive and urban terrain, and the force has used special operations training techniques and procedures for the development of night and urban fighting techniques. Training of the Interim Force is proving that the practice of combining heavy, light, and special operations cultures results in a more adaptable and capable leader or soldier. The Army has learned from experimentation that technology such as digitization allows the integration of intelligence data with tactical and operational information and gives our leaders and soldiers the ability to seize and retain the initiative, build momentum quickly, and win decisively. The Army is accelerating the development and fielding of the Interim Force and studying the viability of fielding an additional interim capability in the European area.

- **Legacy Force**

As the Army transforms, the Legacy Force—our current force—will remain ready to provide the Nation with the warfighting capability needed to keep America strong and free. Through selective modernization and recapitalization, the Legacy Force allows the Army to meet today's challenges and provides the time and flexibility to get transformation right. Effectively managing risk without sacrificing readiness, the Army is focusing resources on systems and units that are essential to both sustaining near-term readiness and fielding the Objective Force while taking prudent risk with the remainder of the force. Recapitalization rebuilds or selectively upgrades existing weapons systems and tactical vehicles, while modernization develops and procures new systems with improved warfighting capabilities. The Army has identified 17 systems—its Prioritized Recapitalization Program—and fully funded them in selected units. Among these systems are the AH-64 Apache, UH-60 Black Hawk, and CH-47 Chinook helicopters; the M1 Abrams tank; the M2 Bradley fighting vehicle; and the Patriot Advanced Capability-3 missile defense upgrade. Modernization provides the linkage to facilitate the fielding of the Interim and Objective Forces. The Crusader self-propelled howitzer will provide combat overmatch to our commanders until at least 2032 and serve as a technology carrier to the Objective Force. Recent restructuring initiatives have reduced Crusader's strategic lift requirements by 50 percent. Technology improvements have increased its range by 33 percent, increased the sustained rate of fire by a factor of 10, and utilizing robotics, reduced crew requirements by 33 percent. Modernized M1A2SEP tanks and M2A3 Bradley fighting vehicles are capable of the same situational awareness as the Interim Force, thus enabling soldiers and leaders to learn network-centric warfare on existing chassis. The advantage these information technologies provide our current force further enhance its warfighting capability. Army Aviation modernization efforts will reduce our helicopter inventory by 25 percent and retain only three types of helicopters in service, and the savings in training and logistics will be used to support the recapitalization of our remaining fleet. As part of its Legacy Force strategy, The Army terminated an additional 18 systems and restructured 12 in this budget cycle.

- **Revitalizing The Army**

Transformation applies to what we do, as well as how we do it. We are working with the business community to accelerate change across the entire Army, promote cooperation, share information, gain greater control over resource management, and adopt better business practices by eliminating functions or activities that no longer provide value. This initiative seeks to focus constrained resources on achieving excellence in areas that contribute directly to warfighting. Transformation of our business practices cannot wait, and we have started at the highest levels.

The Army is restructuring the Army Secretariat and Army Staff to create a more unified headquarters for the conduct of enhanced policy, planning, and resource management activities. The goal is to transform the headquarters into a streamlined, integrated staff more responsive to rapidly changing operational and institutional missions and to push more resources out to the field units. This will streamline the flow of information and speed decision-making. The unified headquarters will seek greater integration of the Reserve components into key staff positions to better accommodate issues and concerns. To minimize turbulence in the workforce, we will reinvest manpower savings in other Army priorities. Realignment initiatives already underway will help us meet the congressionally mandated 15 percent reduction in headquarters staffs. With congressional support, the Army will apply these methodologies to the entire force.

A COMMITMENT TO THE FUTURE

The Army, like the American people, remains committed to preserving freedom. As we have for over 226 years, we will continue to win our Nation's wars. Contrary to the expectations of some, the post-Cold War period has not seen a reduction in the demands placed on soldiers on the ground. In fact, in the years since the fall of the Soviet Union, the international security environment has underscored the importance of ongoing commitments and highlighted new requirements for the Army. These increased demands have intensified the competition for resources and reduced needed investments in people, systems, platforms, and research and development. Unless redressed, risks incurred from this resources shortfall could undermine the Army's ability to satisfy national security requirements. At the same time, the war on terrorism, the requirement to secure the homeland, and the need to maintain readiness for possible near-term contingencies have validated the need for a new kind of Army—a capabilities-based ground force that can fight and win battles across the full spectrum of military operations. We are accelerating Army transformation to achieve these capabilities. The Army cannot predict what other changes the future will bring, but what will not change is the need for our Nation to have the best trained, best led and best equipped soldiers on the ground, deployed rapidly at precisely the right time, the right place, and with the right support structure as part of a joint military team.

Mr. Chairman and distinguished members of the committee, I thank you once again for this opportunity to report to you today on the state of your Army. I look forward to discussing these issues with you.

Chairman LEVIN. Thank you very much, Secretary White.
Secretary England.

**STATEMENT OF HON. GORDON R. ENGLAND, SECRETARY OF
THE NAVY**

Secretary ENGLAND. Good morning, Mr. Chairman, Senator Warner, and members of this distinguished committee. Thank you for the opportunity to be with you today and thank you especially for this committee's continued strong support for our sailors and marines and their families. Recognizing that you are all anxious to move on to the questions, I will keep my remarks brief and ask that my written statement be entered into the record.

Chairman LEVIN. All the statements will be made part of the record.

Secretary ENGLAND. Thank you.

It is indeed a privilege to appear before this committee representing the finest Navy and Marine Corps the world has ever known. All of you have witnessed either first-hand or in compelling news reports the superb performance of America's Naval forces in the global war on terrorism. Never in my adult life have I seen a time in which the combat capabilities and mobility of the Navy-Marine Corps team have been more important to our joint warfighting effort. In my view, not since World War II has the inherent mobility of combat power at sea been so central to our ability to take the fight to the enemy and sustain that effort over time.

Naval forces of the 21st century will continue to offer secure sea bases from which our sailors and marines will be able to operate both in peacetime and wartime alike. Such bases will offset the restrictions caused by sovereignty issues which increasingly limit or impede our national strategies, especially during crises.

Naval carrier battle groups were on station in the Arabian Sea when our Nation was viciously attacked on September 11. These ships, manned by truly great sailors and marines who have volunteered to serve their country, were ready when the order was given to strike back at the terrorists and those that harbor them, and

they remain on station today in support of our troops on the ground in Afghanistan and elsewhere in the region and in the world.

This is not to say the Navy will do it alone, not by a long shot. All of us here before you today can be justifiably proud, not only of how well our individual services have performed, but, more importantly, how seamlessly the operational capabilities of all the great branches of our military have been woven together to great effect on the battlefield.

We also know that this would not have been possible without the wisdom and the support of this committee over prior years. So I thank you again, Mr. Chairman and members of this committee, for all your prior efforts in supporting our forces.

I can also say without hesitation that the President's budget for fiscal year 2003 accurately reflects the priorities set by the Navy leadership. The Chief of Naval Operations, the Commandant of the Marine Corps, and I all agree that we must continue to keep faith with our people by providing them the pay and benefits they so richly deserve and must also ensure that our forces remain trained and ready to carry out missions in the war on terrorism.

To this end, we have prioritized spending on critical readiness elements, such as adequate flying hours and steaming days, spare parts, preventative maintenance, and replenishing our inadequate stockpiles of precision munitions. We have added more than \$3 billion to our operations and maintenance account and an additional \$1 billion to buy munitions.

On the personnel side of the equation, we increased the military personnel account by a little over \$4 billion. Now, that is real money and we have put the emphasis where we believe it will do the most good.

There have been many reports recently that the Navy is underfunding the shipbuilding and aviation procurement accounts. I am here to tell you those reports are accurate. We do need to increase funding in these accounts and we are increasing them across the FYDP. The good news is that we did fund the conversion of the first two of four Trident submarines to cruise missile shooters, or SSGNs. That was about a billion dollars. We added another billion dollars to pay off old debts in the prior year shipbuilding account and to fund more realistic program cost estimates to reduce such bills in the future. Although we increased spending on aviation procurement by more than \$300 million, we will actually build fewer new planes because of the types of aircraft being procured.

The bad news is, as this committee is well aware, we need to build 8 to 10 ships every year on a long-term basis and nearly 200 aircraft on a long-term basis if we are to recapitalize the force and ensure that my successors will inherit the ready Navy and Marine Corps that I am proud to lead.

Mr. Chairman, these have been difficult choices to make, but I firmly believe that the CNO, the Commandant, and myself made the right choices for fiscal year 2003. We cannot fix every problem in 1 year, so we prioritized our funding. We can never afford to break faith with our people on adequate pay and benefits. Frankly, it makes no sense to shortchange current readiness and munitions at a time when the Nation is at war.

The CNO, the Commandant, and I also agree that efficiency in our business practices is now more important than ever before and we are dedicated to that objective.

I look forward to the opportunity to elaborate in response to your questions. Thank you very much.

[The prepared statement of Secretary England follows:]

PREPARED STATEMENT BY THE HON. GORDON R. ENGLAND

NAVY-MARINE CORPS: THE POWER OF TEAMWORK

I. INTRODUCTION

The Navy/Marine Corps Team continues to provide extraordinary service and value to our country. Our contributions in the “War Against Terrorism” have been significant and important in the overall success of U.S. military forces. Naval Forces have demonstrated the reach of their lethal power deep into the enemy heartland. Operating beyond the traditional littoral, we have destroyed the enemy in areas that they previously considered sanctuaries.

Our forces have been effective and congressional support has been essential. In fiscal year 2002, Congress supported the President’s amended budget for the Navy and Marine Corps. In fiscal year 2003, we are again requesting your support of the President’s budget to continue the Navy and Marine Corps improvement in areas previously under-funded, sustain our force, and continue the transformation in the way we fight.

The following sections of this statement describe the dramatic improvement the fiscal year 2003 President’s budget will provide for the Department of the Navy. Significant accomplishments of Naval Forces in the past year, and some of the detail of our plans for the future supported by this budget request are also described.

In assessing our request, it is important to note that our focus is on sustaining and further developing the effective and lethal Naval Forces that are part of a broader networked joint warfighting architecture. Numbers are important, but as Naval Forces are already so well illustrating, warfighting capabilities go beyond mere numbers. It used to require multiple aircraft to strike a single target. Now a single aircraft can strike multiple targets. Networked systems and sensors may be more important today than the sheer number of weapons and platforms. Our focus is on warfighting capability and sustaining an effective and properly resourced force. The Navy and Marine Corps are going to continue to work with the other military services to determine the best path to transformation and the best aggregate warfighting capabilities for our country.

II. FISCAL YEAR 2003—A DRAMATIC IMPROVEMENT FOR THE DEPARTMENT OF THE NAVY

After years of under funding, the fiscal year 2003 budget request, building on improvements in the fiscal year 2002 Department of Defense Authorization Act, represents a dramatic improvement for the Department of the Navy. Although the Department of the Navy still had to make difficult priority decisions, the final request represents the best mix possible among competing priorities. In this budget request, the highest priority items are pay and benefit improvements for our most valuable resource; namely, people and providing them the necessary spares, tools and munitions to carry out the Nation’s requirements. The following is the listing of the priority funding in fiscal year 2003 for the Department of the Navy:

- Personnel salary and benefits are improved approximately \$4.1 billion in MILPERS accounts. This represents improvements in salary, health care, housing allowance and increased sea pay both in amount and number of military personnel covered. In this budget, civilian health care is also on an accrual basis and that administratively adds \$750 million to this budget in operation and maintenance (O&M) and working capital accounts that was not accounted for in prior years.
- Operation and maintenance and working capital accounts are increased by \$3.4 billion. This increases funds for steaming and flying hours, including spares and depot/contractor repair of major systems. This funding does not, however, include any cost associated with Enduring Freedom.
- Munition accounts are increased \$973 million which is allocated predominantly to tactical land attack Tomahawk cruise missiles and precision ordnance delivered from Navy and Marine Corps ships and aircraft.
- The airplane account is increased by \$323 million. Although the number of attack airplanes remains the same as in fiscal year 2002, the total num-

ber of airplanes declines due to the mix of airplanes being procured in fiscal year 2003.

- The RDT&E accounts increased by \$1.1 billion reflecting the need to continuously invest in the future and to incorporate new technologies into our naval services.
- The total number of ships in fiscal year 2003 is 7, consisting of 5 new construction ships and 2 conversions. The conversions consist of modifying 2 ballistic missile submarines into 2 modern cruise missile platforms that provide a transformational capability to the Navy and the Nation. Prior year shipbuilding is funded in the amount of \$645 million. Additionally, pricing for new construction ships has been increased by \$400 million as a management approach to help avoid future cost growth.

Our objective in fiscal year 2003 to fund more robustly all of our operational accounts across the Department of the Navy to assure that our men and women in uniform have all the necessary resources to provide forward presence and to support the President's call for action in support of the "War Against Terrorism." This necessitated some difficult choices and continues to leave the naval services with a smaller number of new construction ships than desired and an airplane force that continues to age beyond the age of our surface ships. In addition, the Department of the Navy is disinvesting in older systems that no longer provide combat capability commensurate with their cost.

III. LEADING THE WAY: NAVY-MARINE CORPS OPERATIONS IN THE GLOBAL WAR ON TERRORISM

Sea-based Forces in a Post-September 11 World

- The "War Against Terrorism" illustrates the value of Naval Forces and the importance of Sea Basing.

Naval Forces

- *Provide global continuous presence*
- *Have no need to obtain base access*
- *Quickly put potent ground forces ashore in a crisis area*
- *Quickly strike enemy targets throughout much of the world*
- *Operate and sustain from secure sea bases*
- *Enable U.S. and allied forces to get into the fight*
- *Remain on-station indefinitely*
- *Influence events ashore from the sea*
- *Extend U.S. power and influence deep into areas that enemies might consider secure*

On September 11, 2001, U.S.S. *Enterprise* and her battlegroup were returning from a successful deployment to the Arabian Gulf. By next morning, *Enterprise* was within reach of Afghanistan, ready to launch and sustain precision strikes against enemies hundreds of miles from the sea.

Enterprise was not alone. In Australia, the sailors and marines of the *Peleliu* Amphibious Ready Group/15th Marine Expeditionary Unit (Special Operations Capable) cut short their port visit and sailed for the Arabian Sea. U.S.S. *Carl Vinson* steamed at high speed to join *Enterprise* on station while surface combatants and submarines prepared Tomahawk missiles for long-range strikes, established maritime situational awareness, and prepared for interdiction operations. U.S.S. *Kitty Hawk* prepared to leave her homeport in Japan, to serve as an innovative special operations support platform. Off the east and west coasts of the United States, U.S.S. *George Washington* and U.S.S. *John C. Stennis* took station along with more than a dozen cruisers and destroyers, guarding the air and sea approaches to our shores. Shortly thereafter, the hospital ship U.S.N.S. *Comfort* joined U.S.N.S. *Denebola* in New York City to support firefighters and recovery workers. Marine Chemical-Biological Incident Response Force (CBIRF) and Explosive Ordnance Disposal (EOD) teams deployed to support local authorities in New York and Washington, DC. Naval Intelligence, in conjunction with Coast Guard Intelligence, immediately began monitoring civilian ships approaching the United States and assessing the potential terrorist uses of the seas around the world.

When the Nation called, the Navy-Marine Corps team responded with speed and agility, and with lethal, combat-credible and sustainable forces. On September 11, as on every other day of the year, sovereign Naval Forces were on watch "around the clock, around the globe."

In 2001 as in the past, the Navy-Marine Corps Team operated extensively representing U.S. interests throughout the world. In the Pacific, forward-deployed Naval Forces based in Japan, the West Coast and Hawaii continued to assure our

allies in the region, deterring threats and coercion. The Navy-Marine Corps team also supported United Nations Transition Assistance East Timor (UNTAET) humanitarian assistance efforts.

In the Mediterranean, Navy ships operated with friends and allies in over 85 exercises. Marines in Sixth Fleet MEUs provided presence ashore in Kosovo and served as the Joint Task Force Commander's Ready Reserve. In South America, Marine elements participated in riverine and small unit training. The annual UNITAS deployment promoted regional security cooperation and interoperability with regional Naval Forces.

In Southwest Asia, we maintained continuous carrier presence throughout the year, conducting combat operations in support of Operation Southern Watch over Iraq. Surface combatants continued Maritime Interdiction Operations (MIO), supporting UN economic sanctions against Iraq for the tenth straight year. Marines from the 15th and 22nd MEUs trained and exercised with friends and allies throughout Southwest Asia.

These familiar "peacetime" operations demonstrate two enduring characteristics of the Navy-Marine Corps team that have been essential in launching the war on terrorism:

- The ability to provide assured, sea-based access to the battlefield unfettered by the need to negotiate base access.
- The ability to project power from the sea to influence events ashore tailored, flexible, relevant power that is critical to the Joint Force Commander's ability to fight and win.

When combat operations began in October, these characteristics made the Navy-Marine Corps team leading-edge elements in the joint campaign. Against a dispersed, entrenched enemy in a landlocked nation, hundreds of miles from the nearest ocean, strikes from the sea were in the vanguard. Carrier-based Navy and Marine aircraft provided the preponderance of combat sorties over Afghanistan while Tomahawk cruise missiles fired from ships and submarines struck communications and air defense sites. In the days that followed, the Navy and Marine Corps worked seamlessly with the other services to sustain carrier strikes deeper inland than ever before. Carrier aviators flew, on average 6-hour missions over Afghanistan, covering distances equal to missions launched from the Gulf of Mexico to Chicago and back. Maritime patrol aircraft flew over Afghanistan to provide unique reconnaissance and surveillance capabilities in direct real time support of Special Operations Forces (SOF) and Marine units on the ground. U.S.S. *Kitty Hawk* excelled as an interim afloat forward staging base (AFSB) for SOF. Ships and submarines supported by Naval Intelligence established maritime situational awareness over a huge area, and began the most extensive Maritime Interdiction Operation (MIO) ever to interdict terrorist leaders and material.

Against a landlocked nation, hundreds of miles from sea. . .

- 70 percent of combat sorties were flown by naval air.
- Tomahawks from submarines and ships key in taking down air defense and command nodes.
- Navy P-3s provided critical surveillance and reconnaissance over Afghanistan.
- Sea based marines—using organic airlift—moved 400 miles, deep into Afghanistan.

Marines established the first conventional ground force presence in Afghanistan. Elements of two MEUs and a Marine Expeditionary Brigade Command Element moved from their ships using organic Marine and Navy lift to create a tailored Marine Air Ground Task Force (MAGTF) ashore. Light, agile and self-sustained, marines established security in a hostile environment and assured access for following forces. Navy Seabees improved runways, enhanced conditions at forward operating bases far inland, and established detainee camps.

Submarines provided tactical and persistent intelligence, surveillance, and reconnaissance (ISR). Sea based aircraft, ships, and submarines brought down enemy defenses from a distance. Carrier strike aircraft, in conjunction with Air Force bombers and tankers and guided by SOF on the ground, destroyed the enemy's ability to fight. Having assured access and sustainment from the sea; marines, Navy SEALs, Seabees, and Army SOF worked with local allies to free Afghanistan from the Taliban regime and al Qaeda terrorist network.

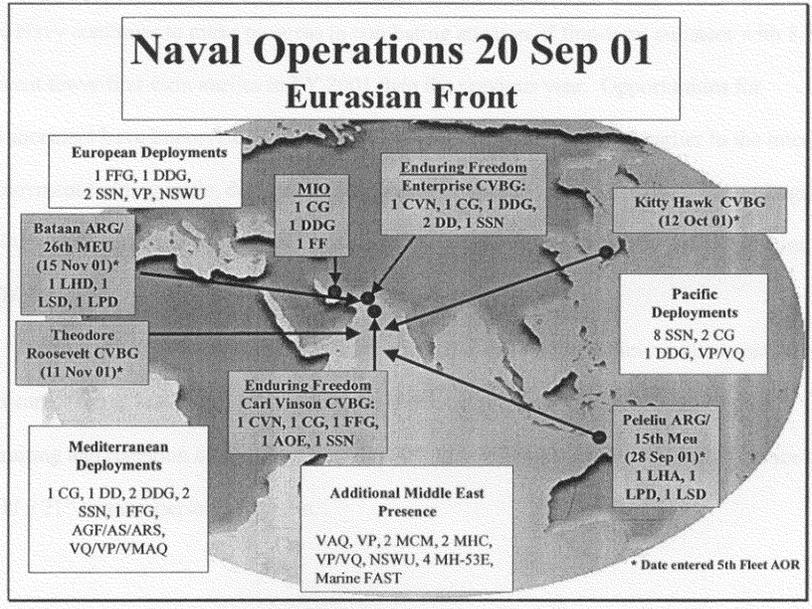
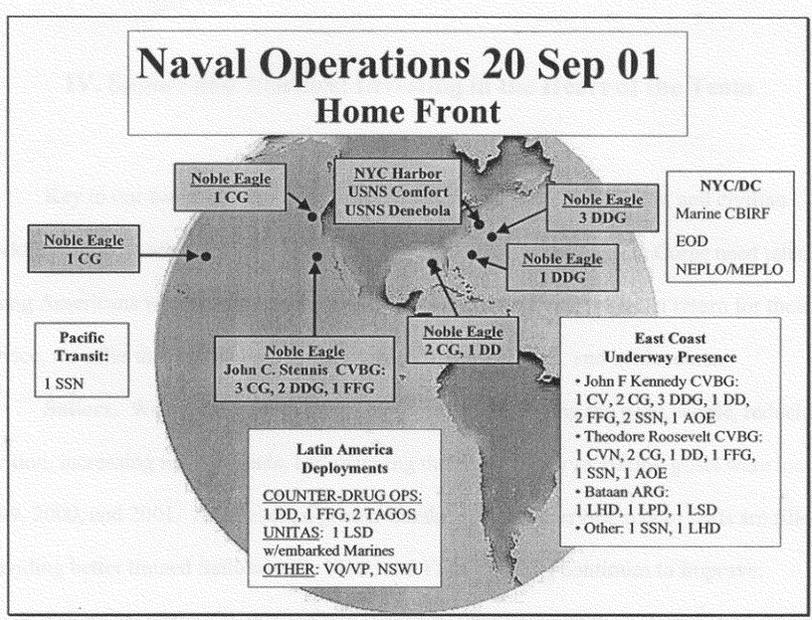
In Operation Enduring Freedom and the global "War Against Terrorism," on station Naval Forces were first to respond, first to fight, first to secure U.S. interests. These operations exemplify the decisiveness, responsiveness, agility and sustainability that are key to Naval services.

Operations in the “War Against Terrorism” make clear important lessons as we move to transform the Nation’s military force and capabilities. Transformation is not just about revolutionary new hardware and technologies. Quantum improvements in warfighting effectiveness also come by coupling evolutionary improvement in existing systems to new ways of thinking innovative operational concepts, doctrine, tactics and intelligence and through new ways of using them together. Here are some examples of this potent combination, and the dramatic improvement in capabilities over just the past decade:

- Unprecedented long-range precision strikes from carrier aviation, effectively supported by Air Force tankers. In Desert Storm our strikes were less than 200 miles on average; in Afghanistan they were often 600 miles or more inland.
- Seamless command and control across a joint task force engaged in global operations.
- Seabased marine operations, arriving and staying light, with the “rear area” largely aboard ships.
- Expeditionary flight operations were conducted from Kandahar, over 400 nm inland. These operations included helicopters and VSTOL fixed-wing aircraft, making the AV-8B the first U.S. tactical strike aircraft to conduct operations from a base in Afghanistan.
- Direct real time intelligence and reconnaissance operational support of Ground Special Operations Forces by P-3 maritime patrol aircraft.
- Continued refinement of Tomahawk as a timely tactical weapon. In Desert Storm, it took about 3 days to program a new mission into a Tomahawk missile. In Afghanistan, some missions were programmed in less than half an hour.
- Marriage of precision munitions with real-time targeting to make aircraft precision “airborne artillery”. Precision munitions became the most commonly used ordnance. Ninety-three percent of the ordnance expended by the Naval Forces in Afghanistan was precision munitions.
- Long-term surveillance and real-time targeting from unmanned aerial vehicles (UAVs).
- Inherent flexibility, as an aircraft carrier’s traditional mission was changed on short notice to become an afloat forward staging base for joint Special Operations Forces (U.S.S. *Kitty Hawk*).
- Integrated use of attack submarines in a networked force.
- Versatile surface ship combat operations, from Tomahawk launch and projecting air defense projection overland with the Aegis system; to escort duty, maritime interdiction, littoral interception operations, and search and rescue.
- Perhaps the most remarkable change is that Naval Forces from the sea are operating in the Eurasian heartland well beyond the littorals, striking an enemy in what he considered sanctuary.

Around the World, Around the Clock

Even as the world moves on through these turbulent times, it is clear that the global commons—the oceans—will continue to matter greatly to the United States of America: as a pathway for transport and commerce; a source of oil, minerals, foodstuffs, and water; a rich venue for research and exploration; a road to our allies and friends as the leader of a global maritime coalition; an extensive though not infallible zone of defense; and—above all—an arena from which to operate as we seek to dissuade, deter, and, if required, fight and defeat our enemies. The power of the Navy/Marine Corps Team in defending our country is inestimable!



IV. SAILORS AND MARINES: INVESTING IN THE HEART OF THE TEAM

Key to our force, and the heart of the team, are our sailors, marines, and civilian workforce. These are our most valuable resource. Our Navy and Marine Corps need talented young Americans who want to serve their Nation and make a difference.

In return for their service, we offer them rich opportunities for leadership, growth, and achievement.

Sailors. We continue to make solid progress in recruiting the right people, reducing attrition, increasing reenlistments, and manning the fleet. Navy recruiting goals were met in 1999, 2000, and 2001. As a result, a greater number of initial service school seats are filled, providing better trained sailors to the fleet, and fleet manning continues to improve.

Sailors are staying Navy in record numbers. First term retention is now at 57 percent. The Navy continues to make progress in combating attrition of first-term enlistees with 8.5 percent fewer first-term attrites in fiscal year 2001 than the previous year. Opportunities for advancement have improved. Our battle groups are being fully manned earlier in the inter-deployment training cycle, deploying with the best manning levels in years. We have begun filling increased manpower requirements in areas such as Anti-Terrorism/Force Protection (AT/FP).

Improving officer retention remains critical to our efforts to achieve a steady-state force structure. Strong leadership at all levels and increased personnel funding have produced recruiting and retention advances. The Navy will continue to invest in quality of service and build a 21st century personnel system.

The Navy wants to give sailors greater choice in their assignment process. The Navy has taken a number of initiatives to make the process more sailor-centered, including a Sailor Advocacy Program that has expanded outreach to sailors by their personnel managers. We also want to be able to shape careers and the force in skills and paygrade to meet future as well as current requirements. For these reasons, the Navy supports several initiatives in this year's budget cycle. A gradual increase in our enlisted top six-paygrade mix (E-4 through E-9) to reflect the skills requirements of increasingly complex ships and aircraft, and legislative initiatives such as enhanced career pay and distribution incentive pay to help compensate for the arduous nature of an expeditionary Service.

Marines. The Marine Corps has either met or exceeded its accession goals since June 1995. During 2001, aggressive recruiting has allowed the Marine Corps Recruiting Command to exceed its quotas again. As a result, the Marine Delayed Entry Pool (DEP), the recruiting reservoir, is in excellent shape. For the third consecutive year, the Marine Corps experienced lower post-boot camp first-term attrition.

Marine Corps retention was very encouraging in fiscal year 2001. More first term marines re-enlisted than at any other time in the history of the Marine Corps, easily reaching our goal to re-enlist 26 percent. The Marine Corps also achieved a better military occupational speciality mix than in previous years. This strengthens the future of our enlisted career force and provides commanders with the most qualified marine by rank and experience. Highly successful retention programs such as the Selective Re-enlistment Bonus (SRB) are addressing shortages in specialty areas. Officer retention has improved substantially with a 15 year low of 8.3 percent attrition during fiscal year 2001. Aviation Continuation Pay (ACP) has assisted in improving officer retention.

For the past decade, the Marine Corps has continued to aggressively examine its force structure. This is necessary to ensure proper staffing of our operating forces, which have been below the 90 percent manning levels required for the tempo and variety of our full spectrum capabilities, and the efficient and effective use of marines and civilian marines in combination with business reform initiatives for our supporting establishment functions. To date, mainly as a result of business reform initiatives such as out sourcing and privatization, we have made substantial progress to increase manning in the operational forces with approximately 2,500 marines identified to shift from the supporting establishment to operating forces billets. As we complete our A-76 studies and continue the implementation of Activity Based Costing/Activity Based Management in our supporting establishment process, we expect some additional marines may be shifted to the operating forces. However the new security environment has increased our operating forces needs. We have responded with the permanent activation of the 4th Marine Expeditionary Brigade (MEB) (Anti-Terrorism/Force Protection), consisting of 2,400 marines out of our total end-strength of 175,000 active duty marines in order to assure we access, train and retain a new, robust tier one anti-terrorism/force protection force capability. The immediacy of the 4th MEB requirement resulted in initial manning using highly trained marines from previously existing but already under staffed operating force units. Marines from the 4th MEB were quickly deployed in 2001 and are deployed today to provide this new capability for joint force missions in the European Command and Central Command Areas of Operation. The nature of the change in our national security environment, both overseas and here at home, requires we sustain this increase in Marine Corps end-strength.

Quality of Service. The Navy and Marine Corps continue to believe that both quality of life and quality of the work environment are important factors in retaining sailors, marines, and their families. This includes compensation, medical care, family housing, retail and commissary services; recreation programs, community and family services; training and education; as well as elements of the work environment such as tools, supplies, and facilities. Congress has supported many improvements in these areas.

Professional development and training is one of our key focus areas. The Navy has launched Task Force EXCEL (Excellence through Commitment to Education and Learning) an initiative to create a "Revolution in Training," leveraging distance learning technologies, an improved information exchange network, and a career-long training continuum to fully realize the learning potential of our professional force. The Navy College Program and the Marine Corps Lifelong Learning Program directly support career-long emphasis on the professional development needs of our sailors and marines. Continuous learning, including an increased reliance on advanced distance learning systems such as the Marine Corps' Satellite Education Network (MCSEN) and the MarineNet Distance Learning Program, is needed to keep our sailors and marines on the cutting edge. The Navy-Marine Corps team owes those who promise to serve the best possible training throughout their Naval service experience so they can succeed and prosper in their professional and personal lives.

Force health protection is an integral part of readiness and is one of Navy medicine's primary missions. Navy medicine has implemented a comprehensive organizational strategy to prepare for, protect against, and respond to threats or attacks. The medical establishment is coordinating with sister services, the Veterans Administration, Federal agencies, and civilian healthcare support contracts through TRICARE to combine our efforts for increased efficiencies. Programs are in place to ensure the health of sailors and marines; protect them from possible hazards when they go in harm's way; restore the sick and injured, and care for their families at home.

Reserves. Some 89,000 Navy reservists and 39,558 Marine Corps reservists serve today. The effective integration of Reserve elements with active components is indispensable to military readiness and personnel tempo in the "War Against Terrorism." We have recalled over 10,000 Navy and Marine Corps reservists as of December 2001. The Marine Corps Selected Reserve contributes approximately 25 percent of the force structure and 20 percent of the trained manpower of the total Marine Corps force. The Navy Reserve constitutes 19 percent of the Navy's total force, providing all our inter-theater airlift and inshore undersea warfare capability.

The Naval Reserve came within 2 percent of its authorized end strength in 2001 and is adding recruiters in fiscal year 2002 to help meet goals. The Marine Corps Reserve continues to meet its authorized end-strength, although the challenge to recruit company grade officers for service with Selected Marine Corps Reserve (SMCR) units is increasing. A Reserve Recruiting and Retention Task Force meets quarterly to develop and implement ways to meet the "right marine in the right place" standard.

Civilian Workforce. The Department of the Navy employs about 182,000 U.S. citizen civilian workers and nearly 3,500 foreign national employees. This is about 149,000 fewer civilians than were employed in 1989, a reduction of 45 percent. Now the Department of the Navy faces an employment challenge shared across the Federal Government: shaping the workforce to ensure that we have the right people, with the right skills, in the right jobs to help us meet the challenges of the future. In an age of rapid technological change, attracting the best available talent is essential. We are building on the successes of Navy and Marine Corps commands to identify and expand the use of best recruitment practices to attract high quality individuals at entry and mid-career levels. At the same time, we are examining and using other innovative workforce shaping strategies to ensure that we have a civilian workforce able to take its place as an integral part of the total force.

V. CURRENT READINESS: OPERATING THE NAVY AND MARINE CORPS

The success to date of the Navy and Marine Corps in the war against terrorism attests to progress made in current readiness. Sailors and marines were ready and had the tools they needed on 11 September. We have worked hard to redress the shortfalls in training, maintenance, spare parts, ordnance, and fuel that have burdened our operating forces in the recent past. The fiscal year 2002 budget was the best readiness budget in a decade. The fiscal year 2003 Budget will continue to ensure that readiness meets mission requirements.

The ships and aircraft joining the fleet and marine forces are the best in the world. In 2001, the Navy launched the next aircraft carrier, *Ronald Reagan* (CVN 76), commissioned our newest amphibious ship, U.S.S. *Iwo Jima* (LHD 7) and continued to take delivery of sophisticated *Arleigh Burke* class guided missile destroyers, and F/A-18 E/F Super Hornets.

Same Ship, New Capabilities



<p>DDG-51 (1991):</p> <ul style="list-style-type: none"> •SPY-1D •5" gun •Standard (SM-2), Harpoon, Tomahawk missiles •PHALANX close in weapons system •SLQ-32(V)2 Electronic Support Measures (ESM) •Link 4A, 11, 14 •Flight deck, no helicopter 	<p>DDG-95 (keel laying July 2002):</p> <ul style="list-style-type: none"> • SPY-1D(V) littoral radar upgrade • New 5" gun upgrade for Extended Range Guided Munition (ERGM) • SM-2, BLK IIIA, IIIB, IV • Quad pack Sea Sparrow missile (2003) • SLQ-32(V)2 Electronic Support Measures • Link 16, Tactical Data Information Exchange System (TADIXS) B networks • Flight deck, hangar, two LAMPS Mk III helos • Fiber Optic Data Multiplexing System • Self Contained Breathing Apparatus • Redundant Independent Mechanical Start System/Full Authority Digital Control • COTS Zonal Electrical Distribution System • COTS improvements to radars, and sonars • Battle Force Tactical Trainer • Cooperative Engagement Capability (CEC) • NULKA, Electronic Decoy • Joint Tactical Information Distribution System • Combat Direction Finding BLK I • Remote Mine Hunting System • IT-21 Integrated Ship Networks System
---	---

While current DDGs and F/A-18s may look from the outside much like earlier models, by design they bring significant increases in capability as the classes evolve.

Ship and Aircraft Build Rates and Modernization. Given current practices and the age of our systems, there is a steady-state requirement to procure 180–210 aircraft and 8–10 ships each year to sustain current force levels over the long term. However, we are also at a juncture of transitioning to new systems such as F/A-18E/F, LPD-17, DD(X), E-2C RMP, and others. We are investing in connectivity and interoperability to leverage our existing assets while we lay the foundation for future modernization.

The Navy has 5 new ships and 2 major conversions requested in the fiscal year 2003 budget, and substantial additional shipyard/conversion work:

- 2 DDGs (\$2.4 billion) including Advanced Procurement for a third (\$74 million)
- 1 *Virginia* Class Submarine (\$2.2 billion)
- 1 LPD-17 (\$604 million)
- 1 T-AKE (\$389 million)
- Incremental LHD-8 Funding (\$253 million)
- 2 SSGN Refuelings and Conversions (\$1.0 billion)
- 1 SSN Refueling (\$360 million)
- DD(X) (\$961 million)

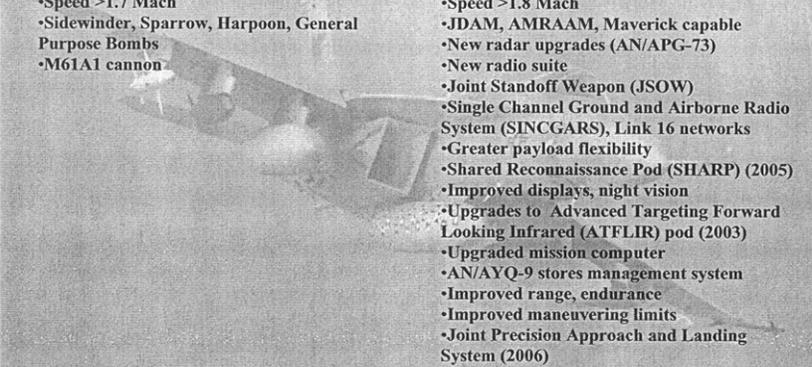
Although we plan to procure additional ships in the out years, fiscal year 2003 is not the best time to further accelerate ship procurement quantities. There is substantial work in many of the Nation's shipyards for SSGN conversions, SSN engineering refueling overhauls, and new construction already underway. For example, there are 36 new ships already authorized and under construction.

The Navy could use additional DDGs, and they are the most appropriate candidate for additional procurement. The Navy would also like to move as quickly as possible to the DD(X) hull in order to reduce operating costs and improve capability and survivability. While the *Virginia* design is nearing completion, there was no prior year advance procurement funding available to support building a second *Virginia* Class submarine in fiscal year 2003. Delivery of U.S.S. *Virginia* in 2004 will

allow the class design and ship testing to complete before beginning the increased production of two *Virginias* per year later in the FYDP. We are not ready for rate acceleration this year. The LPD-17 design is still not complete. Four ships are already funded with advance procurement for another 2 ships. Although we need to replace our older amphibious force ships, LPD-17 is not yet ready for rate acceleration. Design work is just starting on the T-AKE lead ship and 3 T-AKEs are already appropriated. Across the FYDP the Navy will fund 11 Cruiser conversions. Cruiser conversion offers an affordable way to add fleet capability and ultimately we plan to convert 27 cruisers.

Same Name, Different Plane

<p>The original 1978 F/A-18A:</p> <ul style="list-style-type: none"> • 17,700 pounds of static thrust per engine • Speed >1.7 Mach • Sidewinder, Sparrow, Harpoon, General Purpose Bombs • M61A1 cannon 	<p>The F/A-18E and F delivered today:</p> <ul style="list-style-type: none"> • 22,000 pounds of static thrust per engine • Speed >1.8 Mach • JDAM, AMRAAM, Maverick capable • New radar upgrades (AN/APG-73) • New radio suite • Joint Standoff Weapon (JSOW) • Single Channel Ground and Airborne Radio System (SINCGARS), Link 16 networks • Greater payload flexibility • Shared Reconnaissance Pod (SHARP) (2005) • Improved displays, night vision • Upgrades to Advanced Targeting Forward Looking Infrared (ATFLIR) pod (2003) • Upgraded mission computer • AN/AQ-9 stores management system • Improved range, endurance • Improved maneuvering limits • Joint Precision Approach and Landing System (2006)
---	---



We are keenly aware of the critical need to address ship and aircraft recapitalization and plan to do so in future years budget submissions. Some shipbuilding programs have been delayed due to developmental challenges and we would expect to have more flexibility to recapitalize our ship accounts in the future. The challenge of recapitalization today is exacerbated by the immediate and compelling need to rapidly make whole and sustain the current Navy and Marine Corps ability to fight today's wars, which this budget addresses in great part. We had to make some very difficult choices, however, we are making the right choices within available dollars. At the present time, given the age of Navy aircraft, the Navy would place a higher priority on increasing aircraft procurement rates over ships.

Prior topline constraints, coupled with increased operational requirements over the last decade, forced the Marine Corps to defer investment in equipment modernization. As a result of this "procurement pause," many Marine Corps weapons, vehicles, and support systems are approaching or have exceeded block obsolescence. The fiscal year 2003 budget allows the Marine Corps to begin to make more appropriate levels of investment in ground equipment modernization and transformational programs such as the Advanced Amphibious Assault Vehicle (AAAV), LW155, High Mobility Artillery Rocket System (HIMARS), and Common Aviation Command and Control System (CAC²S). Sustainment of this increased level of investment is absolutely critical to the continued success of the Navy-Marine Corps team.

Readiness challenges. We have made major strides in improving current readiness with the strong congressional support in the fiscal year 2001 supplemental and fiscal year 2002 budget. But challenges remain. Our task is to sustain readiness funding while focusing clearly on three challenges in current readiness:

- The aging of assets particularly aircraft and amphibious ships due to inadequate replacement levels.
- The demands of the "War Against Terrorism."
- The maintenance of shore infrastructure.

The Aging Fleet. The aging of ships and aircraft may be one of the main factors contributing to increased readiness costs. Naval aviation poses the most profound

challenge. Our aviation force now contains the oldest mix of type/model/series aircraft in naval history, yet it is these same aircraft that are routinely employed in combat overseas. For the first time, our average aircraft age exceeds the average age of combatant ships, contributing to a corresponding increase in the cost of operations and maintenance.

The average age of our ships is 16 years which is near optimum for ships with a service life of 30 years. However some ships, particularly older aircraft carriers and our amphibious force ships, are reaching the end of their service lives, often requiring unprogrammed repairs, necessitating unplanned funds for urgent maintenance. In part because of these costs, we moved to retire some ships, such as some Spruance-class destroyers, before the end of their service life. Further, capable ships reaching service mid-life, like the oldest of our Aegis cruisers, require modernization to remain operationally viable.

Global tasking and the "War Against Terrorism" continue to stress our aviation force readiness. As a result, the F/A-18 has been flown well in excess of planned utilization rates. More than 300 aircraft will require service life extensions earlier than planned or budgeted. Similar situations apply to F-14s, EA-6Bs, P-3Cs, SH-60s, and virtually every other aircraft in the fleet. The majority of Marine Corps airframes are over 25 years old.

In developing the fiscal year 2002 budget, the department moved nearly \$6.5 billion from other Navy programs to the current readiness portion of the Navy baseline program for fiscal year 2002-2007, shoring up the Flying Hour Program, Ship Depot Maintenance, Ship Operations, and Sustainment, Recapitalization, and Modernization (SRM) accounts. The fiscal year 2002 defense budget made substantial investments to bring readiness accounts to required levels. We sustain this focus in fiscal year 2003 with an additional increase of \$3.4 billion in operation and maintenance and working capital accounts.

Selected readiness issues in the "War Against Terrorism." Recent combat experiences underline the importance of certain assets and capabilities in high demand but short supply. While the EA-6B Prowler, the EP-3E Aries II electronic warfare aircraft and P-3C Orion Anti-Surface Warfare Improvement Program (AIP) aircraft offer theater commanders extraordinary capabilities, higher than planned usage rates results in adverse effects on service life, maintenance costs, and aircrew tempo.

Precision Guided Munitions (PGM) have become the preferred munition of modern warfare. Unanticipated high usage rates during the war in Afghanistan, coupled with years of under investment in ordnance, have caused serious shortfalls. This is a critical path item that we are addressing to sustain our effort in the "War Against Terrorism" and we increased munitions accounts in fiscal year 2003 by \$973 million allotted predominately to tactical Tomahawk missiles and precision guided munitions delivered from the air.

Current operations reinforce the need for sustainable access to training and testing ranges. We are dedicated to finding ways to enhance readiness through creative technologies. While an increasing amount of training and testing can be done using computer simulations and other information technologies, live practice on actual ranges will in some cases remain essential at the right time and place in the training cycle. Maintaining access to ranges requires a comprehensive approach that balances legitimate community and environmental concerns with the need for realistic training and testing.

Shore Infrastructure. Real property maintenance and military construction accounts suffered in past years to maintain forward-deployed forces. Department of Navy's shore infrastructure's recapitalization cycle recently exceeded 130 years, our deferred sustainment is \$573 million and our SRM funding has been significantly below the private industry average. In fiscal year 2003 the Department is making significant increases in (USN \$221M, USMC \$81.6M) SRM. With this effort, our recapitalization rate will be driven down to 83 years by the end of the FYDP, and the lowest readiness (C3/C4) areas are projected to be eliminated by 2013.

The Marine Corps made significant progress in ensuring that its 15 major bases and stations maintain solid training facilities while providing an improving quality of service for marines and their families. The MILCON program replaces or improves over 950 homes and provides new bachelor enlisted quarters for over 1000 marines and their families. The program also addresses facility deficiencies providing maintenance and training facilities. While Marine Corps military construction is below the level necessary to sustain the DOD goal of a 67-year replacement cycle, the Marine Corps has made great strides in sustaining their facilities.

For most of the last decade, real property maintenance, military construction and family housing were bill payers for near-term readiness. Recent top line increases have allowed the Department to make progress in these important areas however,

there is still a great deal of room for improvement. In the area of facility sustainment, the Marine Corps will achieve the goal of C² readiness ratings in all facility-type areas by 2010; however, currently 57 percent of Marine Corps infrastructure is at the lowest state of readiness (C3/C4). While the DOD goal for plant replacement is 67 years, the Marine Corps recapitalization rate for fiscal year 2003 is 125 years.

There is good news in the area of bachelor and family housing. The Marine Corps level of investment in bachelor housing has increased from \$84 million in fiscal year 2002, to an average of \$243 million per year across the FYDP. This increase in investment, coupled with the Marine Corps decision to build barracks in accordance with a waiver-approved 2x0 room standard, allow the Marine Corps to achieve our goal to eliminate inadequate barracks by 2010. The Marine Corps 2001 family housing master plan identified close to 17,700 inadequate family housing units with the majority of those units requiring significant revitalization or replacement. Increases in basic allowance for housing, combined with traditional military construction projects and public-private ventures will allow the Marine Corps to eliminate inadequate family housing by fiscal year 2005.

VI. FUTURE READINESS: TRANSFORMING THE FORCE

The Navy and Marine Corps transformation vision is fundamentally about balanced capabilities rather than specific ships, airplanes, weapons systems or other technologies. The concepts of Network Centric Warfare (NCW) and seabasing will fundamentally transform Joint warfighting. NCW will be part of every system and operation in the future and will tremendously extend the capabilities of individual platforms or systems by expanding the knowledge base, sensor and weapon reach, and ability to quickly react. Seabased operations will capitalize on NCW and the maneuver space afforded by the sea. Seabasing provides a full naval force package, integrated across the amphibious task force, carrier battlegroup, force, and combat logistic force. Sustained at sea, seabased forces will provide the Joint Force Commander with persistence in the battlespace and the capability to rapidly project power and influence well inland without the encumbrance of vulnerable fixed bases. As the overarching architecture unifying the forces and systems within an area of operations and reaching back to other forces ashore, NCW and seabasing will be the central tenant of Navy and Marine Corps experiments and program developments.

Navy and Marine Corps priorities for transformation are centered on capabilities that support Naval Operational Concepts: assuring and sustaining access; projecting power from forward-deployed combat credible forces; deterring aggression; and sustaining logistics from sea-based forces while minimizing our footprint ashore. Transformation activities will be focused on Information Technology (IT) through networks, sensors and information processing. Future capability requirements are determined through the Battleforce Capabilities Assessment and Planning Process developing strong links between technology developers, requirements offices, and concept development and experimentation organizations.

A. Forces to Support Operations in a Changed World.

The "War Against Terrorism" and the emerging world ahead requires a transformational vision of emerging requirements. We envision the need for forces that are more dispersed and provide simultaneous application of sea control, strike, forcible entry, SOF, sea based missile defense, dispersed logistics, strategic deterrence, and Maritime Interdiction Operations (MIO). These forces will swiftly defeat any adversary's military and political objectives, in anti-access area denial or other asymmetric environments.

Evolutionary and transformational improvements in platforms, concepts and technology now in the fleet provide more combat capability per unit than ever before. Yet there remains a "quality in quantity (of platforms)" as global readiness, presence and mission needs change. A balanced force would reflect in part the following considerations:

- **Surface ships.** We will need to distribute surface ship combat power to face global terrorist network threats, take advantage of our network capabilities, and undertake demanding tasks around the globe. Emergent missions may translate to a new demand for additional surface combatants some of which may be new concept ships focused on littoral warfare and others on Theater Missile Defense capabilities.
- **Amphibious capability.** Although the Marine Corps forcible entry amphibious lift requirements remain 3.0 Marine Expeditionary Brigade (MEB) assault echelon equivalents, the fiscal year 2003 budget and FYDP funds 2.5 MEB of lift which is in accordance with the QDR.

- **Submarines.** The submarine force structure is the minimum identified by JCS and other studies. Real world taskings stress this number.
- **Support/Sustainment Requirements.** Global demands implied by new operational concepts may require additional logistics/replenishment assets.

Transforming to the “Force-netted” Fleet. FORCEnet is the architecture and building blocks that integrate sensors, networks, decision aids, weapons, warriors and supporting systems into a highly adaptive, human-centric, comprehensive system. DD(X), CVN(X), SSGN, *Virginia*-class SSNs, *San Antonio*-class LPD, and Multi Mission Aircraft (MMA) are examples of platforms netted for the future. Warfighting effectiveness will be achieved through transformational technologies, innovative operational concepts through experimentation, and a focused procurement program, to realize major increases in our Naval Force’s combat performance and achieve battlespace dominance.

While FORCEnet provides the overarching architectures, critical subset applications are already being procured—in particular, Cooperative Engagement Capability (CEC) and Naval Fires Network (NFN). CEC enables real time exchange of fire control quality data between battle force units, enabling all to have the identical picture, and to conduct cooperative engagements.

Ultimately, with a common integration of networks, sensors, weapons, and platforms networked warfighters can achieve battlespace dominance through knowledge superiority and cyberspace exploitation. Today’s Fleet already has much of tomorrow’s capabilities and we are pressing ahead to advance these groundbreaking capabilities.

Key Acquisition Programs: The Transformational Bridge. In addition to the highly capable systems now entering the fleet, we are making substantial investments in programs that are the bridge to the transformed Naval Forces of the future. Programs include the DD(X) family of ships, CVN(X), Joint Strike Fighter (JSF), *Virginia*-class SSN, MV-22 Osprey and *San Antonio*-class LPD. The Navy will also convert four *Ohio*-class SSBNs into cruise missile carrying submarines (SSGNs) with special operations capabilities, as well as begin to procure a replacement for the aging P-3 series reconnaissance aircraft, such as the MMA. These programs are integrated with other ongoing transformation efforts to move toward the netted potential of Network Centric Warfare. For example, the Joint Tactical Radio system (JTRS) revolutionizes wireless communications; CEC successfully completed OPEVAL in May 2001; IT-21 is in 182 of our ships; Link 16 is in the fleet, and Navy-Marine Corps Intranet is integrating the information backbone of the Naval Service.

Concepts Key to Transformation

- Experimentation to realize revolutionary and incremental change
- New Manning Concepts for ships and squadrons
- Technological innovation speeding the pace of development and insertion
- Expanded use of unmanned vehicles above, on, and below the ocean
- Sea based forces
- All-Electric Warship design could revolutionize the platform from ship design to sensor performance to tactics

These platforms are coupled with “process” transformation, such as improved business practices and spiral development, which will enable short notice innovation and technology insertion on subsequent units in a class. Thus the programs we are launching—DD(X), *Virginia*-class SSN, CVN(X), and others—are important not only for the capabilities they will bring initially, but also as the bridge to even more revolutionary capabilities downstream.

The DD(X) Family of Ships. DD(X), along with CG(X), and the Littoral Combat Ship (LCS), will introduce complementary technologies for 21st century warfighting success. Designed from the keel up to be part of a netted force, these three new members of the Navy’s surface combatant fleet will provide precision and volume fires, theater air defense and focused mission capabilities supporting littoral access. The DD(X) program will provide a baseline for spiral development of technology and engineering to support a range of future ships, such as CG(X) and LCS, to meet maritime requirements well into the 21st century. Some of the most transformational technologies include the Integrated Power System, Multi-Function and Volume Search Radars, Advanced Gun System, and a Total Ship Computing Environment. These technologies will enable the fleet to operate more efficiently because of reduced life cycle costs resulting from fuel and manpower savings.

Future Aircraft Carrier (CVNX). The future carrier force, our centerpiece of global access, will incorporate the best of our transformation technologies. Each CVNX will provide 50 years of service life with growth margin to accommodate advanced equipment and systems that permit flexible response options to wide-ranging roles and

missions. With a new, more efficient nuclear propulsion plant, open systems architecture, state of the art C⁴I and greatly expanded electrical capacity, these ships will host a future air wing (including UCAV/UAV) capable of generating sorties required to strike 1,000+ aimpoints per day. CVNX will remain a premier national asset for forward presence, mobility/crisis response, and sustained force projection.

Amphibious Warfare. The building blocks of our future expeditionary capabilities the Advanced Amphibious Assault Vehicle (AAAV), MV-22 Osprey aircraft, JSF, and a new generation of modern ground equipment allow us to operate from farther over the horizon and deeper into the littorals. High Speed Vessels (HSV) and new lighterage will be key components of the Seabasing concept. The new AAAV will have triple the water transit speeds of older Amphibious Assault Vehicles. MV-22 will ultimately increase expeditionary airlift capacity by a factor of three while quadrupling range. This will increase joint lethality while using greater standoff range to reduce risk to the force. The JSF will provide a joint aircraft that avoids unnecessary duplication, yet provides leap-ahead technology in an interoperable system.

The Marine Corps assault echelon amphibious lift requirement remains at 3.0 MEBs. It shapes the future amphibious force with the number and type of ships required for a flexible warfighting capability. The planned force will form ARGs reconfigured or tailored to smaller sized independent elements during “split-ARG/MEU(SOC)” operations. The *San Antonio*-class LPD 17 is designed to be a principal ARG platform, supporting a range of expeditionary capabilities discussed above.

Virginia Class Attack Submarine. The first of a new class of attack submarine, *Virginia* (SSN-774), is being built today. Building a ship as quiet as the current Seawolf class, this program has received awards for cost reduction and efficiency, but with a 30 percent lower total ownership cost and modular design allowing for spiral acquisition and insertion of future technologies.

Combat Logistics. This force is well on its way to completing its own transformation from six ship classes down to three classes of modern, highly capable, multiple missioned platforms. The newly missioned *Lewis & Clark*-class Dry Cargo/Ammunition ships (T-AKE), the first of a 12 ship class, will eventually replace the aging T-AFS and T-AE platforms, providing increased capacity and combat load flexibility.

Assets. Prepositioning supports all four services. The current MPS program combines the capacity and flexibility of prepositioned sealift with the speed of strategic airlift. We continue to pursue both our Maritime Prepositioned Force Enhancement (MPF(E)) and Maritime Prepositioned Force Future (MPF(F)) programs, enhancing Navy Fleet Hospital, Naval Mobile Construction Battalion and expeditionary airfield capabilities. The long-term prepositioning program, MPF(F), will provide a more robust capability for rapid delivery and sustainment of marine forces ashore. It will be more expeditionary and contribute significantly towards integration of the seabase in order to project naval combat power from the sea in support of joint operations.

Helicopters. All Navy helicopter missions are being consolidated into the MH-60R and MH-60S platforms. These platforms will have a common cockpit and common airframe, with equipment tailored to particular missions enabling a decrease in the number of maintenance personnel required.

B. Technology and Experimentation.

Investing in Technology. Transformation requires substantial investment in S&T to swiftly and effectively leverage emerging opportunities. In fiscal year 2003 we increased the investment in RDT&E accounts by \$1.1 billion. Enhanced capability will be achieved via prioritized investments focusing on networks, sensors, weapons and platforms. Continued investment in S&T is essential in this time of extraordinarily rapid technological change and to ensure technologically superior naval capabilities will be available when required. The Navy’s Warfare Centers and Navy Systems Commands, along with leading researchers in the Naval Research Laboratory and the Naval Postgraduate School, as well as the Nation’s universities and industry, continue to forward fresh and innovative ideas for investigation and development. These will include:

- **Integrated Power Systems (IPS).** Electric propulsion, envisioned for future surface and submarine platforms, will enable integrated powering of all propulsion, combat systems, and ship services, thus enhancing warship capability.
- **Unmanned Vehicles and Distributed Sensors.** Naval UAVs will provide the battlegroup and MAGTF commanders with essential near-real time imagery and data required to support ISR requirements independent of, or in concert with, the use of manned aircraft or limited joint theater or na-

tional assets. Furthermore, \$76 million for unmanned underwater vehicles begins to provide similar capabilities in the underwater environment.

- **Intelligence.** Navy and marine forces will enhance their organic intelligence capabilities by accessing and leveraging national, theater, service, and coalition intelligence assets and support through a comprehensive ISR network. Emerging threats and strategic environments demand broadened intelligence capabilities to support forces engaged in combat against asymmetric threats, international terrorism, military operations other than war, operations in urban environments and IO.

Space. The Navy and Marine Corps will continue to pursue the maximum use of space to enhance our operational capabilities. We look to leverage existing systems and rapidly adapt emerging technology.

Ballistic Missile Defense. A viable theater and area sea based ballistic missile defense system is important to assure the safety of U.S. forces and the flow of U.S. forces through foreign ports and air fields when required. Sea based missile defense can also allow us to assist allies and friends deterring coercion and threats. We must solve the technical issues to field an effective system.

Key Investments for Netted Warfare Success

- FORCENet the overarching structure for Network Centric Warfare systems, including
 - Naval Fires Network (NFN)
 - Cooperative Engagement Capability (CEC)
 - Expeditionary Sensor Grid (ESG)
 - Expeditionary C⁵ Grid (EC5G)
 - Common geotemporal reference of networked knowledge (4D-Cube)
- Information Technology for the 21st Century (IT21)
- Navy-Marine Corps Intranet (NMCI)
- SSGN
- Organic Mine Countermeasures (OMCM)
- Maritime Prepositioning Force (Future) (MPF(F))
- E-2C Radar Modernization Program (RMP)
- Unmanned Aerial Vehicles (UAVs)
- Unmanned Combat Air Vehicles (UCAVs)
- Unmanned Undersea Vehicles (UUVs)
- Advanced Electronically Scanned Array (AESA) Radar
- E-2C Radar Modernization Program (RMP)
- Link-16 network
- Multifunction Information Distribution System (MIDS) data link
- Distributed Common Ground Station
- Joint Tactical Radio System (JTRS)
- Lightweight Mobile Satellite Terminals
- Unit Operations Center
- Mobile User Objective System

Joint/Fleet Experimentation. The path to transformation will involve a robust program of experimentation and concept development with new capabilities and operational prototypes while pursuing S&T efforts. We have ongoing initiatives to translate concepts such as the Navy's Network Centric Warfare (NCW) and the Marine Corps' Expeditionary Maneuver Warfare (EMW) into reality. This summer's Millennium Challenge 2002 exercise will include experiments by each Service, coordinated together by Joint Forces Command.

Fleet Battle Experiments (FBEs). NWDC and the Marine Corps Combat Development Command (MCCDC) develop and refine future warfare ideas, tactics and doctrine in areas such as knowledge superiority and access, time critical strike, organic mine countermeasures, autonomous operations, littoral antisubmarine warfare, platform and war fighter protection, missile defense, enhanced modeling and simulation developments and expeditionary logistics. Navy FBEs and Marine Corps Advanced Warfighting Experiments test these new doctrines and ideas in the field, assess the utility of new technologies, explore new operational capabilities and organizational arrangements, and feed the empirical results back to the development commands. Both Services are collaborating to ensure that Navy and Marine Corps future development and transformation is completely compatible and complementary.

C. Leveraging Organizational Capital

Organizational Alignment. Alignment means having all our organizations acting coherently to achieve our overall objectives. To extract the maximum advantage

from our resources and provide a high rate of return on our investments, we need to know our core requirements and state them accurately. Our continued success also requires organizational speed and agility to capitalize on new opportunities.

To this end the Navy took significant steps to align its organizations more effectively. The Commander, U.S. Fleet Forces Command (CFFC) was created to integrate policies and requirements for manning, equipping, and training all fleet units. Reorganized directorates tied closely to the fleet now lead the warfare requirements generation (N7) process while the resources and assessment group (N8) validates and prioritizes those requirements in the programming and budgeting process. The Navy has also established advocate organizations for fleet and ashore readiness (N4), to ensure that readiness issues have a higher profile in the Planning, Programming, and Budgeting System (PPBS) process. The Navy has closely examined organizational alignment options for enhancing delivery of IT, IO and space capabilities to the fleet. The Department intends to consolidate and align existing space, IT and IO commands to provide this management structure in direct support of our fleets.

Better Business Practices. Key to achieving transformation is changing the Department's business practices, finding efficiencies, and moving bureaucracy dollars to the battlefield. To buy greater numbers of ships and aircraft a balance needs to be struck between the competing demands of current readiness, procurement, innovation, and experimentation. Better business practices are essential for freeing up resources for enhanced procurement and transformation. All Navy leaders, uniformed and civilian, are now thinking in terms of maximum productivity, minimum overhead, and measurable output. Every dollar the taxpayers entrust to us for the Nation's defense needs to be spent wisely.

Navy processes and organizations that equip, maintain, train and otherwise support operational forces are beginning to transform in concert with the 21st century Naval Force. These processes and organizations will be agile, responsive, and cost-effective. They provide for rapid identification, testing, and introduction of new technologies to stay ahead of the threat, streamline development cycle times, optimize human system integration, and provide customer support second to none. Our future readiness and force structure will introduce new systems using spiral acquisition programs and better business practices that allow for introducing innovative and transformational technology improvements into successive units of similar classes. By implementing these practices we will be able to shift more dollars into combat capability.

The Marine Corps has taken major steps to improve its business practices through the comprehensive implementation of Activity Based Costing and Management (ABC/M) methods at all of its installations. These efforts for achieve efficiencies and enable increased productivity at lower costs. These steps enable more rapid transformation of Marine Corps warfighting enhancements.

We are also working to replace other business processes and to revise the current PPBS. Efficient organizations are clearly more effective, and we need to work continuously to improve processes throughout the naval services. Prosecuting the war is our first priority, but our area of responsibility includes the business of war and overseeing the vast infrastructure that supports warfighting. We cannot fully prosecute the latter without fully improving the former.

VII. SUMMARY

At the dawn of the 21st century, the Navy and Marine Corps are uniquely positioned and configured to respond to the challenges the Nation faces. Steeped in a tradition of operating deployed, Naval Expeditionary Forces assure access, swiftly responding to threats to U.S. interests often in areas where access may be restricted, withheld, or denied. Naval Forces fight and win; they are capable of initiating and sustaining nearly unlimited combat operations on the sea, land, and in the air without the burden or liability of a logistics tail or host nation support. Once again in Operation Enduring Freedom and "War Against Terror," on station Naval Forces were first to respond, first to fight, and first to secure U.S. interests.

Naval Forces are continually transforming. We are building on a winning team, leveraging both current and transformational capabilities. The ability to transform is at the heart of America's competitive advantage.

We are the finest Naval Force in the world. While we face the challenges of recruiting and retaining the best people, maintaining adequate force structure, recapitalizing an aging infrastructure, and fighting both symmetrical and asymmetrical threats, we are clear of purpose, focused on the future, and confident in our capabilities. By successfully meeting the challenges outlined above, we remain ready to as-

sure allies and friends, deter potential adversaries, and defeat enemies while providing our Nation the most flexible instrument of military capability.

The fiscal year 2003 President's budget request continues to build on the improvements funded in fiscal year 2002. With continued strong Congressional support we will continue this year, and in coming years, the transformation and recapitalization of our Nation's already potent Naval Forces.

Chairman LEVIN. Thank you, Secretary England.
Secretary Roche.

**STATEMENT OF HON. JAMES G. ROCHE, SECRETARY OF THE
AIR FORCE**

Secretary ROCHE. Mr. Chairman, Senator Warner, members of the committee: It is an honor to come before you today representing the Air Force team and accompanying my esteemed colleagues from the Army and the Navy. We are committed to succeed together in our task to provide for this Nation's security now and in the foreseeable future. You have our full attention and we are ready to get down to the important business at hand.

Like my colleagues and with your permission, Mr. Chairman, I would like to make a short opening statement and request that my written statement of the Air Force 2002 posture statement be included in the record. Thank you, sir.

Mr. Chairman, America's Air Force has recently been afforded numerous opportunities to implement and validate significant changes in the concepts of military operations and indeed the conduct of war. With the support of the Secretary of Defense, we have encouraged and exploited the rapid advancement and deployment of innovative technologies. We have already begun to reorganize and find efficiencies throughout the Air Force and we have taken significant action to implement the findings of the Space Commission in our new role as the Department of Defense's executive agent for space. I am especially grateful to have on board now Mr. Peter Teets, our Under Secretary and Director of the National Reconnaissance Office, whose experience, wisdom, and leadership will be invaluable as we take this mission on.

We proceed, however, hungry rather than complacent, recognizing that much work and many opportunities to improve await us. Despite our dedication to demanding, critical, and global operations, we have not faltered in our steps to continue the task of transforming our force to match the demands of this new century. Operations Northern Watch and Southern Watch, Mr. Chairman, have quietly amassed a total of almost 200,000 sorties in combat missions that have continued now for over a decade. Operation Enduring Freedom has demanded over 14,000 sorties, some of which have broken records in mission range, hours flown, and combat reconnaissance. Tanker support to joint operations, close to 6,000 tanker sorties to date just in Operation Enduring Freedom, plus another 4,200 in Operation Noble Eagle. Mobility demands and humanitarian tonnage delivered have all been unprecedented.

For the first time in the history of warfare, the entire ground operation in landlocked Afghanistan—infiltration, exfiltration, sustainment of supplies and support equipment—has been accomplished by air. In Operation Noble Eagle over the skies of America, over 11,000 airmen, 265 aircraft, and 350 crews from the Air National Guard, Air Force Reserve, and Active Air Force have flown

over 13,000 tanker, fighter, and airborne early warning sorties. Mr. Chairman, we have NATO AWACS over the United States at this time, five aircraft, and we expect possibly two more. I will be going down to Tinker Air Force Base to personally thank them in a week and a half.

As we work to complete our transformation, Mr. Chairman, support our people, and inspire the military-industrial base to become an even more efficient team, our vision remains a total air and space force, providing global reconnaissance in strike, including troops and their support, across the full spectrum of operations. Our more pressing and significant challenges include:

Providing persistent intelligence, surveillance, and reconnaissance across a critical section of a distant country in all weather scenarios, 24 hours a day, 7 days a week, for up to a year; and

Developing the ability to provide near-instantaneous ground attack from the air, precisely, with a wide variety of strike systems, including naval, marine, as well as Air Force, by working closely with troops on the ground equipped with powerful sensors and communication links, as well as with a portfolio of off-board sensors and platforms, including UAVs.

Mr. Chairman, it was Secretary White and myself in the company of Secretary Wolfowitz who worked hard on the idea of linking sergeants on the ground by virtue of GPS, computer, and certain types of binoculars with laser range finders to our aircraft in the air, and that has proven so dramatically successful. It is an example of our Air Force working with the Army as the Army develops an Objective Force to be able to provide instant power to those troops on the ground.

We need to define and pursue the optimum space architecture to fully integrate space assets into global strike operations from the air, land, and sea. We are developing our role in homeland defense and trying to arrive at a steady state of roles and responsibilities among our Active Air Force, Air National Guard, and Air Force Reserve. Our question is how long do we have to maintain the Operation Noble Eagle status as it is now? What is the steady state in those circumstances?

We must complete and implement our long-term strategy for our air logistics centers and we must modernize the tanker and the intelligence, surveillance, and reconnaissance capabilities we will need in the years ahead. Here I am particularly concerned that we have been demanding so much for so long of our aged 707 airframes, that we are soon to find ourselves in the same predicament as the proverbial king of medieval England. For want of a horseshoe, the horse lost a shoe, lost the horse, lost the king, lost the kingdom.

I note, sir, that 55 percent of our tankers in the area of operations, area of responsibility, have been for our Navy brethren. The KC-10, which was purchased a number of years ago, has been just a stalwart of being able to support our Navy brethren.

We are also developing concepts and strategies to seamlessly integrate our manned and unmanned systems, something brand new for us. We remain particularly focused on retaining our people, especially those in mid-career, who will benefit from the provisions of this budget for improved family housing, pay, and facilities. I

wish to pass on the thanks of many of the troops I met overseas who wanted to say thank you to the committee for its leadership in their pay circumstances.

Mr. Chairman, America's Air Force is able to perform the extraordinary feats asked of us because we are blessed with the full support of the American people, Congress, and the President of the United States, all of whom have been graciously supportive of our efforts and missions. We sincerely appreciate the confidence in our commitments and our capabilities, as well as the wisdom, vigilance, and patriotic sense of duty that join us in our journey to provide our great Nation with superiority in air and space throughout the century.

As you go to the area of responsibility as I have, you will be proud of the airmen you meet and the Air Force you and your colleagues in Congress have raised and maintained. Thank you very much, sir.

[The prepared statement of Secretary Roche follows:]

PREPARED STATEMENT BY THE HON. JAMES G. ROCHE

Mr. Chairman and members of the committee, the Air Force remains focused on transformation. It is a continuous journey, and fundamental to succeeding in the joint services' task to provide for this Nation's security. This fiscal year 2003 budget takes significant strides along this path, and will enable us to remain the world's most capable air and space force.

During the past year, the Air Force has had numerous opportunities to implement and validate significant changes in the conduct and strategies of war, exploit the rapid advancement of innovative technologies, and deliver global reconnaissance and strike for America's national security. Our successes are America's successes; they are the direct result of the tireless and unconditional service by men and women of the Total Air Force and their families.

We recognize much work and many opportunities to improve await us. Despite our unassailable dedication to a demanding operational pace at home and abroad—including Northern Watch, Southern Watch, Noble Eagle, and Enduring Freedom—we have not faltered in our steps to continue the tasks of our unprecedented transformation. We are pressing forward to develop and refine our operational and organizational processes and strategies to address the changing national security and economic environments. We are focusing on the horizontal integration of our manned, unmanned, and space assets in order to provide real-time actionable, exploitable intelligence to commanders. We are committed to leveraging technology to combine our air and space capabilities in order to increase asymmetric advantages for our Nation. As our transformation continues, we will support our people, revitalize the military industrial base, and seek efficiency at every turn. We are the world's preeminent Air and Space Force, remaining true to our vision by providing global vigilance, reach, and power across the spectrum of military and humanitarian operations for America and our allies.

We are able to perform the extraordinary feats asked of our Air Force because we are blessed with full endorsement from the American people, Congress, and the President of the United States—all of whom provide unwavering support to our efforts and missions. We sincerely appreciate this confidence in our commitment and our capabilities to provide our great Nation with superiority in air and space throughout this century.

PREFACE

If Americans had not fully understood the idea of "asymmetry" before September 11, they received a horrific education on that day. In a lesson reminiscent of one 60 years earlier, air assets were employed in a malicious fashion on an unsuspecting people. This time, however, the attacks resonated a particular evil, for civil airlines were used to wreak destruction and death upon civilians.

The World Trade Center, the Pentagon and a field in Pennsylvania were the battlefields of asymmetric warfare. A terrorist group exploited the United States' asymmetrical vulnerabilities, far in excess of their relative size and the physical results of the attacks. Within minutes of these attacks, the United States, through Operations Noble Eagle and Enduring Freedom, was providing education on an asym-

metry of its own making—the object lesson of joint and combined warfare visited on the perpetrators of the September 11 strikes. The Air Force is fully prepared to execute the missions required—with our air, space and special forces assets—to carry this global war on terrorism to its conclusion, ending as President Bush declared, “at a time and place of *our* choosing.”

Operation Noble Eagle (ONE)

Operation Noble Eagle unofficially began 3 minutes after North American Aerospace Defense Command (NORAD) received word from the Federal Aviation Administration of two hijackings. F-15 Air Defense fighters from Otis Air National Guard base in Massachusetts raced toward the skies over New York. Thirty minutes later, a similar attack unfolded in DC. Within minutes, Guard F-16s from Langley AFB were on an intercept track while other Guard F-16s headed to the skies over the Capital. Though notified too late to thwart the attacks, the jets were in place to stop any further strikes, including the aircraft that crashed in Pennsylvania.

Within hours of these attacks, the Air Force had established combat air patrols across America with air refueling support to keep them aloft, and command and control assets to direct them. By December, these sorties exceeded 8,000. Meanwhile, as the Air Force air defenses secured the skies, numerous other combat support enablers—strategic and tactical lift, civil engineers, medical teams, combat communications, command centers, chaplains, and security forces—rolled into action. The Air National Guard generated over 100 C-130s to support the movement of FEMA, FBI, human organs and blood, Combat Support Teams (CSTs), medical equipment, and combat communications. In addition, over 70 personnel arrived from Andrews AFB to help coordinate emergency medicine at the Pentagon alongside the Surgeon General of the Air Force.

Within 24 hours, the Air Force swiftly deployed 500 medics to McGuire AFB, to respond to any Federal Emergency Management Agency (FEMA) tasking for equipment and/or personnel needed at the World Trade Center. State-of-the-art medical emergency facilities were assembled, which included four Expeditionary Medical Support packages (EMEDS) (lightweight modular systems). Critical Care Air Transportable Teams (CCATT), which provide emergency medical attention while in-flight, were quickly established at both the Pentagon and McGuire AFB. The port mortuary also was activated, with over 600 Air Force Active duty, Guard and Reserve personnel deploying to Dover AFB. They assisted in the identification and preparation of the remains of the Pentagon attack victims, working alongside the Armed Forces Medical Examiner, FBI, Army and Navy personnel. Critical Stress Management Teams conducted counseling to personnel assigned to recovery efforts at both locations. Finally, since the National Disaster Medical System was activated, the Air Force Medical Service (AFMS) also set up its aeromedical evacuation assets at both McGuire AFB and Andrews AFB.

Meanwhile, demonstrating their invaluable integration in the Total Force, Air Force Reserve and Air National Guard airlift crews were among the first to bring in critical supplies, equipment and personnel, including emergency response teams from FEMA, fire trucks, search dogs, and earth moving equipment. At the time of this writing, more than 10,000 Air Force reservists and over 20,000 Air National Guard members have been mobilized, and many more continue to provide daily support as volunteers. Thousands of Air National Guardsmen, reservists, civilians, contractors, and Active duty members are ensuring air and space security over America.

Operation Enduring Freedom (OEF)

When the President decided on a the appropriate course of action, air and space forces were called into action. At the outset, Air Force bombers proved instrumental to putting weapons on targets in Afghanistan. The vast mobility capabilities of the Air Force quickly moved assets into the theater, while simultaneously making possible Navy and Air Force fighter attacks.

Enduring Freedom also revealed an improvement from even the most recent operations. Air and space precision assets paired with multi-service special forces on the ground proved an effective, efficient and devastating mix of capabilities. Additionally, we have pushed developing technologies forward and have found operational successes in advanced employment of Unmanned Aerial Vehicles (UAVs).

This operation is about creating effects—deterrence and defeat of terrorism—so it is more than simply munitions-on-targets. The Air Force is at the forefront of psychological campaigns, applying robust information warfare campaigns while also leading the humanitarian relief mission—essential to any long-term stability in the region. Airdropping millions of rations to a starving people, Air Force mobility forces directly affecting affected the future of the new Afghan government.

“Let’s Roll!”

As it has throughout its history, America will champion the cause of freedom and defeat those who would attempt to deny us this most basic tenet. Guaranteeing our success is . . . “the strength of our country—the skill of our people and the superiority of our technology.”

INTRODUCTION

The world’s premier Air Force begins 2002 under new leadership. The Secretary and Chief of Staff bring unique and complementary experiences to bear upon the dynamic promise of American air and space power in the 21st century. The Air Force is in the business of global reconnaissance and strike, including the full application of unparalleled mobility forces. Our efforts are fuelled by a vision of *Global Vigilance, Reach, and Power* to help the Nation assure our allies and friends, while dissuading, deterring or decisively defeating any adversary. The specific concept of “core competencies”¹ well known among successful organizations has been adapted by Air Force leaders to characterize the capabilities that are central to our mission: air and space superiority, information superiority, global attack, precision engagement, rapid global mobility, and agile combat support.

The Air Force, and the Nation, entered 2001 aware of the challenges and opportunities of a new administration. The Department of Defense was to undergo significant evaluation, with the expectation of dramatic changes to follow. President Bush brought an eminently qualified team to Defense and National Security, and the Air Force welcomed the injection of energy and attention the Nation’s defense was to receive. Long a force for innovation, airmen continued their leadership throughout the months of military reinvention. Capabilities-based planning was emerging as the Quadrennial Defense Review (QDR) focal point, and the Air Force strove to maximize the assessment of new technologies, revolutionary concepts of operation and visionary organizational changes. However, amidst this important task, terror struck the United States. The Air Force, and the Nation, exited 2001 at war.

This new adversary, and those of the future, will pose a formidable challenge to American interests at home and abroad. They will attempt to intimidate, deter or defeat our Nation through a variety of means, to exploit our asymmetrical vulnerabilities and avoid confronting U.S. military power directly. These strategies will include the use or threatened use of weapons of mass destruction, and the use of terrorism on U.S. soil. They will also attempt to counter the tremendous asymmetric advantages of U.S. air and space power.

To meet these challenges, Air Force strategy calls for a capabilities-based approach to defense planning. This enables the Service to answer a broad range of challenges posed by potential adversaries, while also developing the capabilities it needs for the future. This capabilities-based planning must remain tied to ongoing Air Force transformation that continues to develop new technologies, concepts of employment and organizational adaptations.

The Road Ahead

The transformation of the military now runs parallel to the transformation of our Nation. Just as the military is exploring new capabilities and concepts of operation (CONOPs) to engage threats, America as a whole is experiencing new appreciation for the cost of freedom. The Air Force, the Department of Defense and the American people are up to the challenge.

Though a shock, the events of September 11 did not fundamentally alter the course for a transformed military; rather, they served as an affirmation of our current direction. Turning away from decades of restrictive force-to-threat planning, the Air Force along with the Defense Department is on course to define desired effects, and then secure capabilities which allow us to reach that end. Additionally, the QDR and the Defense Planning Guidance (DPG) address organizational changes, which add to the effectiveness of new military methods.

This describes the heart of Air Force transformation. Assessing existing and potential adversaries’ capabilities against our own, we are developing Task Forces for a variety of mission requirements, from strategic response to homeland security. For example, Global Strike Task Force, which describes how we will operate in an anti-

¹ According to two leading scholars, successful enterprises “consolidate corporate-wide technologies and production skills into competencies that empower individual organizations to adapt quickly to changing opportunities.” The three identifying characteristics of core competencies are: (1) They transcend a single product or service and provide potential access to a wide variety of markets; (2) they are perceived by customers to deliver significant benefit; and (3) they should be hard to imitate. See C.K. Prahalad and Gary Hamel, “The Core Competence of the Corporation,” *Harvard Business Review*, May–June 1990.

access scenario, is the next step in our journey to fully achieve our mission while also opening doors to adaptive and innovative operational plans, and inspired relevant organizational structure.

In order to draw the greatest effectiveness from these capabilities, the Air Force will exploit America's technical dominance to elevate our asymmetric advantage over any adversary. This involves harnessing the attributes of stealth, precision, standoff, space, and information technology. The success of our capabilities-based CONOPs depends upon reducing the find, fix, track, target, engage, and assess (F2T2EA) cycle and achieving persistent ISR capabilities. Key to this is the *horizontal integration* of manned, unmanned, and space assets. By facilitating digital conversations at the machine-level we will provide the Joint Force Commander with the decision-quality information required to ensure success—the “sum of the wisdom” resulting in a cursor over the target. With determined exploration and exploitation of space capabilities—culture, principles, personnel and assets—we will widen our asymmetric advantages and set the bar beyond reach of any adversary. Such transformation will guarantee America's *Global Vigilance, Reach, and Power*—establishing powerful national mechanisms to assure, dissuade, defeat or deter.

These are the building blocks to true transformation—technologically elevated capabilities, focused CONOPs and embedded structural changes. The Air Force remains at the forefront of each of these transformational elements. We ensure the freedom to operate around the globe and in the sky and space above, under any circumstances, and for whatever mission the Nation requires. This is asymmetry—exploitation of capabilities no other force in the world possesses—and it is fundamental to redefining jointly fought warfare on America's terms. Maintaining this advantage is critical, and a constant challenge. In the year ahead, we will meet this test by solidifying the roots of our success: Readiness, Transformation, and the resource that makes these possible—our People.

THE YEAR IN REVIEW

In 2001, the Air Force had an enormous impact on the peacekeeping and combat missions around the world. From the Korean Peninsula to Kabul, across every continent and over all bodies of water, Air Force civilian, Active, Guard and Reserve Forces were executing global reconnaissance and strike missions. Through combined exercises, humanitarian interaction around the globe, and decisive combat action, we assured our friends and dissuaded, deterred or defeated our adversaries.

In the Balkans, contributions to the region included fighter, tanker, command and control, ISR, and airlift aircraft. Combat search and rescue (CSAR) forces, special operations units and unmanned aerial vehicles (UAVs) also flew in support of the operation. In 2001, the Air Force flew approximately 1,000 sorties, enforcing no fly zones over the former Yugoslavia.

In Southwest Asia (SWA), the Air Force maintained a continuous, steady-force presence of more than 8,000 airmen in support of Operations Northern Watch (ONW) and Southern Watch (OSW). Air Force ISR assets provided crucial intelligence and situational awareness, particularly in the form of indications, warning and intelligence. We were the vital element in monitoring Iraq's compliance with United Nations' directives. Coalition forces flew over 22,000 combat sorties in SWA during 2001, 70 percent of which were flown by the Air Force.

In response to the terrorist activity of September 11, we began providing support to homeland defense via Operation Noble Eagle and support to the war against terrorism via Operation Enduring Freedom. By the end of 2001, we had flown 11,000 combat air patrol, surveillance, and refueling sorties protecting U.S. cities and other high-value assets. We also maintained an alert readiness status on the ground in order to scramble and intercept threat aircraft. Nearly 14,000 airmen have deployed to Southwest Asia in support of Enduring Freedom. This number represents nearly every specialty in the Air Force, from engineers to explosive ordnance disposal, pilots to special operators. Of the over 18,500 total coalition sorties flown, almost 46 percent have been flown by the Air Force. These sorties included fighter, tanker, command and control, special operations, UAV, ISR, and airlift aircraft. Initially, the Air Force was the sole provider of airlift for humanitarian relief to the people of Afghanistan. By the end of December, Air Force mobility teams had delivered over 2.4 million humanitarian daily rations and over 4,300 tons of wheat, rice, and cold weather gear. Ultimately, in the land locked country of Afghanistan, everything brought in to build up and sustain our forces was brought in by air.

The Caribbean and South America continued to be the focus of the ongoing war on drugs. Counter-narcotic missions were flown around the clock by all interagency organizations. The Air Force contributed aircraft and crews flying missions as fighter-interceptors, airlift, ISR and CSAR. Of the almost 3,000 sorties flown, the Air

Force flew approximately 25 percent. These efforts directly contributed to seizures that totaled over 75,000 kilos of narcotics.

Establishing operational imperatives for 2001 and beyond, the Secretary of Defense named the Air Force as executive agent for national security space. We now shoulder the responsibility for planning and programming of space systems for the Department. The Secretary and Under Secretary of the Air Force will direct efforts to nurture a space culture and ensure that the advancement of space capabilities receives focused and heightened emphasis. Throughout the year, we also maintained approximately 100 satellites in earth orbits that directly supported, and continue to support, not only the Air Force but also the other Services and the civilian population. Global Positioning Satellites assisted travelers worldwide. Data provided by Air Force weather satellites and communications and missile launch-detection satellites was used by all services. In order to maintain this robust capability, we launched, deployed, and initialized operations of eight additional assets in 2001.

The Air Force provided an American presence in regions of the world where the U.S. is working to build goodwill and improve relations. It also enabled quick humanitarian relief during natural and man-made disasters. During the month of January, following a devastating earthquake in India measuring 7.7 on the Richter Scale, two C-5s and four C-17s transported 115 short tons of humanitarian cargo to Ahmedabad, India. In April, a C-17 airlifted 10 cheetahs from Africa to America as part of a gift to the United States from the people of Namibia. Additionally, Air Force engineers from Active and Air Reserve Component RED HORSE units accomplished several school construction and water well drilling humanitarian projects throughout Central and South America.

When the floodwaters rose in Houston in June, a C-17 transported Federal relief workers and 30,000 pounds of relief supplies to Texas. Additionally, the Air Force deployed a 92-person Expeditionary Medical Support System (EMEDS) to the area to relieve local hospital emergency rooms workload. The EMEDS cared for over 1,000 patients from this disaster, and the AMS envisions placing EMEDS throughout the country to offer added future regional quick-response capabilities. Later, in August and September, Air National Guard and Air Force Reserve C-130 aircraft equipped with modular airborne fire-fighting systems flew 185 missions and dropped over 800,000 gallons of fire suppressant on wildfires in Idaho and California. Additionally, they flew 45 support sorties lifting 414 firefighters and over 300,000 tons of cargo into the area.

Whether at home or abroad, in combat, humanitarian operations or training, we strive to accomplish the mission effectively, efficiently and safely. Effective risk management directly contributes to readiness and warfighting capability. In 2001, a combination of targeted mishap prevention efforts and chain-of-command commitment resulted in sustained low mishap rates in all major areas. On the ground, a record low was achieved for off-duty sports and recreation fatalities with four total. In the on-duty ground fatality category, the Air Force tied the fiscal year 1998 all time record low of three. In the air, Class A Flight Mishap performance yielded the third lowest mishap rate in USAF history.

The Air Force-wide fielding of safety tools and metrics such as the web-based Safety Automation System continues to improve operational and acquisition risk management decision-making. These efforts, coupled with aggressive seasonal safety campaigns, enable leaders at all levels to take proactive action aimed at specific trend areas. The Air Force's commitment to safety as a combat multiplier continues to enhance force preparedness and mission accomplishment.

"The Expeditionary Air and Space Force (EAF) After 2 Years"

Our considerable mission accomplishments in 2001 have in large measure been made possible by the continued maturation of the EAF. Throughout the year, we called upon all facets of our Air Force—Active, Guard, Reserve, civilian, and contractors—to meet the demands of the war on terrorism and our steady-state commitments. In addition to the rotational deployments in support of OSW, ONW, Icelandic Operations, and counter-drug operations; we were called upon to support wartime efforts at home with ONE, and overseas with OEF. The large demand on the Air Force increased the OPSTEMPO drastically and placed a sizeable stress on our most valuable asset, our people. The Air Force is stretched thin, standing up several expeditionary bases overseas while at the same time defending the skies over the U.S. with numerous aircraft on ground and airborne alert. Our people have risen to the occasion in winning this war. We will maintain the Air and Space Expeditionary Force (AEF) structure throughout this effort to the maximum extent possible however, everyone in the Air Force realizes the mission has changed and the requirement to deploy for longer periods of time may increase.

The Expeditionary Air and Space Force—Sum of the Parts

Often misunderstood is the difference between the elements that collectively define the Expeditionary Air and Space Force. Whereas the EAF is a *construct* (including everything within the ball above) and *is* the Total Air Force, the AEFs are a subset and represent the *core of our deployable combat power* and forward presence capability. The EAF also enables the Air National Guard and the Air Force Reserve to participate more heavily in Air Force expeditionary operations. The increased predictability of the AEF rotation cycle allows us to schedule voluntary participation well in advance. This voluntary participation currently provides about 25 percent of the aviation package and 10 percent of the Expeditionary Combat Support. This support brings both OPSTEMPO relief as well as highly trained and skilled talent to the operations. This interaction lays the basis for the development of our transformational initiative, Future Total Force (FTF) (explored in Chapter 4).

AEF Prime consists of *operational* capabilities neither organically assigned to AEFs, nor incorporated in the rotational cycles. This includes regional command and control, intelligence, space, special operations, and the umbrella of deterrence provided by our nuclear forces. AEF Prime enables much of the global reachback we rely on for logistics and analysis.

AEFs are not individual organizations, autonomous fighting forces, or units. Instead, our 10 AEFs represent buckets of capabilities the Air Force can draw upon to satisfy the requirements of theater commanders—flexible, responsive, adaptable. A nominal AEF has about 12,600 people supporting 90 multi-role combat aircraft, 31 intra-theater airlift and air-refueling aircraft, and 13 critical enablers. The enablers provide command, control, communications, intelligence, surveillance, and reconnaissance, as well as combat search and rescue. AEFs are composed of squadron and sub-squadron elements, which are on-call for a period of 3 months in a 15-month cycle. If deployed, forces from AEFs make up Air and Space Expeditionary Task Forces (AETF). Finally, we have two Air and Space Expeditionary Wings (AEWs) that provide crisis response capability beyond what the two in-cycle AEFs can cover. They also contain unique capabilities, such as stealth aircraft, that are not distributed across the 10 AEFs.

Air Force Reserve Command made major AEF contributions in 2001 having met virtually 100 percent of both aviation and combat support commitments, while also deploying 14,000 plus personnel in volunteer status in the current 15-month AEF cycle (1 Dec 00—28 Feb 02). The challenge for 2002 will be to meet ongoing AEF commitments with volunteers from a Reserve Force which has had a large portion of its operations and combat support mobilized for homeland defense and the war on terrorism.

The Air National Guard alone contributes nearly 25,000 men and women every 15 months to the AEF rotations. During AEF cycles one and two thus far, Guard units provided over 20 percent of the total force aviation packages and nearly 10 percent of all expeditionary combat support requirements.

EAF Mobility provides the ability to deploy and sustain expeditionary forces. It includes airlift and air-refueling capabilities—the linchpin of power projection. Many mobility units accomplish the AEF role when specifically assigned to an AEF eligibility period and the EAF Mobility role all other times.

EAF Foundation consists of *support* capabilities not organically assigned to AEFs. This includes acquisition, logistics, health care, education, and training. Due to the expeditionary nature of the Air Force, individuals normally assigned to an EAF Foundation organization can still be assigned to an AEF and deploy to contingency operations during their 3-month eligibility period.

The EAF is a **force structuring mechanism** because it frames Air Force modernization, recapitalization, and transformation efforts. The AEFs and EAF Mobility provide the rotational basis for steady state expeditionary operations. Therefore, current and future programs must ensure adequate capability in the EAF to respond to global contingencies while providing predictability and stability for our people.

EAF Today

Our current level of commitment exceeds the capability we have available in our two on-call AEFs and one on-call AEW. In career fields such as Security Forces, Engineers, Communications and Information, and Medical, we have reached into future AEFs to source enough people to meet the current requirement. Low Density/High Demand (LD/HD) assets such as Airborne Warning and Control System aircraft (AWACS) and special operations aircraft have *deployed almost their entire inventory* to meet the war effort. We have been aided greatly in this LD/HD challenge with the deployment of NATO AWACS that have deployed to the U.S. in support of ONE. For the first time ever, the on-call AEW and portions of the remaining

AEW were employed. Additionally, a large portion of the total tanker force deployed to support Air Force and Navy strikes, while our mobility forces rapidly moved thousands of airmen and support equipment overseas allowing us to quickly engage the enemy on our terms, not theirs.

Fully Capable AEFs

Providing the flexibility needed for full spectrum operations requires continued efforts to round out capabilities of our AEFs to make them inter-changeable. Currently, our 10 AEFs are not all the same. For example, only three of the AEFs have precision, standoff strike capability, and only nine have an F-16CJ squadron for suppression of enemy air defenses. Until the disparity is rectified, the EAF construct will have limits—many LD/HD and stealth systems remaining tasked at maximum levels.

As the EAF continues to mature and technologies advance, we will expand the capabilities each AEF can provide. With enhanced intelligence, surveillance, and reconnaissance (ISR) we will enlarge the battlespace an AEF can control; improve our ability to do real-time targeting; and dramatically increase the number of targets an AEF can engage. Finally, we will continue to improve our expeditionary combat support capabilities—effective, responsive logistics are the key to sustaining expeditionary forces and operating from austere locations.

Reflection and Resolution

After a morning of terror on September 11, there was reassurance. Aircraft over American cities lent calm rather than fear, for they were the active, Guard and Reserve Air Force keeping watch. We reacted within minutes of the attacks to establish a defensive posture and to prepare our offensive forces, just as we spent 2001 reacting successfully to humanitarian and combat operations around the globe. While meeting the requirements of the new war on terrorism, we will continue our transformation journey. The capability to deliver massed, discriminate and precise effects anywhere in the world within minutes, and the persistent ISR to evaluate actions are within reach for America's air and space forces. This is the contribution of the Air Force to the Nation—asymmetric capabilities that assure, dissuade, deter or decisively defeat.

READINESS

Though no organization in America was ready for the attacks of September 11, none was more ready for the immediate aftermath than the Total Air Force team. From humanitarian to combat operations, the operational demands before the attacks were tremendous. Though significant milestones were reached in terms of reducing the effects of high tempo operations, the advent of war placed many of those gains on hold. The war on terrorism has disrupted the AEF schedules, which will create training, organization and resource impacts in the near future. Unaffected though, is our objective of 10 fully capable AEFs—each a flexible, identical cross-section of capabilities for the Joint Force Commander to employ. America's competitive edge is due in large part to its emphasis on realistic, comprehensive training, and we must continue to ensure our forces get that training. Equally important is ensuring our personnel have the resources needed to accomplish their jobs.

Recapitalization

Our fielded forces have aged to the point that they will not be able to compete with emerging and future threats. In order to deal with the global security environment, the Air Force must rebuild its aging infrastructure and modernize its outdated weapon systems. Higher priorities, however, require that we pursue a structured recapitalization process that will ensure tomorrow's warfighters have the advanced tools, technology, and equipment needed to preserve America's air and space dominance.

The budgetary constraints and spending reductions mandated in the 1990s caused the Air Force to seriously underfund modernization and infrastructure improvements. For example, in 1990 the Air Force purchased 257 aircraft; by 1996, that number had fallen to 30. This dramatic cutback in hardware acquisitions signaled an unavoidable shift in USAF priorities. Modernization stalled in order to maintain core operational capabilities and keep the fleet of older aircraft flying. Unfortunately, this financially driven reprioritization placed the Nation's mid- and long-term air power readiness at significant risk.

We now face a dangerous situation. Our aircraft fleet is getting older, less capable, and more expensive to maintain—all at the same time. Reversing this negative trend requires the Air Force to structure its recapitalization plans to avoid large-scale procurement spikes and critical modernization gaps.

The recapitalization of our airframes and weapons systems is only a partial solution. The Air Force needs additional funding to upgrade its infrastructure and physical plant, which include sustainment, restoration, modernization, transportation, support equipment, and communications accounts systems. At the same time, the Air Force must be prepared to conduct real-world operations on a global scale. While recapitalization is important we can never forget investing in our people. The Air Force needs to take particular care in preserving this resource and expanding its capabilities. With the help of Congress, we have made considerable progress in addressing pay, benefits, and quality of life issues (discussed in Chapter 5) but more remains to be done.

Understanding the range and nature of Air Force capabilities is a prerequisite to comprehending the readiness and transformational requirements. Securing our task forces' potential capabilities demands insightful and bold initiatives. How comprehensively we elevate the systems, processes, and people will determine how effectively America will be able to operate on the global stage in the decades ahead.

Core Competencies

Air and Space Superiority

Air and space superiority is the ability to control the entire vertical dimension, from the surface of the earth to the highest orbiting satellite, so the joint force has freedom from attack and freedom to attack. This is the essential first step in achieving battlespace dominance. As was true with operations in the 20th century, dominance of the vertical dimension will remain the most critical capability for 21st century Joint Force.

Air Superiority

The Air Force is investing in a range of systems encompassed in the entire F2T2EA kill chain. Among the air superiority assets that contribute to this targeting and attack process are the legacy air-to-air platforms. While we await the fielding of new systems, we strive to maintain the viability of our current assets. The F-15 and F-16 programs continue to pursue modernization of radars, engines, and enhanced combat capability to ensure near-term fleet maintenance and air superiority in air-to-air combat environment. Finally, key weapon advances rest with continued development and production of the Joint Helmet Mounted Sight as well as the AIM-9X and AIM-120 next-generation air-to-air missiles. While modernization of current systems is required to make them as capable as they can be, our greatest advantage with current systems is our robust training and the availability of ranges to conduct that training.

Self-defense against enemy air defense systems is a key element to ensure air superiority. Several electronic warfare programs support this important capability. The Joint Services Electronic Combat Systems Tester meets our operational requirement for a mobile verification system to confirm installed electronic countermeasures systems on F-15, F-16, and A-10 are operable. It tests end-to-end electronic combat capabilities, identifies system problems before takeoff, and provides the highest level of confidence to the warfighter that the EW suite is operational.

Comet Pod is a new infrared (IR) countermeasures system designed to provide covert, preemptive protection for the A-10 against IR surface-to-air missiles (SAMs). Fielding this system will greatly enhance survivability of the A-10 in its low-altitude close air support role. Additionally, the Advanced Strategic and Tactical Expendable program addresses multiple Combat Mission Needs Statements and provides accelerated ramp-up for production of the MJU-46 covert IR flare. This operational requirement acceleration responds to today's air war threat in Afghanistan and currently provides protection to special operations aircraft in the combat zone.

The AF leads the way in Radio Frequency (RF) Towed Decoys on fighter and bomber platforms. These countermeasures provide protection against advanced SAM threats and increase the viability and lethality of current platforms to conduct operations in the modern RF threat arena. These defensive systems have proven invaluable in combat over the last decade, and will continue to add to our legacy force capabilities.

Combat Search and Rescue (CSAR)

The CSAR mission provides friendly forces protection and assurance by recovering downed aircrew members or other persons in isolated locales and returning them to friendly control. Primarily charged with supporting combat personnel, CSAR continues to play an important role in civil search and rescue activities. The aging nature of the CSAR fleet, however, increasingly jeopardizes the Air Force's ability to accomplish the CSAR mission. Moreover, CSAR assets lack appropriate compatibility with our advances in strike, command and control, intelligence, surveillance and

reconnaissance systems, though some advances in information fusion have been completed.

Other improvements are forthcoming. Air Force Reserve Command (AFRC) will modify nine HC-130s with the APN-241 ground map radar, which enhances position awareness and increases system reliability. Additionally, AFRC is beginning the upgrade of the forward-looking infrared for the HH-60G helicopter fleet.

Space Superiority

Space superiority ranks with air superiority as a top priority. The ability to exploit and assure U.S. access to space assets while denying the same to our adversaries is of great importance, and as the ultimate high ground, space provides America with military advantages that cannot be duplicated.

Space Commission

In 2001, the Secretary of Defense named the Air Force as Executive Agent for Space in his implementation of Space Commission recommendations. This made the Air Force responsible for department-wide planning, programming, and acquisition of space systems. Consistent with the National Reconnaissance Office's (NRO) long standing approach, the Air Force will manage space systems with a "cradle to grave" philosophy, integrating systems acquisition with operations. To accomplish this, the Space and Missile Systems Center has been transferred from Air Force Materiel Command to Air Force Space Command. The Under Secretary of the Air Force is now dual hatted as the Director of the NRO, and will have acquisition authority for all Air Force and NRO space systems, as well as Milestone Decision Authority for all DOD space programs. This will allow a comprehensive review of all space systems, to determine the optimal method of satisfying national/military requirements. The first National Security Space Program Assessment was accomplished this year, comparing DOD and NRO program budgets against existing plans. This assessment will be used in drafting the first National Security Space Plan, due in mid-calendar year 2002.

Spacelift Range System (SLRS)

Achieving and maintaining space and information superiority requires an operational space launch capability that can deploy satellites to orbit with speed and flexibility—the high ground of military operations. The Spacelift Range System modernization program is replacing aging and non-supportable equipment to improve reliability and efficiency; reducing the cost of operations and standardize equipment on the eastern and western launch ranges.

SLRS modernization follows a phased approach. To date, the completion of new downrange satellite communications links, a new fiber optic network, and new range scheduling systems are providing government and commercial users more flexibility at the spacelift ranges. In 2001, these improvements enabled the rapid launch of three systems in just 4 days using Cape Canaveral AFS equipment—an unprecedented feat for America's spacelift ranges. The next phase replaces old, base-unique systems with modern, standardized range safety, flight operations and analysis, communications, tracking, telemetry, planning and scheduling and meteorological systems. Once completed, the SLRS modernization program, coupled with the Evolved Expendable Launch Vehicle (EELV) program, will meet the future launch demands of national security, civil, and commercial payloads.

In addition, Air Force spacelift ranges are central to supporting the Department of Defense's cooperation with the National Aeronautics and Space Administration (NASA) in the development of technology, operational concepts, and flight demonstration for the next generation of reusable launch vehicles. This cooperation also offers the basis for the evolution and future development of reliable, rapid, and assured access to space for air and space vehicles.

Information Superiority

Information systems are integral to every mission of the Air Force. Success in achieving superiority in this domain requires an effects-based approach, superior battlespace awareness, well integrated planning and execution, and properly trained and equipped information operations (IO) organizations. Information superiority means that our information systems are free from attack while we have freedom to attack an adversary's systems.

Information is both a critical capability and vulnerability across the range of military operations from peace to war. In coordination with Joint Forces, the Air Force engages daily in conducting IO functions across this spectrum of military operations. We provide information superiority to our Air Force commanders and Joint Forces CINCs as well as to friendly multinational forces by conducting information operations in the air, space, and information domains.

Command and Control, Intelligence, Surveillance, and Reconnaissance (C²ISR)

Currently, many military operations are limited in the area of C²ISR capabilities, which increases the amount of time, it takes to locate and destroy many targets. While we are aggressively pursuing and fielding solutions to streamline this process, some of our current C²ISR systems, which our forces rely on, are vulnerable to adversary manipulation. The challenge still exists to improve our own ability to disrupt the C²ISR systems of our adversaries. Of further concern to our C²ISR capabilities is limited radio frequency spectrum availability. Spectrum is the medium that supports the mobility, dispersion, and high tempo of operations. To meet this critical need for spectrum we must develop a strategy aimed at sustaining expanding spectrum access as we face evolving national security responsibilities.

Our operational and tactical command and control airborne platforms and ground systems organize and direct efforts to create desired effects, whatever their form. Our C² assets include the air and space operations center (AOC) with its decentralized component control reporting centers (CRC) and Theater Battle Management Core Systems (TBMCS); the Airborne Warning and Control System (AWACS); the Joint Surveillance Target Attack Radar System (JSTARS); and the Multi-Platform Radar Technology Insertion Program (MP-RTIP).

The other half of C²ISR is central to achieving battlespace superiority—knowledge. ISR assets gather and processes the data into decision-quality information. Currently, our limited numbers of airborne ISR systems are in extremely high demand. The RC-135 Rivet Joint, U-2, Distributed Common Ground System (DCGS), Predator, and Global Hawk UAVs have proven indispensable during OEF and the expanding war on terrorism by providing real-time target data, threat warning, and battle damage assessment.

The CRC is the JFACC's ground tactical execution node for C² and battle management. It provides wide-area surveillance, theater air defense, identification, data link management, and air battle execution. The current system was developed in the 1970s and must be replaced. The CRC replacement, the Battle Control System, will exceed year 2010 requirements for time-critical targeting, open system architecture, small deployment footprint, remote operations, multi-sensor fusion, and AEF responsiveness.

Air and Space Operations Center (AOC)—The Falconer

As the primary element of the Theater Air Control System, the AOC is responsible for planning, executing, and assessing the full range of air and space operations. It is the premier operational system at the disposal of the Joint Forces Air Component Commander (JFACC). By fusing the data from a vast array of C² and sensor systems, the AOC creates a comprehensive awareness of the battlespace so the JFACC can task and execute the most complex air and space operations across the entire spectrum of conflict.

Especially significant among these operations is time-critical targeting. This is the development of swift reaction to the threat within theater battle management. Accomplishing this requires combining C², rapid intelligence collection, analysis, and dissemination with positive control of airspace and the tasking of combat forces to coordinate the entire air battle with joint and coalition partners and component commanders. It is the ultimate goal of the targeting process—to reduce the F²T²E^A cycle from hours to minutes.

The Air Force has long understood the need to address standardization of command and control of air and space forces. The last decade witnessed the AOC as equivalent to a "pick up game," requiring on-the-job training and hundreds of individuals working long hours to produce an air tasking order. Throughout 2001, we aggressively addressed this problem and the Falconer AOC is now on path to becoming an efficient weapon system. Our focus will be refining the AOC into a standardized weapon system run by operators formally trained in C² Operations. We must also improve the weapon system's modularity, scalability and interoperability to meet requirements ranging from Major Theater War (MTW) to a Humanitarian Relief Operation (HUMRO) or Non-combatant Evacuation Operation (NEO).

If there are adequate resources to develop Advanced Technology AOC, we will "right-size" the AOC to meet each mission's requirement. The system will be interoperable with internal and external U.S. National, Allied, Coalition and Joint Nodes. Utilizing emerging technologies to maximize reachback, we will dramatically reduce the footprint of the AOC while enhancing JFACC decision processes and timelines, and reduce costs. Supporting combat operations during Operations Noble Eagle and Enduring Freedom validated our strategic vision for C² systems. We will continue to develop the AOC, which sets the standard for new Air Force capabilities-programming efforts, and keep it on course to revolutionizing the operational level of warfare.

The “engine” of the AOC is the TBMCS. It is an integrated, automated C² and decision support tool that offers the senior air and space commander and subordinate staffs a single point of access to real- or near-real-time information necessary for the execution of higher headquarters taskings. TBMCS supports a full range of functions including threat assessment, target selection, mission execution, battle damage assessment, resource management, time-critical target identification and prosecution, and defensive planning. During ONE and OEF, TBMCS was rapidly deployed supporting both CENTCOM and NORAD operation centers. TBMCS will evolve into an open-ended architecture capable of interface with a variety of joint and coalition data buses, displays and links.

The **Airborne Warning and Control System (AWACS)** remains the premier air battle management and wide-area surveillance platform in the world. Still, aging aircraft issues, obsolete technologies, and the proliferation of advanced adversary systems necessitate several upgrade programs. This year, one third of the AWACS fleet completed an improved radar system upgrade, which will reach full operational capability in fiscal year 2005. The next computer and display upgrade will replace the 1970 vintage processors with an open architecture system. Finally, a satellite communications access program will provide improved connectivity with regional and national C² centers.

Joint Surveillance Target Attack Radar System (JSTARS) provides battle management, C², and ground moving-target detection. We will replace the on-board computers with commercial off-the-shelf equipment by 2005 under the JSTARS Computer Replacement Program (CRP). The CRP is the foundation of all JSTARS communications and sensor upgrades, and should reduce life-cycle costs and minimize the number of obsolete parts.

Another 707-airframe C²ISR asset is the RC-135 Rivet Joint—the premier aircraft in its class. We continue to modernize the Rivet Joint’s sensors using an evolutionary, spiral development program. Recapitalization and modernization efforts promise to keep the RC-135 and U-2 viable well into the 21st century. As we look to the future, we are examining the growth of the Rivet Joint as part of the Multi-sensor Command and Control Constellation. Although the U-2 is not currently in production, we continue to modernize the aircraft with updated sensors and aircraft modifications to support our ongoing mission needs. Advanced imagery sensors will allow the U-2 to collect top-notch data for the battlefield commander. Aircraft modifications, such as cockpit, defensive and power system upgrades will ensure U-2 survivability and viability. Air Force DCGS continues to provide robust processing and reporting of the U-2, Global Hawk, and Predator collected data. System modifications/upgrades and increase in capacity will ensure continued delivery of timely intelligence to enable time critical target prosecution.

Unmanned Aerial Vehicles (UAVs) provide unmatched access for information, surveillance and reconnaissance missions. Their capabilities expand ISR collection coverage while reducing the need to place our people in harm’s way. We are committed to the production and fielding of Global Hawk as the next generation of high altitude airborne ISR platform. We have transitioned Global Hawk from an Advanced Concept Technology Demonstration (ACTD) program to a formal acquisition program. In the spring of 2001, Global Hawk successfully completed a deployment to Australia, where it supported maritime reconnaissance and achieved a number of UAV aerial firsts, including the first trans-Pacific crossing.

Due to this success, and a high level of confidence in the platform, Global Hawk was deployed in support of OEF. As part of the SECDEF’s transformation program, Global Hawk is poised to accelerate its production schedule. The development of advanced sensors will enable Global Hawk to support the time critical targeting mission more completely. Finally, demand for the older Predator UAV remains high. The successful weaponization of Predator during OEF holds the promise of significantly shortening the time critical targeting timeline. Based on the tremendous successes of Predator A, testing is underway on an improved version, the larger Predator B.

Air Force weather satellites enable information superiority every day during joint operations around the globe. The Defense Meteorological Satellite Program (DMSP) constellation provides global weather imagery and other environmental data to support mission planning. Augmented with civil satellites, joint forces are provided timely, accurate pictures of the weather affecting operations. The Air Force is modernizing environmental data collection with the new National Polar-orbital Operational Environmental Satellite System (NPOESS). In conjunction with the Department of Commerce, development of the NPOESS will provide the Nation a consolidated system for all national weather monitoring needs. NPOESS will cost the DOD significantly less than building and fielding a DOD-unique follow-on system and will

provide enhanced environmental monitoring capability to support emerging weapons systems and concepts of operations.

The **Multi-Platform Radar Technology Insertion Program (MP-RTIP)** is developing a scalable X-band electronically-scanned array (ESA) for use on a variety of platforms for air-ground surveillance, including a future 767 manned, wide-area surveillance platform, the Global Hawk, and potentially a NATO manned platform variant. On the 767 platform this array would provides five to ten times the air to ground surveillance capability of current JSTARS, reduces target revisit times, improves moving-target track capability, and enhances radar resolution. Furthermore, MP-RTIP on a 767 is envisaged as the first development spiral toward achieving a Multi-sensor Command and Control Aircraft (MC²A) capability as part of an over-arching and transformational Multi-sensor Command and Control Constellation (MC²C) to support future employment of the task forces addressed in Chapter 4.

Communication

Achieving information superiority depends considerably on the availability of a robust, worldwide communications capability. Communications are critical to the joint fighting forces deployed worldwide. We are modernizing Military Satellite Communications (MILSATCOM) systems to keep pace with this demand. Inseparable from such modernization is Tasking Processing Exploitation and Dissemination (TPED). TPED describes how information is transferred among our numerous systems and highlights bandwidth as a serious topic. Bandwidth is a critical parameter—more is better—defining how much and what kind of information we can disseminate. Over the next 10 years, our need for reliable, redundant, and secure communications is expected to increase 15 to 20 times beyond the current capacity. The MILSATCOM systems in use today simply cannot meet that demand and supply CINCs with sufficient protected coverage to adequately support the warfighter. Further, in an environment of extremely high worldwide demand and competition, commercial providers cannot be leveraged for they lack the protected bandwidth, security, and coverage necessary to fully support military operations.

Despite shortcomings, the MILSATCOM system is making significant contributions to current, daily operations. The scope and speed of joint operations, including OEF, simply would not be possible without MILSATCOM systems, notably the Defense Satellite Communications System (DSCS) and the Military Strategic and Tactical Relay System (Milstar). In fiscal year 2001 we successfully launched one DSCS and one Milstar satellite. Additionally, a complete modernization of satellite communications is underway. Wideband Gapfiller Satellites (WGS) are low-cost, high bandwidth communications satellites intended to greatly increase the on-orbit bandwidth available to the warfighter. WGS satellites will help bridge the requirements gap until the Advanced Wideband System (AWS) is brought on-line. Similarly, the Milstar constellation is planned for replacement beginning in 2006 by the new Advanced Extremely High Frequency (AEHF) satellites. The Air Force awarded a System Development and Demonstration contract in November 2001 to design the AEHF satellite system.

To leverage the full capability of our new technologies, we are combining our efforts with the other Services to form the joint Global Information Grid (GIG)—a globally interconnected, end-to-end set of information capabilities and associated processes that allow warfighters, policymakers, and support personnel to access information on demand. Currently as the AEF deploys to support combat operations, it connects to the global information grid via the Theater Deployable Communications (TDC) package. This package is replacing legacy deployable AF communications equipment with scalable, lightweight, and reliable transmission, networking, and network management equipment. TDC allows timely reachback to the US for intelligence, logistics and people support that otherwise would have to deploy forward. During OEF operations, we successfully deployed TDC to support combat operations, demonstrating that TDC is the capability needed to support AEF communication requirements.

Contributing to the GIG, the AF is building an enterprise architecture ensuring our diverse projects and initiatives are closely integrated to deliver maximum capability to the warfighter. In support of the enterprise architecture, the AF “infostructure” architecture facilitates system integration by providing timely and cost effective communications and information technology capabilities. The AF infostructure leverages commercial and government developed technologies and ensures these technologies are controlled and integrated.

To provide our people better access to information and applications needed for their specific missions, we have fielded additional capabilities through the Air Force Portal. The Air Force Portal is envisioned as the single access point for practically all our information needs. Leveraging commercial successes in web-enabled informa-

tion technology and communications, our members now have access to the Air Force Portal almost anywhere in the world.

Information Warfare (IW)

Multi-faceted information warfare planning and execution is another challenge of information superiority. In the effort to create specific effects to accomplish campaign objectives, the Air Force closely coordinates information operations (IO) plans between and among supported and supporting commands to prevent redundancy, mission degradation, or fratricide. The numerous organizations participating in these coordination efforts include representatives from the COMAFFOR for Computer Network Operations and the Air Intelligence Agency, to IO squadrons and IW flights. To enhance the effectiveness of these organizations, we specifically designed tools for the IW planning and testing efforts. In an effort to normalize IO as a warfighting asset, we integrated AIA into the Air Combat Command, the IW lead for the Combat Air Forces. They directly support the Joint Force Commander through the JFACC/COMAFFOR.

We continue to make every effort to define requirements and layout a viable long-term strategy/roadmap to provide IW capability to the warfighter. The IW MAP has become a leading edge planning tool for the Air Force in this arena. Its expressed purpose is: (1) to define, document, and advocate Air Force IW requirements; (2) to integrate those requirements into the Air Force Capabilities Investment Strategy; (3) to identify solutions meeting validated IW needs; and (4) to provide IW Mission Area expertise to the warfighter and to the Air Force corporate process. Subsequently, the MAP helps to focus disjointed efforts, reduces duplication, promotes integration among architectures and enhances operations.

Information Assurance (IA)

The Air Force maintained a robust IA capability through a Defense in Depth strategy that integrated people, operations, and technology for multi-layered, multi-dimensional protection. People were trained to do the IA mission and protect the network. We changed policies and procedures to ensure IA operations are effective and efficient. We also implemented Finally, technological advances to provide physical protection to our information weapon system. Consequently our IA posture has never been better.

Training initiatives included a year long IA Campaign that focused our attention on such corporate issues as IA roles and responsibilities, network threats and countermeasures, computer network defense, and EAF web security which significantly improved our collective IA knowledge and capability. We also continued our emphasis on individual certification for network operators and maintainers through the development of a Job Qualification Standard toward mission-ready, deployable people.

Addressing procedures, we implemented a Time Compliance Network Order (TCNO) process. TCNO allows senior leadership to track and ensure completion of critically important computer security configuration changes. This resulted in a ten-fold reduction of network infections attributed to malicious code attacks from 2000 to 2001. Another important operational initiative is the deployment of Scope Network teams to our installations to fine-tune base-level networks. Scope Network's mission is to optimize and tune networks and firewalls and ensure their proper configuration. They deploy throughout the year to measure, analyze, train, and mentor at the base level.

Finally, our primary IA technology initiative is a layered equipment suite to discourage hackers and filter viruses as well as provide tools to identify vulnerabilities like the Combat Information Transport System (CITS), and the Network Management System/Base Information Protection (NMS/BIP). These systems provide a standard tool suite to each Air Force installation.

The requirements for global-level detection and early warning of natural disasters, conventional military or chemical, biological, radiological, nuclear and high-yield explosive (CBRNE) aggression remain as critical as ever. At the same time, September 11 introduced a new category of threat that will challenge the ability of America's C⁴ISR networks to cope with strategic-level surprise, *fait accompli* or limited objectives strategies, among others. Information superiority, the mastery of prediction, assessment and employment of data, is arguably our Nation's most pressing challenge.

Global Attack

Global Attack is the ability to create desired effects within hours of tasking, anywhere on the globe, including locations deep within an adversary's territory. It also includes the ability to retarget quickly against objectives anywhere, anytime, for as long as required.

Among Air Force programs supporting these capabilities is our bomber fleet. Our B-1, B-2, and B-52 bombers provide a global rapid response, precision and standoff strike capability, 24/7 battlespace persistence, and a level of time-critical targeting (TCT) capability. The new transformation era reinforces and re-emphasizes our ongoing basic bomber modernization plan—increase lethality, survivability, flexibility, supportability, and responsiveness.

All three platforms now carry the highly accurate 2000-pound Joint Direct Attack Munition (JDAM), and are all being fitted to carry new standoff precision guided weapons. In addition, future integration programs will see the inclusion of smaller precision weapons. To improve their survivability, bombers are receiving a range of upgrades to include defensive system, situational awareness and electronic countermeasure upgrades. To enable attack of time-critical targets, the Air Force is upgrading bomber avionics and communication systems and linking them directly with remote sensor and targeting systems.

To enhance our ability to kick down the door in remote theaters and clear the way for follow-on forces, the Air Force is planning for a mix of new generation manned and unmanned, air superiority and ground attack aircraft. However, until the F-22, Joint Strike Fighter (JSF), and Unmanned Combat Aerial Vehicle (UCAV) become an operational part of our inventory, we will continue to rely heavily on our legacy fighters—the F-15, F-16, F-117 and A-10—to provide a potent mix of air-to-air and air-to-surface capability. These platforms are all programmed to receive upgraded voice and data communication systems linking them to a joint command and control net. Programmed improvements to avionics and situational awareness systems will allow for better all-weather/night operations, combat identification and response to time-critical and moving targets.

F-15E modernization incorporates robust data-link capability and integration of smart weapons to ensure all-weather, deep strike lethality. The recent addition of Global Positioning System (GPS)-guided, precision guided munitions (PGMs) on the F-117 give it an adverse-weather capability. However, these aging platforms are growing more expensive to maintain and operate, and their combat effectiveness is expected to eventually decline as projected surface-to-air and air-to-air threats with greater capabilities emerge. The introduction of the stealthy F-22 and JSF will maintain America's technological advantage and ensure our ability to defeat next-generation threats while replacing our aging force structure with leap-ahead capabilities.

One of our Guard and Reserve's top modernization priorities is incorporating precision targeting pods into their F-16 aircraft. From 1998 through 2000, we outfitted all our Reserve units and selected Guard units with LITENING II pods. This acquisition gave Guard and Reserve F-16s a critical precision strike capability while configuring these units with the system capabilities of the active F-16 force. Additionally, the Guard will join the active force in procuring Advanced Targeting Pod (ATP) for an initial operating capability in 2003.

Two critical F-16 programs, the Combat Upgrade Integration Details (CUPID) and the Common Configuration Implementation Program (CCIP), will bring decisive combat capability (night vision, helmet-mounted cueing, and data links) to our F-16 fleet. Additionally, the Falcon Structural Augmentation Roadmap (STAR) will ensure the F-16 fleet is structurally sound to perform its mission through its designed service life. Collaborative programs between our Active and Reserve components increase our overall procurement flexibility and close the gap in combat capability.

Intercontinental Ballistic Missiles (ICBM)

The recent DOD Nuclear Posture Review (NPR) announced a transition from the Cold War nuclear triad to a new capabilities-based triad in response to the more complex, evolving security environment. Consistent with NPR direction, the Air Force is providing for long-term sustainment of ICBM capabilities. Minuteman III (MMIII) ICBMs will be deployed through 2020 and supported by on-going life extension programs. We will begin to look at alternatives for a follow-on ICBM to be fielded as MMIII reaches the end of its service life. Peacekeeper (PK) ICBMs will be retired beginning in calendar year 2002. As the PK system is deactivated the Air Force intends to transfer some warheads currently on PK to the MMIII, thereby avoiding a costly life extension program on certain MMIII warheads. This replacement effort will ensure that the newest warhead with all modern safety features remains a part of the ICBM force, an essential nuclear strike element in the Nation's capabilities-based triad.

Precision Engagement

Our current operations emphasize the powerful advantage of being able to create precise effects rapidly. The Air Force offers tremendous capabilities to meet this na-

tional requirement from pinpoint humanitarian responses to precise weaponry. Precision is fundamental to all of our operations and, in particular, to transformational combat operating concepts. Along with information superiority and stealth, precision engagement enables our forces to identify an adversary's key centers of gravity and relay that information to strike assets, thus reducing risks by avoiding unnecessary engagements (a concept generally referred to as "parallel warfare"). Enhancing precision engagement will allow us to accomplish this cycle in near real-time. This would allow us to maximize the leverage gained from the fluid interaction of joint forces in more effective prosecution of operations.

We have made significant progress in our efforts to develop and field a new generation of weapons that can attack and destroy pin-point, hardened, and relocatable targets at night and in most weather conditions while greatly reducing the risk. By rapidly adapting new technology employed under actual combat conditions in Operations Allied Force and Enduring Freedom, we now have an array of precision weapons that can be employed from nearly all of our combat aircraft. Our high priority precision engagement programs now include the Joint Air-to-Surface Standoff Missile (JASSM), Joint Standoff Weapon (JSOW), Joint Direct Attack Munition (JDAM), Wind Corrected Munitions Dispenser (WCMD), and eventually the Small Diameter Bomb (SDB).

JASSM is a precise, stealthy, cruise missile that will enable us to destroy heavily defended, hardened, fixed and relocatable targets from outside of area defenses. JASSM program is currently undergoing flight test recently entered low rate initial production and will be delivered to the field in 2003.

JSOW is an accurate, adverse-weather, unpowered, glide munition. We are currently procuring two variants, the AGM-154A and AGM-154B, which are capable of destroying soft and armored targets at ranges exceeding 40 nautical miles.

JDAM employs GPS-aided guidance, incorporated in a tail kit, to deliver general-purpose bombs or penetration warheads with near-precision accuracy. We will use JDAM in all weather conditions from multiple platforms to destroy high-priority, fixed, and relocatable targets. The first operational use of a 2,000-pound JDAM was from a B-2 during Operation Allied Force and JDAM has been used extensively during OEF. The F-22 will employ the 1,000-pound JDAM against anti-access and air defense systems. Using the 500-pound JDAM currently in development, the B-2 that carries up to 16 2,000-pound JDAMs in OAF, would be able to carry up to 80 500-pound JDAMs in future conflicts. This will provide the first step in the Air Force's transition to miniature munitions. Succeeding steps include the Small Diameter Munition (SDM) (discussed in Chapter Four). SDM, under development for the F-22, will offer standoff capabilities against the most difficult surface-to-air threats. The F-22 will carry up to eight SDMs internally.

WCMD has an inertial-guided tail kit that enables us to accurately deliver the Combined Effects Munition, Sensor Fuzed Weapon, and the Gator Mine Dispenser from medium to high altitude in adverse weather. WCMD became operational in late 2000 and has been successfully employed in OEF from the B-52.

Key to precision engagement is the GPS navigation signal used by sensors and shooters to assist in targeting the enemy with pinpoint accuracy. Successful joint operations rely on the GPS signal: search and rescue, rendezvous, and mapping are only a few examples. Rigorous upgrades to both satellites and warfighter equipment are currently in work to protect the ability of American and allied forces to employ the GPS signal on the battlefield and deny it to our adversaries while preserving civil use.

Precision capabilities allow the United States to engage in operations with dramatically reduced risk to friendly forces, significantly less costs in men and materiel, and with greater likelihood of success. The strike side of precision engagement enables us to employ one weapon per target to destroy it with minimal collateral damage and greatly increase the number of targets that can be struck per sortie.

The benefits are exponential. By minimizing the number of sorties required to strike a target, we shrink the forward footprint necessary and minimize the number of airmen, soldiers and sailors in harm's way. Indeed over the last decade, the Nation has faced numerous engagements wherein precision has proven the method for success. From the Balkans to Kabul, combatant commanders have required precision capability, not large-scale conventional operations. However, this demand has dramatically reduced our large Cold War Reserve munitions stockpiles. As current operations continue to tax existing PGM inventories, the Air Force is working to expand the capacity of our industrial base to fill preferred munitions requirements. This strategic effort, along with our continued acquisition of JDAM, JASSM, JSOW and WCMD, will increase PGM capabilities over the next several years. The changing nature of warfare with its emphasis on precision engagement, necessitates that

munitions recapitalization and development of transformational miniature small weapons will remain among our top priorities.

Precision strike, however, is more than simply very accurate munitions. It is also the ability to generate precise effects other than destruction. For that reason we also invest in various non-lethal weapons, offensive information warfare capabilities, and directed energy weapons that enable the U.S. military to affect targets without having to destroy them. This enables effects-based operations that match precise capabilities to desired effects—the ultimate in deterrence.

Rapid Global Mobility

Rapid Global Mobility ensures the Nation has the global reach to respond quickly and decisively anywhere in the world. As the number of forces stationed outside the United States has declined, the need for an immediate response to overseas events has risen. Given that access to forward bases will remain critical and become increasingly risky, the rapid deployment and agile sustainment of expeditionary air and space forces will be key to our ability to operate across the spectrum of conflict.

Airlift and tanker aircraft give the United States the ability to swiftly reach out and influence events around the world. OEF and ONE have, again, shown the utility of rapid global mobility. We have also witnessed the potential need to provide critical tactical lift capability for immediate response at home. However, even with the success of these ongoing operations, the Air Force desperately needs to continue airlift and tanker modernization efforts to ensure the U.S. maintains its ability to operate globally. As part of our on-going effort to assess our airlift requirements in light of current and anticipated needs, Air Mobility Command is undergoing a comprehensive review of our air mobility force structure.

Global Air Traffic Management (GATM)

In addition to aging aircraft problems, the Air Force mobility fleet must also respond to the added requirements of a new air traffic architecture. GATM focuses on increasing system capacity and flight efficiency, while continuing to meet flight safety standards. The most critical technology elements are satellite-based navigation, increased use of data links rather than voice for pilot/controller communication, and improved surveillance that will enhance both ground and cockpit situational awareness. Incorporation of these technologies will ensure our mobility fleet maintains unrestricted access to global airspace.

An essential means to ensure the AF's ability to support its 54.5 million-ton miles per day airlift requirement is through the procurement of additional C-17s. The AF has identified a need for at least 180 C-17s, and seeks to will award a follow-on multiyear procurement contract to reach that number. A mobility tiger team with Active, Reserve and Guard representation will continue to study beddown plans for these additional aircraft.

The average age of our KC-135 tankers is now over 41 years and operations and support costs are escalating as structural fatigue, corrosion, systems supportability, and technical obsolescence continue to take their toll. To keep this vital system operating these aging aircraft operational, we are modernizing the avionics and navigation systems on all Active, Guard, and Reserve KC-135s. Called Pacer CRAG (compass, radar and global positioning system), the project provides for a major overhaul of the cockpit to improve the reliability and maintainability of the aircraft's compass and radar systems. The project also meets the congressionally mandated requirement to install the global positioning system in all Defense Department aircraft. As an added safety measure for formation flying, a traffic collision avoidance system (TCAS) will be installed. TCAS gives pilots the ability to actively monitor other aircraft and provides advance warning of potential mid-air collisions.

The ongoing war on terrorism is further stretching the tanker fleet, forcing motivating the Air Force to consider accelerating replacement options. The Boeing 767 Global Tanker Transport Aircraft (GTTA) is a promising alternative to quickly replace the KC-135E, our least capable and most costly to maintain tanker aircraft. While considering this and other lease options, the Air Force is focused on acquiring the world's newest and most capable tanker; increasing fuel offload, increasing availability, and increasing reliability—all with far lower support cost.

The Air Force is pursuing a two-phased modernization plan for the C-5 fleet. Phase I is the Avionics Modernization Program (AMP) and Phase II is the Reliability Enhancement and Re-engining Program (RERP). C-5 AMP replaces unreliable/unsupportable engine/flight instruments and flight system components, installing GATM equipment to assure complete access to global airspace and installing navigation/safety equipment to reduce risk of mid-air and ground collisions (i.e. TCAS). C-5 RERP improves aircraft reliability, maintainability and availability by replacing the power plant and other unreliable systems. Several C-5 aircraft will undergo

multiyear testing to evaluate the potential for modernizing this aging, but important mobility asset. The results of that evaluation will determine the need for additional C-17 acquisitions or other alternative.

Modernization of the C-130 fleet is proceeding with a two-pronged approach to maintain an intra-theater airlift capability well into the 21st century. Procuring 168 new C-130Js to replace our oldest C-130s and modifying the remaining fleet will reduce total ownership costs and simplify maintenance, training, and operational employment. New C-130Js will replace eight EC-130Es and 150 of our most worn-out C-130E combat delivery aircraft. In addition, 10 C-130Js will replace the Reserve's 10 WC-130H aircraft at Keesler Air Force Base, MS. These aircraft and crews are specially trained and equipped to penetrate severe storms while collecting and transmitting extensive meteorological data necessary to track and forecast the movement of these severe storms to a special ground station. C-130Js will also replace the Air National Guard's aging Commando Solo platform, as well as complete other Guard units. The remainder of the AF's C/AC/EC/HC/LC/MC-130 fleet will undergo an Avionics Modernization Program (C-130 AMP). This will include state-of-the-art avionics and a new "glass" cockpit that will eliminate the need for a navigator in the combat delivery aircraft. Along with increased reliability, this modernization will make the fleet compliant with the GATM and the DOD's navigational safety requirements.

Rapid Global Mobility is also dependent upon expeditious airfield support. Moving aircraft tails in-and-out of a field quickly can determine success or failure of an operation. The Air Force is procuring the Tunner (60K) and Halvorsen (formerly next generation small loader or NGSL) loaders to replace older equipment, providing a new capability to interface directly with all military and commercial cargo aircraft. The Tunner is optimized for high volume to support operations at major aerial ports while the Halvorsen is C-130 deployable to support mobility operations at forward, austere bases.

Large Aircraft Infrared Countermeasures (LAIRCM)

The Air Force has begun a new self-protection initiative to counter man-portable air defense systems (MANPADS). LAIRCM will use state-of-the-art technology to provide an active IR defense for the AF's airlift and tanker aircraft. LAIRCM builds on existing systems designed to defend helicopters and small, fixed-wing aircraft. It will add a laser, which provides the increased power needed to protect aircraft with large IR signatures like the C-17 and the KC-135. Operational capability is expected on the first C-17s in late fiscal year 2004. Additional airlift and tanker aircraft will be LAIRCM-modified in the near future.

CV-22

The CV-22 is the Air Force designation for the special operations variant of the V-22 Osprey—a vertical takeoff and landing airplane designed for long range, rapid, clandestine penetration of denied areas in low visibility, adverse weather, and/or at night. With twice the range and speed of a conventional helicopter and state-of-the-art avionics system, the CV-22 will be able to complete most of its missions under the cover of darkness without being detected. We will use the CV-22 to infiltrate, exfiltrate, and resupply Special Operations Forces (SOF) and to augment personnel recovery forces when needed. Currently, the entire V-22 program is undergoing a major restructuring that will address technical and safety concerns. Flight tests of the two CV-22 test vehicles, suspended through 2001, will resume in 2002 and continue through 2005.

VIP Special Air Mission / Operational Support Airlift (VIPSAM / OSA)

The Air Force continues to modernize the VIPSAM/OSA fleets to provide senior leaders with improved capabilities to respond to national crises. Aging CINC support aircraft are being replaced with modern commercial aircraft with intercontinental range and robust communications (leased Gulfstream Vs, designated the C-37, and Boeing 737-700 designated the C-40B). This innovative strategy to leverage the commercial aircraft industry should be completed by fall 2002. The President's VC-25s will receive major upgrades to the passenger cabin infrastructure, and Additionally, major upgrades to the communications suite (to be leased) to will provide airborne capabilities comparable to that of his White House office. The four C-32s (Boeing 757s) will also receive advanced "office-in-the-sky" upgrades to include broadband data and direct broadcast service. As funds become available, remaining VIPSAM aircraft will be evaluated for similar upgrades.

Agile Combat Support (ACS)

Responsiveness, deployability, and sustainability—the cornerstones of American expeditionary operations—are the mandate of agile combat support. The basic objec-

tives established set to achieve these goals remain intact. The Air Force established set objectives to elevate the capabilities of the ACS elements by developing lighter, leaner, and more rapidly deployable forces; creating more responsive planning and execution capability; executing improved agile combat support command and control; and assuring an agile, responsive, and survivable sustainment capability.

While progress has been made toward achieving these objectives, much of the deployment strain in support of OEF has fallen on our expeditionary combat support forces. Some high-demand support areas have exceeded their on-call capabilities in current AEF rotation cycles, as a result of our surge mode activities, which are likely to continue for some time. Consequently, we are continuing to make gains in right-sizing deployment teams so they are postured efficiently and effectively for expeditionary needs. We are placing high emphasis on the development of expeditionary site planning tools that provide the means to tailor our deployment capability based on assets pre-positioned in the theater.

Reconstituting our current bare base systems and wartime stocks, as well as developing and acquiring bare base assets and other types of support equipment that are “lighter and leaner” and more rapidly deployable are also integral to achieve force responsiveness. Essential investments in infrastructure and pre-positioning are mandatory ingredients of improved reception and beddown capabilities at our fighter and bomber forward operating locations (FOLs).

The fielding of the Integrated Deployment System at all of our AF Wings has improved the responsiveness of our Wing deployment process. Our information technologies must continue to mature with expansion of such capabilities as the virtual logistics suite hosted on the Air Force Portal. These essential components provide real-time situational awareness for ACS command and control that leverages logistics and combat support across simultaneous operations in multiple theaters that now include the CONUS. The CSAF’s Logistics Review (CLR) and ongoing Logistics Transformation are reengineering our logistics processes to achieve an agile, effective, well integrated logistics chain that is responsive to AEF requirements.

Whether forward deployed in AEF operations, or completing homeland security missions, we must be prepared to operate under any conditions. Protecting critical bases of operations and defeating CBRNE weapons and their means of delivery is one of the most complex challenges facing the DOD. Our balanced response to the proliferation of these weapons, integrates the four pillars of counterproliferation—proliferation prevention, counterforce capabilities, and active and passive defense measures.

Our counter-NBC operational readiness initiative sets Air Force-wide standards for readiness, identifies shortfalls and develops capabilities to effectively cope with CBRNE attacks. This initiative includes a counter-NBC roadmap and an enhanced counter-chemical warfare CONOPs. The roadmap is an innovative investment strategy that cuts across Air Force plans and programs to increase counter-NBC visibility, while offering enhancements for effective air and space operations in NBC environments.

Regardless of contamination, combat or humanitarian settings, the medical service plays an important role in agile combat support. Through training initiatives and innovation in field systems this year, AFMS has raised the bar on its capabilities. The results of these efforts are the addition of state-of-the-art equipment and training facilities which guarantee AFMS’ ability to respond effectively when the Nation calls.

One example is EMEDS, which is a lightweight modular medical system that allows the AFMS to tailor its response to each situation. Another revolutionary disaster response system is the Lightweight Epidemiological Advanced Detection and Emergency Response System (LEADERS), designed to enhance the current medical surveillance process and provide the earliest possible detection of covert biological warfare incidents or significant outbreaks of disease. The Air Force will continue to work with its civilian counterparts to develop and fine-tune this technology over the coming year.

Along with developing relevant facilities and equipment, the AFMS is expanding its training capabilities through the development of the Coalition Sustainment of Trauma and Readiness Skills (CSTARS) program. CSTARS creates learning opportunities in which civilian academic centers serve as training platforms to provide clinical experience to help sustain necessary readiness skills for AFMS providers. The CSTARS arrangement allows for synergistic relationships between academic medical centers and military medical assets, while simultaneously improving wartime readiness and homeland security capability. Finally, AFMS training also extends to allied and friendly nations. The Institute of Global Health (IGH), located at Brooks AFB, Texas, is a worldwide educational program for medical providers to

develop and improve their medical response skills. Programs are tailored to the host nation's infrastructure and resources and are taught on-site.

This cross-section of examples of initiatives that will help achieve the four ACS objectives are producing meaningful results. There is, however, more to be done to better prepare our ACS capability for supporting the EAF vision. For example, we need to fill readiness shortfalls in key logistics resources strained by expanded operations including people, skills, spares, munitions, bare base assets, vehicles, etc. We need to improve our capability to rapidly develop deployment and sustainment plans for fast-breaking contingencies. Enhancements need to be made to our ACS command and control capability to make it more responsive, better integrated, and sufficiently robust to support AEF needs worldwide. Finally, modernization of equipment and the tools essential to complement skilled personnel require investments in R&D in Science and Technology initiatives that will help reduce our "footprint" while improving our ACS capability.

Additional Readiness Concerns

Facilities and Infrastructure

Air Force installations and facilities that are available when and where needed, and with the right capabilities, form the foundation supporting current and future operational requirements and readiness. Our installations and facilities are the platforms from which we launch and recover Air Force and Joint weapon systems while simultaneously providing work and living environments for personnel and their families. For example, bases like Whiteman AFB, Missouri and Ramstein AB, Germany, are important nodes in the global network that sustains OEF operations while also sustaining thousands of airmen, dependents, and their communities.

Regular and planned upgrades are an essential part of keeping a healthy infrastructure upon which to build and sustain air and space capabilities. Unfortunately, in fiscal year 2002, operations and maintenance (O&M) sustainment funding shortfall precluded fully maintaining Air Force facilities and infrastructure and will increase the backlog of necessary repairs. In the near term the Air Force facilities recapitalization rate falls short of DOD's 67-year facilities recapitalization goal. In fiscal year 2002, our military construction (MILCON) and O&M restoration and modernization accounts allowed us to achieve a recapitalization rate of 163 years. With congressional assistance we were able to reduce our fiscal year 2002 rate to 118 years.

In the fiscal year 2003–2007 Adjusted Program Objective Memorandum we were able to fully fund O&M sustainment across the FYDP and achieve a restoration and modernization recapitalization rate trajectory that will meet the OSD's 67-year goal by 2010. This track must be maintained. Sustaining and modernizing our facilities and infrastructure will ensure we have the right facilities at the right time and place to support military readiness.

Vehicle Replacement Program

The Air Force vehicle fleet is in serious need of recapitalization. Underfunding of the program during the past decade has created a backlog of more than 41,000 general and special purpose vehicles that have exceeded their life expectancy. This backlog represents half of the entire Active, Guard, and Reserve vehicle fleets. The backlog continues to grow each year, despite efforts to lease vehicles and extend vehicle life expectancies through enhanced technology. Current funding is \$415 million below the annual requirement. On-going operations have created a need for 879 additional leased and procured vehicles valued at \$42.4 million to support the mission. Failure to replace aging vehicles has a direct impact on of readiness and ultimately our combat capability.

Realignments and Closures

Reductions in Air Force manpower and force structure continue to outpace those in infrastructure. As a result, the Air Force continues to fund unneeded facilities while struggling to maintain its vital operational readiness. Our physical plant today is too costly, and we have too much of it. Excess infrastructure continues to waste precious dollars that could be better used for force modernization and quality of life. The Air Force needs to close unneeded installations and direct the savings into readiness areas: base operating support, real-property maintenance, family housing, and military construction at crucial operational bases. The Air Force will comply with the Secretary of Defense's guidance for conducting the Base Realignment and Closure (BRAC) process in 2005, as authorized in the 2002 National Defense Authorization Act.

Environmental Leadership

The Air Force continues to be a leader in the stewardship of our environment through compliance, pollution prevention, resource conservation, and environmental restoration. We have achieved the Defense Planning Guidance goal for 2002 for the environmental restoration program, to have cleanup remedies in place for 50 percent of our active installations high-risk sites. The next goal is to have remedies in place for 100 percent of the high-risk sites by the end of 2007. We are on track to achieve that goal, as well as having remedies in place for all medium risk sites by the end of 2011 and all low-risk sites by the end of 2014.

The Air Force has a tremendous range of flexible, rapidly responsive capabilities—the skill sets that allow us to meet any mission requirement. Constant improvement will require innovation, creativity and re-assessment, but also the funding support to recapitalize critical components.

*Towards Developing Systems**Experimentation and Wargames*

We conduct experiments and wargames to evaluate near- and far-term air and space capabilities and operational concepts. Joint Expeditionary Forces Experiment (JEFX) is the Air Force's large-scale experiment, which is fully integrated with Joint Forces Command's Millennium Challenge series of experiments. It is a live and constructive event focused on improving time critical targeting; command and control of intelligence, surveillance, and reconnaissance; and alliance participation in an open-floor Combined Air and Space Operations Center. The Global Engagement (GE) wargame is held every other year to explore the potential capabilities of joint air and space power and future concepts 10 to 15 years into the future. GE V demonstrated air and space power's unique capability to ensure access to operational areas where the enemy employs robust anti-access strategies. In August 2001, we completed a year of post-game analysis from GE-V. This analysis showed the Air Force is on the right vector toward the future in the area of force capabilities and is making great strides in addressing time critical targeting requirements. GE V also provided substantive recommendations for improvements in space control, information operations, and forward logistic support.

Planning is underway for the next Global Engagement (GE VI), scheduled for November 2002. This game will explore mid-term joint/combined operational concepts, such as rapidly dominating the battlespace and setting conditions for transitioning to sustained joint operations.

During odd-numbered years, we conduct the Air Force Future Capabilities wargame that takes a longer view, striving to shape our strategic vision by testing alternative concepts, systems, and force structures that may appear 20 to 25 years into the future. These wargames have produced new air and space concepts, such as long-range standoff warfare, reach-forward C² capability, space force application, and the link between C², ISR and target engagement, which continue to mature through follow-up analysis and subsequent wargames. We have just concluded the 2001 Futures Game that focused on defining C² and ISR for the 2020 air and space campaign; overcoming anti-access strategies; survivability of space capabilities; future transformational capabilities; computer network operations; and conducting future joint/coalition operations. Insights from this game will be developed, analyzed and investigated further throughout 2002.

Advanced Concept Technology Demonstrations (ACTDs)

ACTDs marry new operational concepts with mature technologies meeting warfighter needs in 2 to 4 years at a reduced cost. The Air Force currently has 21 ongoing ACTDs. An example is the Hyperspectral Collection and Analysis System ACTD that will demonstrate various hyperspectral sensors on operational platforms and integrate them into the existing tasking, processing, exploitation, and dissemination architecture. Another example is the Thermobaric Weapon ACTD, which provides an energetic thermobaric penetrator payload to defeat enemy tunnel facilities and weapons with two to three times the lethality of conventional high explosive payloads.

Battlelabs

Since their inception in 1997, Air Force battlelabs have developed over 120 initiatives, including the application of commercial scheduling software for the Air Force Satellite Control Network, telecommunications firewalls for base phone systems, and the use of speech recognition to reduce mission planning time. The recently commissioned Air Mobility Battlelab, with a charter to rapidly identify and assess innovative operational and logistics concepts, joined the ranks of the Air and Space

Expeditionary Force, Command and Control, Force Protection, Information Warfare, Space, and Unmanned Aerial Vehicle Battlelabs.

Enhancing Fundamental Practices

Agile Acquisition

The Air Force launched Agile Acquisition to streamline and synchronize the business of defining, funding, developing, acquiring, testing and sustaining the weapon systems our Air Force uses to defend America's freedom. The goal is simple: Field today's technology . . . TODAY. While we've had many individual successes in the past, individual successes do not translate into fundamental reform. We must get to the point where doing things smartly is not news. Agile Acquisition is the strategy to achieve systemic improvement.

As a strategy, Agile Acquisition has three major thrusts: First, we will relentlessly attack our own processes and get rid of those steps that are not value added. Second, we are going to free our leaders to lead and demand that they take the initiative. We are going to train them to be innovative and think creatively, provide periodic refresher training, and then hold them accountable for being agents of change. Finally, we're going to offer a lot of help through our new Acquisition Center of Excellence, which opened for business on December 2001.

The acquisition reform of *Lightning Bolts 2002* gives us the tools to make those changes. They will focus our acquisition efforts and, at the same time, reinforce our other initiatives to transform and improve the services and products we provide. The Lightning Bolts will also reinforce and complement the headquarters reorganization announced in December 2001 by the Secretary and Chief of Staff. In addition, the AF is an active member of DOD's Rapid Improvement Team, chartered to streamline the Information Technology system acquisition process to less than 18 months. Towards that end, we are leading prototype programs aimed at eliminating serial and redundant oversight processes, expanding participation by interested parties, and sharing accountability from program inception. Achieving agile acquisition is not a luxury; it is a requisite for success. We must provide absolutely the best and newest capabilities to our fighters in the shortest time possible. Our acquisition processes, too often seen as a roadblock to real progress, must become as agile as our warfighters.

Another key aspect of acquisition reform involves bringing the warfighter into the process early on. This is an essential element of our capabilities-based concept of operations which is discussed in the following chapter.

Long Term Depot Maintenance Plan

Depot maintenance is another critical element of our overall warfighting capability. The current depot posture has been influenced by the downsizing of our operational force; the reduction of our organic infrastructure; the introduction of new technologies; and recent depot legislative changes. In order to maintain a ready and controlled source of depot maintenance, the Air Force has prepared a Long Term Depot Maintenance Plan for submission to OSD and Congress by the summer session of Congress.

The overarching objective of this plan is to ensure that Air Force equipment is safe and ready to operate across the whole range of contingencies, from training to supporting major theater wars. Partnering with private industry is a key element of our plan and provides the best value approach for maintaining our depots. Benchmarking our depots is essential for us to understand where best to invest. Leveraging the best of public and private capabilities ensures the Air Force will take advantage of what each does best. Partnering is also the method by which we will be able to most efficiently utilize our current facilities as well as bring in technologies to support core capability requirements in the future. However, taxing programs to fund capital improvements is a contentious process. We continue to explore the concept of depot capital appropriations to smooth out the investment streams.

The Air Force Long Term Depot Maintenance Plan will provides military strength by ensuring we possess an organic "core" capability sized to support all potential military operations. It is will be a living document and postures our three organic depots to continue to support the warfighter.

Organizational Experimentation—Future Total Force

In the 21st century, the U.S. Air Force anticipates deriving its strength from the flexibility and the diversity of its integrated Active duty, Air National Guard, Air Force Reserve and civilians more than ever before. Optimum use of Air Force component resources is critical in providing the complete potential of American air and space power. Future Total Force (FTF) efforts will include new ways to optimize the

components to make the best use of our resources and people and to build on a foundation of high standards and strong cooperation among the components.

In the 1990s, the restructuring of the Air Force placed a greater emphasis on the force structure in the Air Reserve Component. Today, the Guard and Reserve account for over 65 percent of the tactical airlift, 35 percent of the strategic airlift capability, 60 percent of air refueling, 38 percent of fighters, and significant contributions to rescue, bomber, and combat support missions. Additionally, the Guard and Reserve have an increasing presence in space, intelligence and information systems. Guard and Reserve units also provide support in pilot training; radar and regional control centers manning; at the Edward's Test Center, California; Test and Evaluation missions in Arizona; instructing in weapon system school houses; conducting flight check functions at Air Force depots; and helping to develop the Homeland Defense mission. Today, the Guard and Reserve components are providing day-to-day mission support. They are no longer simply a "reserve" force—their collective capabilities make operating as an expeditionary Air Force possible.

Future success will depend upon our ability to develop an even closer partnership between the components and a "seamless" integration of all assets. FTF will explore expanding the integration of our people and systems, seeking efficiencies and leveraging their individual strengths by combining operations into new organizational structures—blended units. Together, Active, Civilian, Guard, and Reserve form a more capable, more efficient and more effective organization than any could provide individually.

Blended units will integrate Active, Civilian, Guard, and Reserve capabilities in creative new ways, that may appear as radical departures from the past but which have already been part of the Air Force business practice for years. Flying and support functions, for example, will be so integrated with component personnel as to be invisible to outside observers. This will focus attention on conserving valuable manpower, resources, and skills while reducing overall costs. Finally, blended units will maintain the ability to deploy rapidly and will explore new avenues toward an overall goal of providing a "best mix" of personnel for the assigned mission.

Developing blended units will not be without challenge. Out-dated laws and policies would have to change to reflect requirements in command and control, fiscal and personnel issues. Demands for more efficient use of resources (personnel and aircraft), greater flexibility and integration of personnel and administrative systems, higher reliance on the commercial marketplace skills of individuals, and rapid adjustment to changing cultural, social, and economic influences on the Air Force institution will serve to further promote blended organizations.

The Guard and the Reserve are more than just our partners in providing air and space power, they are an integral part of today's Air Force and form a special link between the active duty Air Force and America's citizens. To a great extent, they are citizens first. Blended units would take advantage of that connection to the citizenry and their broad base of knowledge and experience, in both civilian and military matters. The Air Force goal is to create a truly "seamless" force of airmen—one organization of airmen who are interchangeable but who also operate in a different status at particular periods in their air and space careers. The Air Force is committed to evolving its FTF to meet the highly complex security demands in its future.

Enhanced Homeland Security Missions

As operators of two legs of the nuclear triad, the Air Force remains at the heart of homeland security. Since its establishment in 1947, the Air Force has been actively and successfully deterring aggressors, intercepting intruders, and providing ballistic missile warning. The September 11 attacks brought homeland security to the forefront with the publication of Executive Order 13228, establishing the office of Homeland Security. The Air Force is being called upon to counter a new class of foreign and domestic terrorist threats through both defensive and offensive actions. Air defense capabilities remain on high alert to intercede and prevent further misuse of our Nation's civil aviation assets. Expeditionary capabilities have been called upon to help destroy terrorist operatives where they live. In all actions, the air and space expeditionary force construct provides the flexibility to place forces where and when we need them.

Ground-Based Midcourse Defense (formerly: National Missile Defense)

The Rocket Systems Launch Program provided targets and interceptor vehicles for two National Missile Defense tests in 2001. Using decommissioned Minuteman II's, simulated incoming missiles were launched from Vandenberg AFB while a Minuteman II stage two and three combination, with test interceptor on board, was launched from Kwajalein Island. In the two tests supported this year, both success-

fully intercepted the target vehicle, meeting a huge technical milestone in the quest for homeland missile defense.

Conclusion

Air Force capabilities provide America with a unique set of strengths—asymmetric advantages. However, today’s technological advantage is no guarantee of future success. Maintaining our current leadership position requires addressing our aging infrastructure, modernizing outdated weapon systems and harnessing technology to achieve our vision. To be sure, this requires funding, but a significant part of the improvements rests with ingenuity. In fact, how we maximize the collective potential of our Active, Guard, Reserve, and civilian resources will affect our ability to exploit the advantages our core competencies create. Realizing this potential through better business practices, more sophisticated training methods, acquired technologies, and other innovative means will be even more challenging given our ongoing efforts in the war on terrorism. Yet the risks of failing to meet the requirements for readiness are unacceptable. Readiness is one prerequisite for American military success. Another is transformation.

TRANSFORMATION

New Impetus to Transform—The evolving geopolitical context

The terrorist attacks of September 11 have forever changed the world we live in. Now, more than ever, our military must transform to preserve the asymmetric advantages it currently enjoys—specifically, its air and space capabilities. These advantages are in danger of eroding in the face of emerging security threats including the diminishing protection of geographic distance; the proliferation of weapons of mass destruction; rapidly advancing technologies (such as sensors, information processing, and precision guidance) available to adversaries; escalating competitions in space and information operations; greatly reduced access to forward bases; the prospect of operations in urban areas; and finally, the prominent threat of global terrorism, especially within our open borders. The demonstrated superiority of our air and space forces over Afghanistan, and the asymmetric advantage they continue to provide the Nation must not be taken for granted. Success is not a birthright, we must continue to transform to stay ahead of our adversaries.

America’s future success requires us to fully exploit our current technological dominance to seek asymmetric advantage over our adversaries. Such transformation will encompass the horizontal integration of manned, unmanned, and space assets and require us to successfully address emerging and time-critical targets. It will require digital communications at the machine level which result in providing Joint Force Commanders with decision-quality information. The sum of this wisdom is a cursor over the target.

Transformation can include multiple technologies that enable new missions, significantly improved old systems and processes, or using existing capabilities or organizations in new ways. Ultimately, transformation will drive how the military is organized, trained, and equipped. Transformation can also involve changes in military doctrine or tactics, techniques, and procedures that determine force deployment, employment, or the way forces are led or interact with each other to produce effects. It is also important to remember that transformation extends into every aspect of the Air Force—be it warfighting or support capabilities. For example, transformation of our business systems is currently being embraced to take advantage of new technologies and processes already proven in commercial industry. These ideas and products will enhance our efficiency and increase the crossflow of information across Air Force communities.

A recapitalized force is fundamental to the realization of transformational forces. Though we are shortening acquisition cycles, new systems still take years to reach the field. Therefore transformation in the immediate future must begin by using legacy systems in new ways. We will continue to adapt and innovate in order to push the envelope of our capabilities.

Transformation—Realizing Potential Capabilities

In the 2001 QDR, the Secretary of Defense provided specific direction for military transformation. Future defense planning will shift from the previously “threat-based” approach to a “capabilities-based approach,” focusing on “how an adversary might fight, rather than specifically on whom the adversary might be or where a war might occur.” To support the SECDEF’s goals, the Air Force remains in a continued state of evolution and transformation, aggressively pursuing advanced technologies, innovative methods of employment, and bold organizational changes. Transformation is nothing new to the Air Force. It has been an innate characteristic of airmen from the Wright Brothers to airmen operating in the 21st century.

Continued AF transformation will enable the United States to defeat an adversary by giving the Joint Forces Commander the exact warfighting effects he needs, at the right place, and at the right time. AF transformations will help DOD achieve its “operational goals;” give the United States more operational flexibility and capability to address the future security environment; defeat adversaries’ asymmetric strategies; reduce friendly casualties and collateral damage; and sustain America’s current asymmetric advantages into the future.

Capabilities-Based Concepts of Operations (CONOPs)

AF warfighters are working hard to lay the foundation for the next step in our transformation to a capabilities-focused Expeditionary Air and Space Force. Our goal is to make warfighting effects, and the capabilities we need to achieve them, the drivers for everything we do. The centerpiece of this effort is the development of new Task Force Concepts of Operations (CONOPs) that will guide our planning and programming, requirements reform, and acquisition. We have identified several Task Force CONOPs that we are fleshing out—Global Strike Task Force (GSTF) is a prominent example and is the farthest along in development.

GSTF defines how the AF plans to operate when faced with an anti-access scenario. It will meet the immediate needs of our regional CINCs by leveraging our current and near-term capabilities to overcome anti-access threats like the next generation surface-to-air missiles and other defensive networks. By incorporating the stealth and supercruise capabilities of the F-22 with advanced munitions like SDB we will enable other our stealth assets like the B-2s and F-117 to take apart the enemy defenses. This capability guarantees that follow-on air, space, land, and sea forces will enjoy freedom from attack and freedom to attack. Key to the success of the entire family of Air Force Task Forces will be the horizontal integration of manned, unmanned, and space ISR assets. A key component of horizontal integration is the Multi-sensor Command and Control network that will help provide the actionable, exploitable intelligence the JFC needs to make effective decisions.

What warfighting effects will the AF provide? What capabilities do we need to deliver these effects? Our family of Task Force CONOPs will provide the answers to these questions. With this focus, we then understand what key requirements are needed to support these CONOPs.

Advanced Capabilities

Manned Assets

Stealth provides the ability to fly largely undetected in hostile airspace and penetrate air defense systems. Stealth will be absolutely essential to establish air superiority in the decades ahead against rapidly improving air defense systems and fighters. The F-22, JSF, UCAVs, and improved B-2 bombers, and highly stealthy stand-off weapons comprise the critical stealth capabilities under development now and into the future.

The F-22, with its revolutionary combination of stealth, supercruise (i.e. supersonic-cruise without afterburner), maneuverability, and integrated avionics, will dominate the skies. The F-22 is clearly needed to counter the rapid deployment of third generation fighters to potential U.S. adversaries. In addition, when outfitted with the SDB. The F-22’s ability to penetrate an adversary’s anti-access airspace and destroy his most critical air defense capabilities, will enable 24 hour stealth operations and freedom of movement for all follow-on forces—fully leveraging our Nation’s asymmetric technological advantages.

In 2001, flight-testing continued to demonstrate the revolutionary capabilities. Specifically, the F-22 successfully completed an AIM-120 guided missile launch, and initial radar detection range measurements (met specification requirements the first time out—an unprecedented accomplishment).

On August 14, the Defense Acquisition Board approved the F-22’s entry into low-rate initial production (LRIP). Entering operational service in 2005, this transformational leap in technology is the linchpin to preserving the Nation’s most important military advantage for the warfighter: the capability to rapidly obtain and maintain air and space dominance.

Acting in concert with the F-22 will be the JSF. The JSF program will develop and field an affordable, lethal, survivable, next-generation, multi-role, strike fighter aircraft for the Air Force, Navy, Marine Corps, and our allies. With its combination of stealth, large internal payloads, and multi-spectral avionics, the JSF will provide persistent battlefield stealth to attack mobile and heavily defended targets. Furthermore, JSF planned reliability and maintainability will enable an increase in sortie generation rate and mission reliability, and will reduce the logistics footprint as compared to legacy aircraft.

On 25 October 2001, the Secretary of Defense certified to Congress that all JSF Concept Demonstration Phase (CDP) exit criteria had been accomplished; the technological maturity of key technologies was sufficient to warrant entry into the System Development and Demonstration (SDD) phase; and both CDP contractors achieved greater than 20 hours of short take-off, vertical landing (STOVL) aircraft operations. On October 26, 2001, the JSF program officially entered the SDD phase with the award of contracts to Lockheed Martin for the airframe and Pratt & Whitney Military Engines for the propulsion system. During the SDD phase, the program will focus on developing a family of strike aircraft that significantly reduces life-cycle cost, while meeting the Services' operational requirements. The program will use a block upgrade approach, based upon an open system architecture, which addresses aircraft and weapons integration and supports the Services' Initial Operational Capability (IOC) requirements in the 2010–2012 timeframe.

International partners will share the cost of JSF development. The United Kingdom signed an agreement in January 2001 to contribute \$2 billion to the SDD program, and negotiations are underway with other potential international partners. International participation in JSF will result in substantial benefits to the United States in such areas as future coalition operations and interoperability; financial savings; appropriate U.S.-foreign industry technology sharing; and strengthening political-military ties with our allies.

For ballistic missile defense, one of the most important manned assets is the Airborne Laser (ABL). ABL is a transformational boost-phase intercept weapon system that will contribute significantly to our multi-layered missile defense architecture. Structural modification of a 747 aircraft, the first of two ABL prototypes, was completed in calendar year 2001. In calendar year 2002, ABL will begin an intensive period of subsystem integration and flight testing, progressing toward a lethal demonstration against a ballistic missile. The ABL program transferred to the Missile Defense Agency in October 2001 and will return to the Air Force for production and deployment. The ABL will also provide critical data for the development of a Space Based Laser (SBL).

Unmanned Assets

Unmanned Combat Aerial Vehicles have the potential to provide revolutionary suppression of enemy air defenses (SEAD) and strike capabilities to future joint force commanders. Our UCAV X-45 system demonstration program with DARPA will demonstrate the feasibility of UCAVs to affordably and effectively accomplish these missions in the high threat environments of the 21st century. The first demonstration aircraft test flights will begin in 2002. UCAVs will eliminate the operator from harm's way for high-risk missions and, in conjunction with manned platforms, be a crucial enabler for GSTF and other Air Force Task Forces.

Space Based Assets

Maintaining and developing space superiority is critical to the transformation of the U.S. military to meet the challenges ahead. At the forefront of this development is leveraging the resident expertise of our space warriors, and integrating their cultural strength and wisdom with air forces in order to achieve maximum operational effects. The ability to exploit and deny access to space is of great importance in this new era where dominance in information systems may determine battlefield success or failure. The Air Force is investigating or pursuing revolutionary new capabilities to ensure adequate space situational awareness (in addition to traditional space surveillance) as well as defensive and offensive counterspace capabilities.

We are transforming our space situational awareness with a much needed improvement to the Nation's missile detection and warning capability. The highly accurate Defense Support Program (DSP) satellite system on orbit today was developed over 30 years ago to provide strategic missile warning. Modernization to meet 21st century warfighter needs is critical. The new Space Based Infrared system (SBIRS) provides a single architecture for the Nation's infrared detection needs—a "system of systems"—meeting our security requirements for 24/7 strategic and tactical missile warning, missile defense, technical intelligence and battlespace characterization. This transformational space system consists of two primary components: SBIRS-High and SBIRS-Low. SBIRS-High includes four satellites in Geosynchronous Orbit (GEO) and two in a Highly Elliptical Orbit (HEO) that will work hand-in-hand with the 20–30 Low Earth Orbit (LEO) satellites being acquired developed through the Ballistic Missile Defense Organization's (BMDO), (since renamed the Missile Defense Agency (MDA)), SBIRS Low program. Both programs currently are under review. SBIRS-High has experienced unacceptable cost growth and is being considered for restructuring. SBIRS-Low may be delayed as the state of the program's maturity is being evaluated.

Air Force Satellite Control Network (AFSCN)

AFSCN is a global system of control centers, remote tracking stations, and communications links used to establish initial contact with all deploying military satellites, and to control early checkout operations. In addition, the AFSCN enables common satellite operations such as telemetry, tracking and commanding, mission data receipt and relay, and emergency satellite recovery. We also use the AFSCN to update the navigational database of GPS satellites, which ensures effective support to the warfighters. In fiscal year 2002 we initiated an AFSCN modernization program using commercial off-the-shelf equipment. It is critical that we continue this effort since much of our current infrastructure is so old that spare parts no longer exist. Moreover, since nearly 50 percent of the total AFSCN workload supports National requirements, the system's viability is essential. Preservation of both the AFSCN infrastructure and the frequency spectrum it uses for military satellite operations is vital to successful national security space operations.

Launch Systems

Our heritage launch systems continue with a 100 percent success rate this year. The Evolved Expendable Launch Vehicle (EELV) will build on past successes while transforming today's fleet of Delta, Atlas, and Titan space launch vehicles into low-cost, efficient space transportation systems. The EELV will deliver navigation, weather, communications, intelligence, early warning, and experimental satellites to orbit on time and on budget to meet warfighter needs. Boeing Delta IV and Lockheed Martin Atlas V rocket families are currently in Engineering Manufacturing and Development to provide launch services beginning next year through the year 2020 and beyond. Our partnership with industry will meet military, government, and commercial spacelift requirements at 25 percent to 50 percent lower costs than current systems.

Space-Based Radar (SBR)

From the ultimate high ground, space-based ISR will provide near continuous overflight of enemy targets to complement airborne and ground-based sensor platforms. SBR will revolutionize battlespace awareness by providing deep-look, wide area surveillance of denied areas in a manner unaffected by terrain masking and political sensitivities—absolute leap-ahead technology. Persistent ISR will be achieved with day/night, all weather detection and tracking of moving and fixed targets; improved mapping, charting, and geodesy; and responsive targeting data from sensors to shooters. Due to its basing mode, SBR can provide the Nation a non-provocative, long-range capability to enable early situational awareness in advance of hostilities and throughout the spectrum of conflict. This will allow us to tighten the timelines for prompt attack of both anti-access systems and enemy centers of gravity. SBR is being designed to fit into the portfolio of other ISR assets.

Information Warfare (IW) and Information Assurance (IA)

Of primary importance to IW operations is the horizontal integration of manned, unmanned, and space systems to achieve the machine-to-machine interface of command and control, communications, computers, intelligence, surveillance and reconnaissance (C⁴ISR) systems. This integration provides executable decision-quality information to the commander in near-real-time. Second is our ability to protect these systems from adversary manipulation through defensive information warfare. Third, is the ability to deny adversaries these same capabilities through offensive information warfare.

Information superiority enables our military to achieve "decision cycle dominance" and allow us to act and react much more rapidly and effectively than our adversary—creating transformational military advantages. While technology will never completely overcome Clausewitz's "fog of war," achieving information superiority as described here could certainly minimize it for us and maximize it for our adversary.

Information superiority also yields additional benefits. First, a reduced forward deployment requirement expedites the time to begin effects-based operations and reduces the number of personnel and equipment exposed to threats. Second, by avoiding massive attrition tactics, it would result in far fewer casualties and collateral damage. Third, under the right circumstances, effective offensive information warfare capabilities, which include computer network attack, military deception, public affairs, electronic warfare, and psychological operations (PSYOP), could prevent the need for destruction by influencing our adversaries to capitulate before hostilities begin. This latter possibility will be crucial in many of the environments the military will have to operate in the future, such as urban areas and various military operations other than war, in which employing highly destructive kinetic weapons would not be desirable.

In the future, the Air Force will field C4ISR capabilities that enable dynamic assessment, planning, and the rapid execution of global missions. The system will be tailorable across the spectrum of operations and be horizontally and vertically integrated across components, functions, and levels of command. Joint Force Commanders will be able to exploit knowledge and awareness to use the *right* tools at the *right* time in the *right* way—and do it all *faster* and with higher *fidelity* than the adversary.

Predictive Battlespace Awareness (PBA)

PBA involves those actions required to understand our adversaries to the extent of being able to accurately anticipate his actions before they make them. This includes understanding how our adversaries organize and employ their forces. It means knowing their centers of gravity, capabilities, and weaknesses. PBA is an ongoing intelligence effort which begins long before forces are deployed. Ultimately, PBA allows finite ISR assets to be focused on confirmation of anticipated actions instead of the more time-consuming discovery.

Communication Enhancement

We are now transforming the way information technology is used in the Air Force as we implement the One Air Force . . . One Network initiative. This enterprise-wide approach to IT will allow more responsive and more robust service to the whole Air Force. In addition, Global Combat Support System—Air Force (GCSS—AF) will integrate combat support information systems, thus removing the business inefficiencies resulting from numerous, independent stand-alone systems. With GCSS—AF, the Air Force will finally have the means to provide an enterprise view of combat support information. GCSS—AF, through the Air Force Portal, will provide the warfighter, supporting elements, and other Air Force members the means to seamlessly integrate agile combat support information necessary to efficiently field and sustain our Air and Space Expeditionary Forces.

Another piece of integration is the Joint Tactical Radio System (JTRS). We aggressively accelerated development of this enabler of machine-level, digital conversations between our C²ISR and strike platforms so that the “sum of our wisdom” results in a cursor over the target. JTRS will also provide a flexible and adaptable information exchange infrastructure, which moves the joint force forward in getting operators and commanders the timely decision-quality information needed in today’s warfighting environment.

Precision Engagement

The small diameter bomb, the first “miniature” munition in development, will provide an evolutionary capability in kills per sortie. The SDB weapon will use a common carriage system for fighters and most bombers, to carry at least four and potentially up to 12 SDB weapons per 1760 data bus aircraft station. This will allow a fighter-size platform to carry 16 or more SDBs and a bomber to carry up to 288. We will employ the SDB from low-to-high altitude, from standoff or direct attack ranges, and in adverse weather conditions. Each SDB weapon will employ GPS-aided guidance and be independently targeted. The Phase I SDB will have a capability against fixed or stationary targets, while the Phase II SDB will add a seeker with Automatic Target Recognition to provide a capability against mobile and relocatable targets.

To increase our capability against time-critical and moving targets, we are experimenting with existing and miniaturized versions of precision weapons on UCAVs. The range and loiter time of the “hunter-killer UCAV” coupled with the direct feed of real-time targeting data, will increase our opportunities against moving targets—tightening our decision cycle and maximizing our warfighting effects. What these systems UCAV and our other advancing capabilities indicate is that we are within range of our goals of persistent ISR, the finding to targeting to assessing within minutes cycle, and fidelity in the integration of our systems. We seek near instantaneous attack capabilities once a target is approved for attack.

Innovation and Adaptation

All of the new systems and technologies in the world cannot supplant ingenuity. Whether modifying current systems, developing streamlined efficiencies in organizations, or simply thinking creatively, innovation and adaptation are at the heart of any transformation, and embedded in Air Force heritage. The same visionary essence behind the flight at Kitty Hawk works today to link emerging technologies with dynamic future concepts of operation. The driving spirit of innovation in past times of war exists today in the impetus to evolve our air and space capabilities and elevate the security of the Nation. Innovation and adaptation will be tremendously important again in fiscal year 2003, and they will resonate in all the systems we

develop, in our fundamental practices, how we organize and even in our evolving roles and missions in homeland security.

The prerequisite to achieving the transformation force outlined in the QDR is our commitment to a strong Science and Technology (S&T) program. S&T is the critical link between vision and operational capabilities. We continue to invest in a broad and balanced set of technologies derived from basic and applied research, and advanced technology development on a continuum of maturity levels from short- to long-term. This time-scaled approach keeps emerging capabilities in the pipeline and fosters revolutionary developments.

The Air Force S&T community is working closely with operators and strategic planners to explicitly link research activities with our core competencies, critical future capabilities, and future concepts of operation. This effort has produced eight short-term goals and six long-term challenges to focus our S&T investment. The short-term S&T objectives are focused on warfighter priorities in the following areas: Target Location, Identification, and Tracking; Command, Control, Communications, Computers, and Intelligence; Precision Attack; Space Control; Access to Space; Aircraft Survivability and Countermeasures; Sustaining Aging Aircraft; and Air and Space Expeditionary Force Support. Long-term S&T challenges also involve revolutionary capabilities in Finding and Tracking; Controlled Effects; Sanctuary; Rapid Air and Space Response; and Effective Air and Space Persistence. Successful pursuit of these challenges and objectives will meet the transformation goals of the Air Force and maintain our air and space dominance today and well into the 21st century.

Our new homeland security environment will necessitate both traditional and non-traditional responses, with significant coalition, joint, and interagency involvement. Whatever the threat, the AOC provides the critically important real-time predictive battlespace awareness for decision-makers. The Air Force will work closely with the other agencies to form a tightly knit web of resources that will be readily available to answer the call. In this way, Homeland Security efforts will be interwoven and fundamentally aligned with the Air Force's top priorities.

Additionally, Air Force counterair and ISR capabilities are significant contributors to the multi-layered missile defense system, incorporating air and space-based elements that provide effective, affordable, global protection against a wide range of threats. Future space capabilities such as the SBIRS will greatly enhance our ability to track and engage ballistic missiles while space-based radar technologies will identify and track fixed and mobile ballistic missile launchers. Finally, the ABL will engage ballistic missiles in their boost phase, while the F-22, working with advanced ISR systems, will defend against cruise missiles.

Consequence Management

The Air Force has played an important role in consequence management. We have provided critical resources such as airlift, command and control, and disaster preparedness response forces to other lead agencies and the Joint Forces Civil Support Teams. The AFMS is acquiring a variety of modular packages that can be used to support civilian authorities requesting our assistance at home or abroad. Within 2 hours of notification, the Small Portable Expeditionary Aeromedical Rapid Response (SPEAR) teams deploy ten specialists with the capability to provide a broad scope of care, including initial disaster medical assessment, emergency surgery, critical care, and patient transport preparation. This will increase the state medical response capability for homeland security. Additionally, Air National Guard men and women both command and contribute to the Nation's current Civil Support Teams—including critical mobility requirements that support the air transportation of these teams to sites of potential CBRNE or WMD attacks.

In the QDR, the Secretary of Defense identified Homeland Security as a top priority for the Department of Defense. The Air Force has a role in each aspect of preventing, protecting from, and responding to attacks against our homeland. The Air Force has a robust array homeland defense capabilities today and will improve and transform as necessary for the future. As in the past, we stand ready today to contribute these unique capabilities and develop new technologies to aid our national command authorities in combating threats or attacks to our homeland.

Conclusion

The same relative advantages of speed, flexibility, range, lethality and the like that have defined air power since its inception also define the collective talents of airmen—military and civilian alike. The partnership among all of the components of the Air Force is elevating the Nation's air and space capabilities to even greater heights than ever conceived. Yet we are not satisfied. We will continue to aggressively pursue our critical future capabilities through every avenue, drawing on all

of our resources, and finding no satisfaction in compromise. While funding is critical to securing new and revitalized systems, the Air Force is focused on the source of the most exponentially beneficial results—our innate skill at integration, innovation, and visionary implementation of ideas and processes. Ultimately, it is from our airmen, our most essential resource of people that transformation will accelerate, accelerate and continue.

PEOPLE

“People are a priority” is not just a slogan in the Air Force, it is an imperative. Historically, the Air Force has been a retention-based force and continues to be so today. We rely on recruiting and training technically and mechanically gifted individuals to develop and operate our advanced air and space systems. Though we exceeded our fiscal year 2001 recruiting and accession goals, there are some critical skills in need of special attention—scientists and engineers in particular. We must take action now to address these and other developing personnel gaps in the uniformed and civilian Air Force alike.

Before September 11, we were deploying our people at a rate three times higher than we were a decade earlier. Though we were narrowing the gap between force structure drawdowns and increased commitments, the marker has been shifted significantly and we anticipate a growth in requirements. The addition of Operations Noble Eagle and Enduring Freedom and the creation of new homeland security requirements to an already strained personnel tempo (PERSTEMPO) warranted an assessment of our total manpower requirements. We are working with our sister services and OSD on this issue. Between the active, Reserve, and Guard, we have identified the need for and end strength increase of over 45,000 above fiscal year 2002 levels. Such an increase in the force introduces significant challenges, however we believe we have the initiatives and plans in place to achieve the larger force.

Recent events have accentuated the contributions our Total Force—Active duty, Air National Guard, Air Force Reserve, and civilians—brings to our national defense team. We must now size this force appropriately to meet new demands by capitalizing on positive recruiting results, and honing retention programs, and examining closely tasks that might better be performed by civilians, or members of the Guard or Reserve. To attract and retain the best people in a high-technology world, we will accelerate our efforts to develop, educate, train and compensate our people to continue to lead the world as a technologically superior military force.

Retention is more than a quality of life issue. It involves letting our people know that what they are doing matters. It is about instilling our Airmen with pride in a mission well done. At the end of their careers they will remember being part of a team that made a difference. To this end, we have initiated a major “re-recruiting” program.

Recruiting

The Air Force exceeded fiscal year 2001 enlisted recruiting goal of 34,600 by almost 800. We still require 99 percent of our recruits to have high school diplomas and nearly 75 percent to score in the top half of test scores on the Armed Forces Qualification Test. In addition, we brought 1,155 prior-service members back on Active duty, nearly double the number from fiscal year 1999.

We must enlist airmen whose aptitudes match the technical requirements we need. In fiscal year 2001 we implemented targeted recruiting programs for mechanically skilled recruits. These efforts paid off, allowing us to exceed our recruiting goal for these skills by 763. We did, however, fall short of our recruiting goal by 203 in the general skill area. This includes the Security Forces career fields, which have become vital in light of current operations.

The Air Force is postured well to increase recruiting goals to meet new requirements. Previously approved increases in advertising, a more robust recruiting force with broader access to secondary school students, and competitive compensation prepares the Air Force to meet future recruiting challenges. We budgeted \$77 million for recruiting advertising in fiscal year 2002, which is nearly five times the amount from fiscal year 1998. For fiscal year 2002, we programmed an additional \$9 million for the enhanced initial enlistment bonus program, and the prior service reenlistment program, up from \$123.8 million in fiscal year 2001. These bonus programs help to recruit hard-to-fill critical skills and to encourage recruiting during historically difficult recruiting months.

Officer recruiting faces many of the same challenges as enlisted recruiting. However, we continue to draw America’s best and brightest, even given the lure of a competitive job market. In the ROTC program, we implemented several initiatives to attract more candidates, offering contracts to freshmen cadets rather than waiting until their sophomore year, and a one-year commissioning program to attract

both undergraduate and graduate students. Overall in fiscal year 2001, we achieved 105 percent of our line officer accession target, up from 97 percent in fiscal year 2000. Recent legislation, which increased the maximum age for appointments as cadets into Senior ROTC scholarship programs, further increases our recruiting opportunities. We are also examining changes to the program to reduce attrition during the ROTC cadet years.

Of particular concern, however, is the area of military and civilian scientists and engineers. We fell short of our accession goal for these groups by nearly 250, and have begun an all-out effort to plus up recruitment and target retention of these critical specialties. For example, in fiscal year 2003 we begin a college sponsorship program to attract scientists and engineers from universities where there is no ROTC program. Thanks to prompt Congressional action, we have the authority to implement bonuses, adjust funding to create retention allowances, and work toward implementing special salary rates for the most difficult to retain fields. At the December 2001 Scientist and Engineer Summit, the Secretary and the Chief of Staff embraced these and other initiatives to remedy the accession challenge. The Air Force recognizes the great need for these bonuses and has programmed funds accordingly. However, funding levels were cut during the appropriations process.

We have also found recruiting health care professionals especially difficult. Many medical, dental, nurse and biomedical specialties are experiencing critical shortages. For example, only 80 percent of our clinical pharmacy positions are currently filled. We are now reviewing accession initiatives for pharmacists.

In fiscal year 2001, the Air Force Reserve exceeded its recruiting goal for the first time in 5 years—accessing 105 percent of their target. However, there are significant challenges ahead in recruiting citizen-airmen. Historically, 30 percent of Reserve accessions come from eligible members (i.e. no break in service) separating from Active duty. In fiscal year 2002, recruiting will have to make up that part of the goal, more than 3,000 people, from other applicant sources until Stop Loss is lifted. Once lifted, we expect there will be challenges in filling many vacated positions. One of the biggest challenges for Reserve recruiters this year is Basic Military Training (BMT) quotas. While recruiting services increased emphasis on enlisting non-prior service applicants, BMT allocations have not kept pace. This problem is forecasted to worsen this year as a result of Stop Loss. Reservists are working diligently to increase BMT allocations and explore solutions to address BMT shortfalls.

The Air National Guard has placed recruiting and retention emphasis on Air Force Specialties where shortages exist by offering enlistment and reenlistment bonuses, Student Loan Repayment Program, and the Montgomery GI Bill Kicker Program. As a result, many of the Air National Guard critical maintenance AFSCs have seen real strength growth from 2–6 percent over the last 2 fiscal years. These incentives have contributed greatly toward enticing and retaining the right talent for the right job. Though recruiting and retention rates have increased, the Air National Guard realizes that potential problems exist that may affect future sustained capability.

Retention

Over 128,000 Active duty airmen, 46 percent of the enlisted force, are eligible for reenlistment in fiscal year 2002–2003. Although positive about a career in the Air Force, our people are being lured away by the availability of higher-paying civilian jobs. To sustain our readiness posture for rapid deployment, we must retain our highly trained, experienced, and skilled people. Retention is half the equation of an increase in end strength. By keeping our experience, we reduce recruiting and training requirements and continue to build and maintain our technical expertise.

Retention will continue to be a priority and a challenge in the future. We are aware Stop Loss and the increased tempo of ONE and OEF may have a negative affect on retention and we are planning for offsets already. We must provide a robust compensation package that rewards service, provides for a suitable standard of living, ensures a high quality of life, and retains our high caliber professionals. We must continue to reduce out-of-pocket expenses incurred through frequent moves, deployments, and other temporary duty. Our airmen must view a military career as a viable and competitive option if we are to maintain an all-volunteer force. To that end, we have initiated an aggressive campaign to “re-recruit” our force, through individualized mentoring and career counseling. This effort began with pilots scientists and engineers, as well as Battle Managers, and will include other critical skills in the coming months. Pilots were to be the initial focus, but the demands of ONE and OEF required that we delay the re-recruiting of this group. Congress has rallied to the Air Force’s needs in all of these, and we will rely on continued help, particularly in the year ahead.

Officer retention trends continue to raise concerns. We monitor these trends through the officer cumulative continuation rate (CCR), or the percentage of officers entering their 4th year of service (6 years for pilots and navigators) who will complete their 11th year of service, given existing retention patterns. Although the fiscal year 2001 CCR for pilots increased from 45 percent in fiscal year 2000 to 49 percent, it's significantly lower than the high of 87 percent in fiscal year 1995. We have fully manned our cockpits, but our rated pilot staff manning has fallen to 51 percent. Airline hires in fiscal year 2002 will be down from over 3,000 last year to approximately 1,500 this year; however, we anticipate the hiring will surge again shortly thereafter. Therefore, we can expect the USAF pilot shortage to continue for at least the next 8 years until we fully realize the effects of the 10-year Active duty service commitment for undergraduate flying training. We are optimistic that our "re-recruiting" effort will further enhance pilot retention and help alleviate the shortage sooner.

The mission support officer fiscal year 2001 CCR has held steady at 44 percent. However, retention rates for several high-tech specialties have decreased—scientists (36 percent), developmental engineers (42 percent), acquisition managers (40 percent), and air battle managers (47 percent). Conversely, navigator rates improved in fiscal year 2001, rising 3 percentage points to 72 percent. Navigators are a critical rated resource being used to fill many pilot vacancies at headquarters level. In the next few years, we expect a rapid decline in this large retirement-eligible population. We also need to retain every experienced air battle manager (ABM) we can to preserve our warfighting capability. This high-demand, low-density career field retention is negatively impacted by increased operations tempo.

The Air Force Reserve exceeded Command retention goals for their enlisted airmen during fiscal year 2001. Again, it was the team effort of the members, first sergeants, supervisors and commanders that led the Reserve to this exceptional achievement. Bonuses also continue to be an effective tool in retaining our members. The flexible Aviation Continuation Pay (ACP) program is an important part of our multi-faceted plan to retain pilots. In fiscal year 2001 we offered ACP payments through 25 years of aviation service, resulting in a substantial increase in committed personnel. Because of this success, we plan a similar design for the fiscal year 2002 ACP program, and extension of this program to navigators and ABMs.

Seventy-eight percent of our enlisted skills are now receiving re-enlistment bonuses, up 2 percentage points from fiscal year 2000. The authorization to pay officer and enlisted critical skills retention bonuses should help retain individuals in high demand by the civilian sector. We are initially targeting this new authority to Science, Engineering, and Communications and Information. Also, the authority to increase special duty assignment pay provides the flexibility to target our most pressing enlisted skills. The fiscal year 2002 National Defense Authorization Act (NDAA) authorizes installment payment authority for the 15-year career status bonus, and an educational savings plan to encourage re-enlistment in critical specialties. Additionally, the Air Force Reserve is studying special duty pay initiatives for senior enlisted positions, such as command chief master sergeants and unit first sergeants for future implementation.

The Air National Guard's number one priority is to increase their traditional pilot force, which has maintained a steady state of 90 percent. During the past year, the Guard continued to see an increase in ACP take rates to 93 percent. ACP has accomplished its goal by retaining qualified full-time instructor pilots to train and sustain our combat force. The Guard and Reserve continue to pursue substantial enhancements to the Aviation Career Incentive Pay (ACIP) and Career Enlisted Flyer Incentive Pay (CEFIP) to increase retention in the aviation community, as well as attract/retain individuals to aviation. These initiatives, which affect over 13,343 officers and enlisted crew members in the Guard and Reserve, are aimed at those traditional aviators who do not qualify for the ACP for AGRs and the Special Salary Rate for Technicians.

Training

Training the world's best Air Force is challenging in today's rigorous, expeditionary environment. Increased accessions stress our training facilities and personnel. During surge periods, we operate at maximum capacity by triple-bunking students in two-person dorm rooms. We are currently seeking funds to improve the training infrastructure.

Lower than required enlisted retention rates are increasing our training burden. Also, fewer experienced trainers are available to train 3-level personnel. Despite these challenges, our technical training schools have been able to meet their mission. We increased our use of technology and streamlined the training processes to produce fully qualified apprentices ready to support the warfighter.

Even with the EAF, our tempo can make educational pursuits difficult. Our learning resource centers and Advanced Distributed Learning initiatives address this situation by offering deployed personnel education and testing opportunities through CD-ROM and interactive television. We support lengthening the Montgomery GI Bill contribution period from 1 to 2 years in order to ease the financial burdens of new Airmen. Additionally, we have joined with the other Services, the Department of Labor, and civilian licensing and certification agencies to promote the recognition of military training as creditable towards civilian licensing requirements.

Defining the Air Force's institutional training and educational requirements for leadership development allows the services to weigh resource decisions better and to emphasize to our people the institution's investment in their careers. The Air Force is pursuing leadership development and career mentoring strategies, to prepare the Total Force for the 21st century. These competency-based strategies are focused on understanding the leadership needs of our transforming force and creating a development process that will better prepare Airmen to serve and lead. The Air Force is examining more deliberate career broadening, emphasizing two categories of competencies—occupational (what we do) and universal (who we are). We are also examining potential changes to the professional growth of officers including the rationalization of advanced degrees and professional military education. Force readiness, sustainability, and mission performance all depend on selecting, training, and retaining the best individuals with the necessary skills, as well as motivating every member of the service and taking care of Air Force families.

Civilian Workforce Shaping

Today, less than 10 percent of our civilians are in their first 5 years of service. In the next 5 years, more than 40 percent will be eligible for optional or early retirement. Historical trends indicate that approximately 33 percent of white-collar employees and 40 percent of blue-collar employees will retire the year they become eligible. In addition, downsizing over the past decade skewed the mix of civilian workforce skills, compounding the loss of corporate memory and lack of breadth and depth of experience.

While we are meeting mission needs today, without the proper civilian force shaping tools, we risk not being ready to meet tomorrow's challenges. To help shape the civilian workforce, it is imperative that we fund civilian force development initiatives to include skill proficiency and leadership training, and tuition assistance programs. The fiscal year 2002 NDAA did authorize the payment of expenses to obtain professional credentials.

In addition, management tools are essential in shaping the force by opening the door to new talent so we can gather the right skill mix. These initiatives include pay comparability and compensation, a streamlined and flexible hiring process, recruiting incentives for technical skills and student employment programs. Also, the fiscal year 2002 NDAA provided the authority for a pilot program allowing for payment of retraining expenses and extended the use of Voluntary Separation Incentive Pay (VSIP) and Voluntary Early Retirement Authority (VERA) for workforce restructuring. To incentivize key senior personnel to accept critical positions, we continue to support implementation of a last move home benefit.

Quality of Life

Quality of life ranks as one of the Air Force's top priorities, so our quality of life initiatives attempt to balance the intense demands we place on our mission-focused Total Force. With continued congressional support, the Air Force will pursue adequate manpower; improved workplace environments; fair and competitive compensation and benefits; balanced deployments and exercise schedules; safe, affordable, and adequate housing; enhanced community and family programs; improved educational opportunities; and quality health care, as these have a direct impact on our ability to recruit and retain our people and sustain a ready force.

The fiscal year 2002 NDAA provided for the largest raises for mid-level and Senior NCOs (7 percent–10 percent) to improve pay based on their education and experience levels. Junior enlisted members received a 6 percent–6.7 percent pay raise and captains and majors received a 6 percent–6.5 percent raise while all other personnel received a 5 percent raise. Basic Allowance for Housing rates effective 1 Jan. 2002 will be based on 11.3 percent out-of-pocket for the National Median Housing Cost for each grade and dependency status. Additionally, the fiscal year 2002 NDAA authorizes several additional travel and transportation allowances that will reduce out-of-pocket expenses for our military personnel.

Higher priorities have led to a deferral of much-needed infrastructure sustainment, restoration, and modernization of the workplace. Together with spare parts and equipment shortfalls, budget limitations impede successful execution of mission

requirements, cause lost productivity, and negatively impact quality of life. It will take increased funding levels focused on infrastructure restoration and modernization to allow us to optimize the condition of the workplace environment and, furthermore, help eliminate the risk to our near- and long-term readiness.

Providing safe and adequate housing enhances readiness and retention. The Air Force Dormitory Master Plan and Family Housing Master Plan identify and prioritize our requirements, while DOD is championing the reduction of out-of-pocket housing expenses by fiscal year 2005. We project significant improvements in our military family housing by reducing our inadequate units from 59,000 at the beginning of fiscal year 2002 to 46,000 at the beginning of fiscal year 2003, and with the help of privatization efforts underway, eliminating inadequate units by 2010. During fiscal year 2001–2004 we plan to privatize over 21,000 housing units at 26 installations. Similar improvements are being made in our unaccompanied housing, where more than 1,600 dormitory rooms will be constructed as a result of the fiscal year 2002 program.

The Air Force continued to set the standard in providing quality childcare and youth programs. In addition to 100 percent accreditation of Air Force child care centers, the Air Force achieved 100 percent accreditation of all of its before- and after-school programs for youth 6–12. In fiscal year 2001, the Air Force expanded the extended duty childcare program for members required to work extended duty hours and in fiscal year 2002 will test using this program for members working at missile sites and those who need care for their mildly ill children. Many youth initiatives implemented in fiscal year 2001 are part of the affiliation of the Air Force's youth program with the Boys & Girls Clubs of America.

The Air National Guard also identifies childcare as a readiness issue. With increasing demands from Commanders and family members, the ANG formed a Childcare Integrated Process Team (IPT) to study innovative childcare options. The IPT yielded a website developed for internal use by ANG field units to pursue childcare alternatives in relationship to the unit's location, demographics, and legal issues. Additionally, the Guard has proposed a cost-sharing pilot program based on the Air Force childcare cost model.

Tremendously important to child and family quality of life are the commissaries and exchanges. The Air Force continues to support these benefits as vital non-pay compensation upon which Active duty, retirees, and Reserve component personnel depend. Commissaries and exchanges provide significant savings on high quality goods and services, and a sense of community for airmen and their families wherever they serve. As a result, commissaries and exchanges are cited as a strong influence on retention and a highly valued component of quality of life.

Additionally, lodging facility improvements and temporary lodging facilities have become a higher quality of life priority. Constructing facilities in sufficient quantity and maintaining existing facilities not only supports our members and families in TDY and permanent change of station status, but also yields significant savings in travel costs and ensures force protection. All new construction and renovations meet the recently adopted VQ standard—"one size fits all ranks"—mirroring the industry standard of 280 square feet per room with private baths for all grades.

Physical fitness is unquestionably a force multiplier, and investment in fitness facilities, equipment, and programs directly impacts readiness. An independent assessment of our fitness centers documented a requirement of \$645 million for construction and renovation at Active duty and Reserve bases. The Air Force committed \$183 million in fiscal year 2000–2005 Quality of Life funding and has steadily increased annual MILCON funding, including \$52 million this year.

Meanwhile, today's Air National Guard member families are in immediate need of dedicated full time family readiness and support services—specifically information referral support and improved communications and education capabilities. The Air National Guard has developed a program solution in fiscal year 2001 to fund a full-time contracted family readiness program at each Wing and Combat Readiness Training Center. While funding for fiscal year 2002 has been added in the fiscal year 2002 Supplemental Appropriations, there is no sustained funding in the FYDP. Properly funded and resourced, the ANG family readiness program will significantly enhance mission capabilities by reducing pressures on personnel and their families and improving their Quality of Life.

Healthcare

The recent implementation of DOD health care initiatives, such as TRICARE for Life, provided the missing link to the Air Force Medical Service's population-based health care strategy. Now, the AFMS has the foundation to provide whole care to its beneficiaries. The TRICARE Senior Pharmacy Benefit, started 1 April 2001, brought an expanded benefit to the Air Force's retired population. TRICARE for

Life, the program that makes TRICARE second payer to Medicare, and TRICARE Plus, the program that allows seniors to enroll in a primary care program at selected MTFs, both began concurrently on 1 October 2001. These new programs will undoubtedly enhance the quality of life for the Air Force's older retiree population. TRICARE Plus will also strengthen the AFMS's medical readiness posture by expanding the patient case mix for our providers.

The AFMS continues to make great strides in its population health initiatives and customer satisfaction. Central to the AFMS's population health plan is its Primary Care Optimization program, which improves clinical business processes through maximizing medical support staff skills and duties and through robust information management that supports effective decision-making. The Primary Care Manager by Name program provides much-needed continuity of care and, ultimately, better patient management by providers. Other population health initiatives include the Air Force Suicide Prevention program, which has served as a model for DOD and the Nation in their efforts to address this significant public health issue. As a result of AFMS' initiatives, health care customer satisfaction continues to rise in the Air Force. According to the latest Customer Satisfaction Survey Results, 90 percent of the Air Force's enrolled beneficiaries indicate they would enroll or re-enroll in TRICARE Prime if given the option. The overall satisfaction with clinics and medical care exceeds national civilian HMO averages.

Conclusion

The Air Force implemented structural and cultural changes via EAF concept to enhance responsive force packaging, as well as to provide more stability/predictability in deployment and home station scheduling. We must continue to address force-wide balanced tempo issues with manning, infrastructure and equipment, training, recruiting and retention, and mission requirement assessments. High OPSTEMPO has taken its toll: our people are still deployed three times more often than prior to Desert Storm—based on a force 60 percent its former size. Air National Guard and Air Force Reserve participation has steadily increased since Desert Storm, which has created unique challenges for Guardsmen and reservists balancing civilian careers with increased military requirements. Trends show demand for air power will only increase; EAF holds promise by giving airmen predictability and stability. We must also take care of our families with adequate housing programs, medical facilities, and base support services. Our efforts continue to pay off, yet they must be actively renewed and revitalized—flexible enough to adapt to new circumstances and demands in a changing world.

Chairman LEVIN. Thank you, Mr. Secretary.

We will have a 6-minute round on an early bird basis. I think we are going to be interrupted by perhaps a series of votes. We will have to figure out what to do when that information comes to us.

Let me ask this of each of you. Eight months ago there was an announcement made that two new committees were going to be formed, a Senior Executive Committee (SEC) and a Business Initiative Council (BIC) at the Department of Defense. Both of those committees would have responsibility for planning and implementing improved management practices across the entire Department of Defense. This was an effort made to improve business practices of the Department and to roll those savings into the warfighting end of the Department.

Can you each tell us very briefly what specific reforms have been initiated through these two new entities? Secretary White, let me start with you.

Secretary WHITE. On the BIC side, we are accelerating and pushing hard utilities privatization, which was a program that actually started before this administration. We are realigning headquarters to meet the goals that the Secretary has established for us. I have talked about the reductions that we have made as we have realigned the secretariat and the Army staff.

On the SEC side, we are looking at all the defense agencies and the roles that they play within the Department and streamlining their operations as well.

Chairman LEVIN. Are these Department-wide, what you have just announced?

Secretary WHITE. Yes, they are generally being followed by all of the services.

Chairman LEVIN. Do you have anything to add to that, Secretary England?

Secretary ENGLAND. I was only going to comment that in both the SEC and BIC, the three of us serve together on those committees along with the Under Secretary, Paul Wolfowitz, and occasionally with Secretary Rumsfeld. So we all work this jointly.

I was going to add that, in addition to the things that the Secretary of the Army commented on, we are also looking at supply chain management throughout the whole Department, because that is where a lot of the money is in this Department, it is in the whole support infrastructure. So we are looking at that and how we might do it better. We also, with Pete Aldridge, who is the Under Secretary for Acquisition, Technology, and Logistics, have a wide range of initiatives in that area, and some of those have been implemented.

So we have been implementing changes. Some of those have already taken place and there is a whole agenda of issues we are working on.

Chairman LEVIN. Will you identify for us the specific changes which have occurred and the savings which have resulted?

Secretary ENGLAND. Yes, sir. We have done a number of issues dealing with personnel, I guess what I would call low-hanging fruit. We identified in the very first series of meetings we had, as I recall, the number was about \$250 million. We had 11 issues brought before the board and we approved 10 of those. One is still being studied. Those 10 saved, I believe the number was \$250 million, Senator, but I have to get back with you on that.

Chairman LEVIN. Would each of you provide for the record the specific savings which have resulted from these initiatives, and would you tell us where in the budget we can find those savings? Will you each do that for us?

Secretary ENGLAND. Yes, sir.

Secretary WHITE. We will do that.

Secretary ROCHE. Absolutely, sir.

[The information referred to follows:]

DOD BUSINESS INITIATIVE COUNCIL (BIC) ESTIMATED SAVINGS IN THE FISCAL YEAR
2003 BUDGET

Secretary WHITE. Our BIC objectives are to improve the Department's business processes and to make resources available for higher priority programs, most significantly the transformation of the Department and the support of our uniformed and civilian personnel. A key feature of the program is that the Services are allowed to retain the savings and apply them to other priorities. We solicit the support of Congress in allowing us to retain the savings that we are now beginning to generate. The assurance that we will be able to retain the savings is an essential motivator that will keep the flow of good ideas coming to us from throughout the Department.

The BIC has approved eight initiatives to date. The benefits from these initiatives include reduced cycle time for business processes, improved freedom to manage our financial and personnel resources, and increased efficiency. Seven of the initiatives

are projected to generate savings in the fiscal year 2003 budget. I am providing details for these initiatives in the following table.

In all cases, the savings are estimates. Because most of these initiatives involve innovative approaches to improving our business operations, we cannot be certain of the dollar values. We have not yet realigned our budgets by moving the savings from one program to another. The savings estimates shown in the table are for all three military departments combined.

Two initiatives—contracting of security guards and raising Davis-Bacon Act thresholds—require congressional approval of proposed legislative changes. These proposals will be included in our Omnibus package.

One initiative—exempting DOD from paying the Federal Retail Excise Tax on tactical vehicles—requires agreement by the Secretary of the Treasury, who is reviewing the DOD proposal.

The Senior Executive Committee (SEC) has begun several analyses that will enable us to streamline DOD's operations in the future. We are not projecting fiscal year 2003 savings from these analyses.

Note: Savings estimates are for all of DoD combined.

Initiative	Description of the Initiative	Estimated FY03 Savings (\$M)	Where Savings Can Be Found in the Budget
Recovery auditing	Use contingency fee auditing services to identify and recover contract overpayments made by the Department's working capital funds.	30	Cost recoveries will be factored into the funds' rates for subsequent years, and savings will be indirectly passed on to warfighters and other customers.
Web-based invoicing and receipt processing	Use a Web-based, rather than a paper-based, process for processing contractor invoices and receipts. This will reduce the occurrence of incorrectly prepared or missing receiving reports and will enable the Defense Finance and Accounting Service (DFAS) to pay vendors more quickly and accurately.	7 - 11	Savings will be realized in the cost of support services provided by DFAS. DFAS will have lower costs, and will pass these savings on to DoD customers.

Initiative	Description of the Initiative	Estimated FY03 Savings (\$M)	Where Savings Can Be Found in the Budget
Local/regional cell phone pooling	Negotiate local or regional cell phone contracts to consolidate cell phone users into pools.	3 – 10	Savings will be realized in the Services' operating appropriations at all organizational levels. The Services intend to allow local commanders to retain these savings.
Enterprise Software Initiative	Streamline the acquisition process for computer software licenses by giving all DoD users access to best-priced, standards-compliant software products.	7	Savings will be realized in the Services' operating appropriations at all organizational levels. The Services intend to allow local commanders to retain these savings.

Initiative	Description of the Initiative	Estimated FY03 Savings (\$M)	Where Savings Can Be Found in the Budget
Contracting of security guards	Allow the Services to contract for security guards at small locations in the Continental United States. This will give local commanders increased flexibility in enhancing anti-terrorism and force protection measures.	3	If Congress approves DoD's request, which will be submitted with the FY03 Omnibus package, savings will be realized in the operating appropriations of selected installations throughout DoD. The Services intend to allow local commanders to retain these savings.
Davis-Bacon Act threshold	Raise the threshold subject to the Davis-Bacon Act from \$2000 to the simplified acquisition threshold, which is currently \$100,000.	6	If Congress approves DoD's request, which will be submitted with the FY03 Omnibus package, savings will be realized in the Services' construction appropriations.

Initiative	Description of the Initiative	Estimated FY03 Savings (\$M)	Where Savings Can Be Found in the Budget
Elimination of excise tax on tactical vehicles	Ask the Treasury Department to exempt DoD from paying the Federal Retail Excise Tax on tactical vehicles.	65	If the Secretary of the Treasury approves the request submitted by the Secretary of Defense, savings will be realized in the Services' procurement appropriations.
Total		121 -132	

Secretary ENGLAND. The mission of the BIC is to improve the efficiency of DOD business operations by identifying and implementing business reform actions, which allow savings to be reallocated to higher priority efforts. Such savings will be retained by the Services for their reallocation. As we transform America's military capability to meet the threats of the 21st century, we must also transform the way the Department works and what it works on. To date, the BIC has approved 28 initiatives; seven offer potential savings in fiscal year 2003, while four others appear to have savings, but are too premature in implementation to quantify. The remaining 17 will provide cost avoidance and/or unquantifiable savings, in terms of reduced cycle time, improved freedom to manage, streamlined procedures, accelerated information sharing/decision-making, etc. Potential savings have not progressed to the point of having actual, verifiable figures and have not been broken out by Service nor realigned within the budget; rules of engagement to break out and reflect the savings are in work. Some of these initiatives can be approved within the Department while others will require Congressional help.

The following are examples of initiatives offering potential savings that are within DOD's purview:

- **Recovery Auditing:** Use contingency fee auditing services contracts to identify and recover overpayments to providers of goods and services. This initiative will initially focus on contract overpayments made in the Department's working capital fund business areas. Cost recoveries will be factored into the funds' rates for subsequent years, and potential savings will be indirectly passed on to warfighters and other customers. Recoveries of general fund overpayments will begin when OMB regulations implementing PL 107-107 are received.
- **Web-Based Invoice Receipt Process:** Reduce occurrence of incorrectly prepared or missing receiving reports and move toward paperless process; will allow Defense Finance and Accounting Service (DFAS) to pay vendors more quickly and accurately. Savings will be realized in the cost of support services provided by the DFAS, as manual processes are reduced.
- **Local/Regional Cell Phone Pooling:** Negotiate new local or regional cell phone contracts to consolidate cell phone users into appropriate pools. Savings will be realized in the Services' operating appropriations at all organizational levels. The Services intend to allow local commanders to retain these potential savings.

The following are examples of initiatives offering potential savings that require Congressional or other Departmental assistance:

- Allow for Contracting of Security Guards: Allows Services to contract security guards in CONUS at small locations, to provide increased flexibility as Department continues to enhance anti-terrorism/force protection measures; will be included in the fiscal year 2003 Omnibus package. If Congress approves the requested legislative proposal, savings will be realized in the operating appropriations of selected installations throughout DOD. The Services intend to allow local commanders to retain these potential savings.
- Revise Davis-Bacon Thresholds: Raise the current threshold subject to Davis-Bacon Act from \$2,000 to the simplified acquisition threshold currently at \$100,000; will be included in our fiscal year 2003 Omnibus package. If Congress approves the requested legislative proposal, potential savings will be realized in the Services' construction appropriations.
- Eliminate Excise Tax on DOD Tactical Vehicles: Request authorization of exemption from Treasury Department from paying Federal Retail Excise Tax. If the Secretary of the Treasury approves the request submitted by the Secretary of Defense, potential savings will be realized in the Services' procurement appropriations.

In summary, BIC is an ongoing effort, which is "action-focused," aimed at identifying and implementing good business practices and creating an environment that encourages innovation and good ideas.

Secretary ROCHE. The mission of the Business Initiative Council (BIC) is to improve the efficiency of DOD business operations by identifying and implementing business reform actions, which allow savings to be reallocated to higher priority efforts. Such savings will be retained by the Services for their reallocation. As we transform America's military capability to meet the threats of the 21st century, we must also transform the way the Department works and what it works on. To date, the BIC has approved 32 initiatives; 7 offer potential savings in fiscal year 2003, while 8 others appear to have savings, but are too premature in implementation to quantify. The remaining 17 will provide cost avoidance and/or unquantifiable savings, in terms of reduced cycle time, improved freedom to manage, streamlined procedures, accelerated information sharing/decision-making, etc. Savings are estimates only and have not progressed to the point of having actual, verifiable figures. These savings have not been broken out by Service nor realigned within the budget; rules of engagement to break out and reflect the savings are in work. Some of these initiatives can be approved within the Department while others will require congressional help.

The following are examples of initiatives offering savings that are within DOD's purview:

- Recovery Auditing: Use contingency fee auditing services contract to identify and recover overpayments in Working Capital Funds to providers of goods and services. Estimated savings: \$93 million (fiscal year 2003)
- Web-Based Invoice/Receipt Processing: Reduce occurrence of incorrectly prepared or missing receiving report and move toward paperless process; will allow DFAS to pay vendors more quickly and accurately. Estimated savings: \$7-\$11 million (fiscal year 2003)
- Cell Phone Minute Pooling: Negotiate new local or regional cell phone contracts to consolidate cell phone users into appropriate pools. Estimated savings: \$3-\$10 million (fiscal year 2003)
- Enterprise Software Initiative (ESI): Streamline the acquisition process by providing best-priced, standards-compliant software products and expanding the use of ESI process as the benchmark acquisition strategy. Estimated savings: \$7 million (fiscal year 2003)

The following are examples of initiatives offering savings that require congressional or other Departmental assistance:

- Allow for Contracting of Security Guards: Allows Services to contract security guards in CONUS at small locations, to provide increased flexibility as Department continues to enhance anti-terrorism force protection measures; will be included in the fiscal year 2003 Omnibus package. Estimated savings: \$3.5 million (fiscal year 2003)
- Revise Davis-Bacon Thresholds: Raise the current threshold subject to Davis-Bacon Act from \$2,000 to the simplified acquisition threshold currently at \$100,000; will be included in our fiscal year 2003 Omnibus package. Estimated savings: \$6.5 million (fiscal year 2003)
- Eliminate Excise Tax on DOD Tactical Vehicles: Request authorization of exemption from Treasury Department from paying Federal Retail Excise Tax. Estimated savings: \$66 million (fiscal year 2003)

In summary, BIC is an ongoing effort, which is "action-focused," aimed at identifying and implementing good business practices and creating an environment that encourages innovation and good ideas. The total estimated savings (attached) for fiscal year 2003 anticipated for all of these BIC initiatives is approximately \$190 million with anticipated DOD savings across the FYDP (fiscal year 2004-2009) ranging from \$750 million to \$1 billion.

Initiative	Estimated Range of FY03 Savings (\$M)*	Where Savings Can Be Found in the Budget
Recovery Auditing	93	This initiative will recover contract overpayments made by the Department's working capital funds. Cost recoveries will be factored into the funds' rates for subsequent years, and savings will be indirectly passed on to warfighters and other customers.
Web-based Invoice/Receipt Processing	7 - 11	Savings will be realized in the cost of support services provided by the Defense Finance and Accounting Service (DFAS). DFAS will have lower costs, and will pass these savings on to DoD customers.
Cell Phone Minute Pooling	3 - 10	Savings will be realized in the Services' operating appropriations at all organizational levels. The Services intend to allow local commanders to retain these savings.
Enterprise Software Initiative	7	Savings will be realized in the Services' operating appropriations at all organizational levels. The Services intend to allow local commanders to retain these savings.
Allow for Contracting of Security Guards	3.5	If Congress approves the requested legislative proposal, savings will be realized in the operating appropriations of selected installations throughout DoD. The Services intend to allow local commanders to retain these savings.
Revise Davis-Bacon Act Thresholds	6.5	If Congress approves the requested legislative proposal, savings will be realized in the Services' construction appropriations.
Elimination of Excise Tax on DoD Tactical Vehicles	66	If the Secretary of the Treasury approves the request submitted by the Secretary of Defense, savings will be realized in the Services' procurement appropriations.
Total	186 - 197	

* Savings estimates are for all of DoD combined.

Chairman LEVIN. Secretary Roche, do you have anything to add on that?

Secretary ROCHE. Yes, sir. I just wanted to make a point, that a number of these are cost avoidance. In other words, it is not taking something that is now in place and doing away with it, but avoiding a cost in the future. So it is a combination of savings and cost avoidance.

The two groups are very different. In terms of the SEC, it is with Under Secretary Aldridge, who is part of it. We have been able to move very, very quickly over things. We have been able to support

price-based acquisition instead of the more torturous forms. We have been able to work with Mr. Aldridge in getting a lot of savings out of DLA, DFAS, et cetera, conscious goals for those agencies to lower their costs to us.

With the BIC, we have done such simple things as asking the Treasury to not charge us a tax on our vehicles that we use off road, that do not ever get on the highway. Why are we paying a highway tax? We are looking at how long it takes for something to happen because so much money is involved and people are just reviewing and reviewing and we are trying to streamline the processes.

Probably over the period of the Future Years Defense Plan (FYDP), between what we have done and what we would like to do, we are looking at something like a billion dollars so far. But they are very different. The reason it has been working, Mr. Chairman, is that the Secretary has allowed us to take any savings and plow it back into the services, into personnel accounts or into other accounts.

Chairman LEVIN. We will expect, then, from each of you for the record the list of those savings, how much for each one, and where in the budget we can find them.

Secretary Rumsfeld established a goal of investing 3 percent of the Department's budget in the science and technology programs, which would help drive the transformation of our services. But the budget request contains no measurable increase in science and technology funding over last year's appropriated levels, despite the large increase in the budget request.

Last week the Department's Deputy Director of Defense Research and Engineering was quoted as saying the following: "Science and technology makes up less than 2 percent of each of the military departments' budgets. They really did not care about the technology. It is all about this budget. The only thing I can say to them is you cannot solve your problems with that amount of money."

Would you react to that quote? Let us start with you, Secretary Roche.

Secretary ROCHE. Yes, sir. I think the Air Force came out around 2.6 to 2.7 and part of it is our denominator moved up on us, gratefully. We also have to include the moneys that are in the Defense Advanced Research Projects Agency (DARPA) associated with Air Force programs and the number of programs we transferred over to what was the Ballistic Missile Defense Office (BMDO), now the Missile Defense Agency.

Science and technology is at the front end. You can throw money at it. We would rather work this up to 3 percent and take a year or 2 to get there, so we can tailor what we are investing in. Clearly we are heavily dependent on science and technology investments for long-term results and we are trying to make sure each of those investments has some prospect of paying off, although we are also interested in some wildcatting.

Chairman LEVIN. Do either of the two of you have a reaction to that quote? Secretary White?

Secretary WHITE. Our principal investment in S&T is the Future Combat Systems (FCS) associated with the Objective Force. About

98 percent of it is focused on that. I think we are spending about as much money as can be productively used in S&T at this stage of maturity of FCS. DARPA is kicking in an extra \$122 million on their own front. So my opinion is the S&T of the Army is in good order compared to the other priorities that we have.

Chairman LEVIN. You are at what percentage?

Secretary WHITE. We are probably a little over 2 percent.

Chairman LEVIN. Despite Secretary Rumsfeld's statement that the DOD had a goal of investing 3 percent?

Secretary WHITE. Right. We agonized over the 3 percent level and whether it was appropriate in each service.

Chairman LEVIN. Got you.

Secretary England, you want to just finish this question?

Secretary ENGLAND. Yes. First of all, the 3 percent—I would suggest that absolute numbers are more meaningful because as we increase pay and benefits, et cetera, the denominator gets very, very large, so you would have to dramatically raise S&T as a part of the whole budget, particularly the personnel accounts. Our S&T is down somewhat from last year.

Chairman LEVIN. Absolute or percentage?

Secretary ENGLAND. No, absolute it is down. We are down absolute, but our research and development (R&D) is up about \$1.1 billion. So we made the conscious decision that there were R&D accounts we needed to fund and we funded those accounts, because at some point you do need to bring the S&T to realization. Otherwise you just have an interesting S&T program. So we decided that we would instead emphasize the R&D this year.

Now, if you go across the FYDP our S&T does definitely go up.

Chairman LEVIN. Thank you.

Senator Warner.

Senator WARNER. Thank you.

Gentlemen, the 2003 DOD budget includes a substantial increase in funding for combatting terrorism. Nearly all the proposed increase is for this purpose. Would each of you outline what your respective departments are doing to augment our effort to deter first and if necessary to combat terrorism? Secretary White?

Secretary WHITE. Senator, we have, first of all, an enormous manpower commitment, as I talked about in my opening statement, supporting homeland security in a variety of ways, everything from the Salt Lake City games to airport security with the National Guard to enhance force protection at our installations, both here in the United States and overseas. So we have a large chunk of our operating budget that right now is focusing on homeland security and force protection, enhanced force protection against counterterrorism.

Senator WARNER. What is the status of the programs that were initiated some several years ago and received very strong support in this committee? We used to refer to them as the RAID teams. Those are the groups that go out to work with the local communities should they be hit by a problem. This committee repeatedly in the past 3 or 4 years has authorized increases in the number of those teams, because of our firm belief they would directly help the citizenry if they were faced with a problem of a weapon of mass destruction, be it chemical, biological, or other.

Secretary WHITE. Senator, we have pushed that hard. We call those Weapons of Mass Destruction Civil Support Teams. There are 22 of them fully up and certified. They are manned by National Guard full-time people. We will have 32 total by the end of 2002, which is what is currently authorized, and those 32 will give us coverage of about 96 percent of the population of the United States in a 3-hour period. So they are very impressive teams and we pushed it as a matter of great urgency.

Senator WARNER. Secretary England, the question to you as to how you are redirecting portions of your budget to combat terrorism.

Secretary ENGLAND. Well, Senator, we have two carrier battle groups right now in the Arabian Sea actively engaged in the war against terrorism. As part of those battle groups, there are also our Amphibious Ready Groups with our marines on board. Of course, they have just now left Afghanistan, some still in country, but back on their ARG. We also, of course, have forward-deployed forces around the world.

Senator WARNER. We are aware of those. That is pretty much standard operation. But for example, the SEALs have had a remarkable role in this conflict. Are you looking to increase the size of the SEAL force and provide newer or more modern equipment?

Secretary ENGLAND. At this point I do not believe we have active interest in increasing the size of the SEAL force. We are actually undermanned in our SEAL force, so we would like very much to increase the manning to its authorized level.

We do, by the way, have 13 patrolcraft boats that we are manning for the Coast Guard, for example, outside of our traditional role, that we are providing to the Coast Guard for sea and harbor security. So we have taken a number of measures with the Coast Guard and of course with the military around the world, our intel, et cetera, all being directed on the war on terrorism. Frankly, the entire force is directed against this war on terrorism around the world.

Senator WARNER. Secretary Roche.

Secretary ROCHE. Senator Warner, obviously in Operation Noble Eagle we have put a huge number of forces in place, as I described. Also, to complement Secretary White's teams, we have 35 C-130s that are on alert every day and backup airplanes to move the emergency action teams so they can get where they are. That is over and above all the cap and everything else we fly, and we have tankers ready for them as well.

Our force protection has been a major investment. We have called up all the Reserves, all the Guard folks, in force protection, and we are still shy of people. We never planned to be able to defend our forces overseas, because we have to do a lot of force protection there, and our home bases at the same time, and that has been a heck of a strain on us and we have had to invest more and part of our new recruits. We are trying to direct more of them in that direction.

In Operation Enduring Freedom, the things that you will see are this persistent ISR, looking at something for a period of up to a year; also our use of UAVs, and the fusion, fusing of intelligence from very many sources.

Lastly, this equipment that the young troopers have been using on the ground to work with the aircraft. We now know what the next generation of those should look like and we have started to design to get those different pieces in something that is a smaller package. When they break off to get on their horses, they have to take apart about four different things, get on their horses, and go to the next spot.

Senator WARNER. Thank you.

Secretary England, just going through the morning news, there are nine pages of stories on the shipbuilding program. It goes from the extreme, that for example Newport News Shipbuilding, which is building a carrier, cannot hire enough people to do the work they have in place, to some individuals saying we are going to be faced with imminent layoffs of large numbers.

Now, this is all very unsettling, and it is clear from this conflict in the Afghan operating area that the Navy is integral, that those platforms to which you referred earlier were the foundation from which so many of the strikes were launched. I think that it is incumbent upon you, working with Congress, to try and put to rest this problem. I asked the Secretary of Defense the other day specifically about the carrier program and he said the slippage of 1 year was not in any way to be construed as a lessening of the importance of that program to our overall defense.

Nevertheless, we have a lot of instability. We have a new contractor that has taken over the management of that shipyard down there and works on both the carriers as well as the *Virginia*-class submarines. So I would hope this morning that you could refer to some of the conversations that we have had in which you have given me the reassurance that you feel this thing will be worked out, that the slippage of 1 year in the carrier program was predicated on clear justifications for technology.

Would you kindly clarify some of this this morning for us?

Secretary ENGLAND. Senator, I would be pleased to. Thanks for the opportunity to discuss this. First, we did move the carrier out. We actually have it moved out, I believe, to 2007 and 2008. That is half the funding in each year, in 2007 and 2008. We did that partially to hurry up some dollars in 2007, because you know when a ship is appropriated that is a very large amount in 1 year and it crowds out everything else. So it was more prudent from our point of view to spread this over 2 years.

But the other side of this is, we have had a continuing problem of prior year shipbuilding bills. Last year in the fiscal year 2002 budget, we had \$800 million of prior years bills. In the fiscal year 2003 budget we have \$645 million. We still have \$1.6 billion of prior year shipbuilding bills that we still have to pay. So out of last year and this year that is \$1.4 billion, \$1.6 billion to go. We are basically spending a lot of money each year and we are not buying ships with that money because of prior year bills.

So we are trying very hard to bring this to a stop and have some better business practices applied. So this year we have increased the funding for our current shipbuilding, our current ships, by another \$400 million. So we have increased the funding of our current ships, in hopes that that is a meaningful step so we will not have this continual overrunning of prior year shipbuilding.

Now, also part of this is the maturity of the technology. It was certainly my concern, with all the technology going in that ship, that if we had more—

Senator WARNER. You are talking about the CVNX-1 now?

Secretary ENGLAND. Yes, sir.

Senator WARNER. The first new carrier.

Secretary ENGLAND. That is correct. We would certainly like to mature those technologies as much as possible so we can predict the cost and know the costs and not have this problem on future ships when we do this the next time.

So this decision was partially financial, but in my mind moreso on the technology, so that we would be able to bring to an end this practice of always having bills flowing into the out years. That is what has been happening for the last several years.

Senator WARNER. Would you want Congress to take it upon itself to try and reallocate the funding in these shipbuilding budgets, such as to restore the carrier to its previous schedule? Do you think that would be a prudent action?

Secretary ENGLAND. No, sir, I don't. Frankly, I believe we made the right decisions. I think we went through a lot of work on this and decided that was the best decision that we could make, was to move this out 1 year, split the funding, mature the technologies.

I will also comment, while I have an opportunity, Senator, that in the past whenever in the FYDP we had shipbuilding in the future years it never came to pass. That is, if we had a large number of ships in the out years, that did not come to pass. It did not come to pass because we had prior year shipbuilding accounts to pay or we had other aspects of the Navy that had been underfunded and we used that money to fund other accounts.

This year we took a very straightforward approach. That is, we funded all the accounts that were needed to be funded. We robustly funded everything we could across the Navy in terms of spares, flying hours, training, et cetera. So we have "filled those buckets." So as we go forward we now have a solid foundation. We have also fully funded our accounts. So therefore there is high confidence in the future that those moneys that are allocated to shipbuilding and to aviation will indeed be spent for those purposes.

So I feel like we have put the foundation in place.

Chairman LEVIN. Thank you.

Senator Nelson.

Senator BEN NELSON. Thank you, Mr. Chairman.

Secretaries England, White, and Roche, certainly I want to thank you for being here to address the concerns we have about the defense of our Nation. Obviously, it is very important to critically focus on what these expenditures in the budget represent both as to the present situation and as to the future.

The critics will do their work on the budget and already have, and they will write the 10 stories that Senator Warner had reference to, and others will challenge, whether it is on shipbuilding or will challenge that much of the expenditure request deals with current assets and replacing the assets that have been used. Obviously, replacement is part of what needs to be done.

The criticism of the military always seems to be that we are ready to fight the last war. The fact that we were able to react as

quickly as we did to this Operation Enduring Freedom is some indication that we were prepared to deal with the current situation far more than people might have suggested and some of the partisan attacks might have also suggested.

What I would like to have you do is tell me in this budget, not simply what we are replacing—obviously that is part of it—but what are the priorities in this budget for fighting phase two as the technology increases and knowledge increases during our expansion of these activities of war, but also what is in this budget for the next war? In other words, what are the preparations that are reflected in this budget for the future? Is it the Predator or are there other activities that you see, force development, as well as assets that really represent the future, not just simply the present or the past?

I guess I would start with you, Secretary Roche, and move down the other way for a change, to change your luck just a little bit.

Secretary ROCHE. Thank you, Senator. I probably cannot give you line item by line item, but I can give you—

Senator BEN NELSON. No, just generally.

Secretary ROCHE. The overview would be that as we look to the future we clearly need to keep our bomber force modernized and we are putting the equipment in place to do that, the modernization of the B-2, et cetera. By reducing the B-1 fleet, we are plowing the money back to make the B-1s quite useful, and in fact that by giving them standoff weapons they can fly at an economical altitude and get much more range.

So the bomber force, we have worried about the weapons and the weapons being so accurate and standoff that that force should be good over a period of time. It has been years since we have introduced a new fighter bomber. In fact, we have done two classes of bombers, the 117, the C-17, the C-130J, Joint STARS, a whole bunch of aircraft, and we still have the F-16s, et cetera. Those wings are about as loaded as they are going to get.

So the F-22 program, which is now fully funded, and the starting of the Joint Strike Fighter program will give us the fighter bomber aircraft that we need, although we are reorienting part of the F-22 to be air-to-air than air-to-ground. Now it will be roughly half air-to-air, air-to-ground, developing special weapons for it. So the fighter force is in good shape.

Lift, with the multiyear on C-17 and our request to you for a multiyear on C-130Js, our taking and fixing up the old C-130s in avionics and then taking a look at the C-5s, which one of those can be overhauled and kept, I see lift in good shape.

Where we still have a problem is our reliance on the old 707s in the intelligence, surveillance, and reconnaissance area. There we are trying to augment, besides moving forward potentially to a new platform, with UAVs and also space-based things, like space-based radar. But the UAVs are still experimental. There are still issues that we have to work through with those.

In the ISR field we are trying to do some new things plus change the platforms. In the case of things like helicopters for the Special Forces or for our combat search and rescue, they are old. When I find helicopters from Vietnam still being used, they are old. In the

case of tankers, we find ourselves just with tankers aging to 43 years and we have to worry about those.

Senator BEN NELSON. Secretary England.

Secretary ENGLAND. Senator, a few of the things we are doing on investing in the future: First of all, we have started work on the EA-6B replacement. That is the only jamming aircraft we have in the U.S. military. It is getting long in the tooth. We are starting that replacement program. We have started a multi-mission airplane. We put money in to start looking at that airplane. That is a replacement for our P-3 maritime patrol and also our E-P3 signal intelligence aircraft.

We have a new program, DDX, which is a new family of ships for the Navy; and the Joint Strike Fighter, as Secretary Roche mentioned. We are also now buying the Advanced FLIRs that we do not have yet on our F-18Es and Fs, so we have invested more this year to bring those into inventory. We are investing in unmanned vehicles and networking, a lot of money in networking, because networking gives us the leverage to maximize the total forces that we have; rather than add just a platform, to get real leverage. So we are investing more in that. Our E-2, we are upgrading our electronics in our E-2 airplanes, our airborne early warning airplanes.

New and dramatically upgraded munitions. We have some magnificent precision weapons, but there is a next generation now that is being developed to give us better capability in terms of targeting, and we are investing in those.

So we are investing in a wide, wide area in addition to the way we are doing things like SSGN, the conversion of the two boomer subs. So we have a lot of investments going forward for our Navy and our Marines.

Senator BEN NELSON. What percentage would you estimate that this is of your budget? Is it 1 percent or 2 percent? Is it some significant percent above that?

Secretary ENGLAND. Well, certainly all of our R&D is in these areas.

Senator BEN NELSON. It is more than research and development. That is out there on the cutting edge, but you are also now applying some of that, I would assume, to new weaponry.

Secretary ENGLAND. Absolutely. Like SSGNs, this year we are putting a billion dollars alone just in that account. So I do not know—I will be happy to get back with you. We are way into the billions. These are a lot of programs we are funding, Senator.

[The information follows:]

Secretary ENGLAND. Approximately 36 percent of the Department of the Navy's R&D account finances transformational capabilities being fielded in new weapons systems. This accounts for 4 percent of the total Department of the Navy budget.

Secretary ROCHE. I think, Senator, across the board our goal of 1 to 2 percent for transformational things, we are above that. It is much larger than people realize. In many cases we are using some old things, but in very new ways.

Senator BEN NELSON. We do not have to be absolutely creative on new projects. We can take old material and make it better, and I commend you for doing that.

I think my time may have expired, but would it be okay for Secretary White to respond?

Chairman LEVIN. Sure, just to finish the question, absolutely.

Secretary WHITE. Thank you. As I said in my opening statement, we are taking a near-term risk by limiting the degree of modernization and recapitalization we are doing on the existing legacy force in order to bring along what we consider to be transformational systems. That includes Crusader, Comanche, which will revitalize our helicopter fleet, the information technology that we are working on at Fort Hood, the interim brigade combat teams, one of which is funded in the fiscal year 2003 budget, and then finally, as we talked about earlier, the Future Combat Systems.

In the Future Combat Systems, what we are looking for is something that is more lethal than Abrams, more survivable than Abrams, with a two-man crew, 10 percent of the logistics tail, fits in the C-130. That will truly be a transformational capability. We have put our money very definitely in the mid to long-term to achieve this transformation.

Thank you.

Senator BEN NELSON. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator Nelson.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

Let me first comment to Secretary White and Secretary Roche. The comments you made about our troops over there are certainly appropriate. I had occasion to be at the hospital at Lansduhl last week and talking to some of the troops that had been injured, all of them that were there, as a matter of fact, who were injured. Without exception, they said they, number 1, wanted to get back to their unit; and number 2, they want to make a career out of it. These are the ones that were hurt, so I just cannot say enough good things about these guys.

Secretary England, let me just take my entire 6 minutes to ask two questions that I hope will clear up the most misunderstood issue that is out there and will also provide for a dramatic increase in our readiness of our deployed troops. First of all, I thank you for your letter of the 6th of February, when you tried to clear up a couple of articles published in the newspaper that suggest you denied a request by the CNO, Admiral Clark, and the Marine Commandant, General Jones, on the use of Vieques for live fire training.

However, your letter did not address live fire training. It merely said that is the decision the military would make, and that is the statement you made in my office and that you have made several times. Now, what I am really confused about that can be cleared up today once and for all is this. Two weeks ago I went up to the ships that were involved in training for the east coast deployment. That was the *JFK*, the U.S.S. *Whitney*, and the U.S.S. *Wasp*. I talked with Admiral Natter, the Atlantic fleet commander, and Vice Admiral Dawson, the Second fleet commander. I also spoke to the commander of the Marine Expeditionary Unit, the commodore of the *Wasp*, as well as the commander of the *JFK* battle group.

They echoed your response that, because of an accelerated deployment schedule, they did not use Vieques during their final exercise, but that it had been used before for naval gunfire qualifications in the fall. In other words, they got the naval qualification taken care of there, but they also said that it would have been better if they could have had this in the final exercises right before deploying. This is where the football team gets together and scrimmages and says, this is how we work together. They believe that their orders were not to use their range for live fire, and all of them commented about a Presidential directive that would have forbidden them to do that.

Now, I looked up and I checked with the Navy, as well as the counsel of the committee, and found that the Presidential directive that they are talking about was one that was directed by President Clinton on January 31, 2000. However, that particular directive is one that referred to the referendum that was going to be taking place and when they cancelled the referendum that automatically cancelled the Presidential directive.

In addition to this, we actually put language in the law that is there today that says they cannot do that anyway because we would continue to use that range until certification came from both the CNO and the Commandant that it was not needed.

Well, I relearned three things on this trip: number 1, that Vieques is the only range on the east coast where naval gunfire qualification can take place; number 2, Vieques is the only location where the entire amphibious assault team can train together; and number 3, the commanders believe that live fire training is better than inert training. As one commander put it—and I asked him this question—he said, “If live fire training is a 10, my unit would be at a 5.”

The President, in his State of the Union message, talked about our military men and women and said they deserve the best training. He was not talking about 5 out of 10. He was talking about the best. Secretary Rumsfeld said in his testimony before this committee just last week that our men and women should train as if they are going to fight. In my recent conversation with both Admiral Clark and General Jones, I find their desire to train at Vieques both live and inert as not wavering.

So I have these two questions. They are yes or no questions. Believe me, there is not a person up here at this table who has not been misquoted in the press. This has happened to everyone at your table, too, I am sure. But I want to read something that was a press release from the Puerto Rican governor’s office and ask you if this is accurate or inaccurate, is it true or is it not true: “Secretary of the Navy Gordon England ordered the cancellation of the exercises and he overruled two high military officers, the Chief of Naval Operations Vernon Clark and the Commandant of the Marine Corps James Jones, who had asked to train in the island with real ammunition.” Is that true or false?

Secretary ENGLAND. False.

Senator INHOFE. Thank you very much. I do appreciate that.

The second question is this. Last week when we had both General Myers and Secretary Rumsfeld at that table, I asked them a question about the training and they were all very interested in the

training, but they said this is a Navy decision, this is not their decision—so that is going to be you. That is a Navy decision.

You have said in a letter that I have here that you will let the military make that decision. The military has made that decision. In the letter that came signed by both Clark and Jones—I will read out of this letter: “The shift of wartime operations following 11 September’s tragic events has led your uniformed leadership to review the current prohibition on live ordnance training at Vieques with an eye toward accomplishing vital Naval training while continuing to limit our impact upon the island and the people of Vieques. We respectfully request support of a wartime modification of current practice to sanction the use of live ordnance during combined arms training exercises prior to deployment.”

So the second question is: Will you make Vieques available for live fire training by making it clear to the commanders within the Navy that they may train there with live ordnance of their desire?

Secretary ENGLAND. Senator, the request was really overcome by events, because the fleet commander decided not to do live fire. I understand, and I believe he discussed that with you, it was also decided not to do it with the *George Washington*—

Senator INHOFE. Let me interrupt your response because I am running out of time. Yes, I talked to the fleet commander and I talked to the Second Fleet commander. They said they were under the understanding that they could not have live fire training. Now, my question is this: Will you make Vieques available for live fire training by making it clear to the commanders of the Navy that they may train there with live ordnance if they desire?

Secretary ENGLAND. Senator, I do not believe the decision is quite that simple, because there are other factors in this in terms of our ability to do live fire. We have not had any live fire training on Vieques for some time. The last time we did, it was very traumatic. That is how we got into all the security issues and all the problems on Vieques. That is what led to the Presidential directive.

So this is a situation that is not as clear as just deciding what I would like to do. The people in Vieques actually have a say about this and there are security issues associated with this. So I do not believe it is quite that easy to just decide. There are environmental issues, a lot of other issues that we have to deal with.

Senator INHOFE. Well, we are aware of all those issues. We are also aware that the judiciary can get in there and start talking about restraining orders and all these things. Yes, we understand that can happen. But the military wants to use live fire and train these guys so that they are able to go into battle with the very best training that they can have, which they cannot yet today. My question is would you allow your military to make that decision and to train with live fire?

Secretary ENGLAND. Senator, the military has not made that decision. I told you before I did not overrule them. They decided not to do that for *Kennedy* and they decided not to do it for *George Washington*. So they have already made that decision.

Senator INHOFE. Mr. Secretary, I cannot relinquish this line of questioning without rereading what they said. Now, you remember what they said. They said that “We respectfully request support of a wartime modification of current practice to sanction the use of

live ordnance in training.” This is what they are asking for. These are the top guys. These are the bosses. They are the bosses of the fleet commanders, as you well know.

Secretary ENGLAND. Senator, the fleet commander makes that decision. The fleet commander made the decision not to do it. He makes the decision. The fleet commander makes that decision.

Senator INHOFE. The fleet commander only made the decision not to do live ordnance in the final analysis because of the rapid schedule that they are under, which I understood. But they also said, the fleet commander as well as the Second Fleet commander, that they would have had better training if they had been able to have in the final training unified live fire training, and they so requested this.

Secretary ENGLAND. Senator, we do live fire in lots of venues. In lots of places we do live fire, and we train our people very effectively, as evidenced by the magnificent performance we have had over in the Gulf.

Senator INHOFE. So is the answer to the question no, then?

Secretary ENGLAND. They did not do live. They did not do live fire.

Senator INHOFE. Is the answer to the question no?

Secretary ENGLAND. I have lost track of the question.

Senator INHOFE. Let me read it again.

Chairman LEVIN. I am afraid that—

Senator INHOFE. Well, no. He has lost track of it.

Chairman LEVIN. Excuse me, though. I am afraid you are way over time on this. Just try it one more time.

Senator INHOFE. All right, one more time.

Chairman LEVIN. Try to duck it one more time and then let us go on.

Senator INHOFE. I think we need it. This is a very serious question.

Chairman LEVIN. I agree, but—

Senator INHOFE. Let me just ask it one more time. Will you make Vieques available for live fire training by making it clear to the commanders within the Navy that they may train there with live ordnance if they desire?

Secretary ENGLAND. Senator, I am telling you again, that is not solely my decision. There are events that you have to think about in this decision. If you do that without considering the people in Vieques, without considering the environmental issues, we could end up in a worse situation.

Senator INHOFE. Thank you, Mr. Chairman.

Secretary ENGLAND. We will look at that when we get to it.

Senator INHOFE. We have already considered all those things for 2 years now and this comes down to your decision, and I think you have answered the question.

Thank you, Mr. Chairman. I apologize for going over in my time.

Chairman LEVIN. Thank you.

Senator Landrieu.

Senator LANDRIEU. Thank you. I have an opening statement for the record.

[The prepared statement of Senator Landrieu follows:]

PREPARED STATEMENT BY SENATOR MARY L. LANDRIEU

Thank you Mr. Chairman. I would like to welcome our three distinguished service secretaries: Secretary England, Secretary Roche, and Secretary White. I'm very pleased that you are with us today to offer testimony on the budgets you have submitted. Having reviewed your statements, I find several areas of concern.

As chairperson of such a currently issue-centered subcommittee as the Emerging Threats and Capabilities Subcommittee, I am struck by the under-investment in research and development and science and technology across the Services and Special Operations for new cutting edge weaponry and information technology.

I support the increase in the Defense budget 100 percent, but I have pause with the seemingly "Cold War Era" approach to military procurement which permeates this budget. I see lackluster prioritization based on the current world threat of non-state terrorists.

We live in a time where the right technology in the battlespace means the difference between superiority of decision-making and being overwhelmed by the fog of war—where the wrong intelligence can send a team of special operators to their death—and where unmanned aerial vehicles should be able to do as many tasks as we can imagine they should, to spare the threat to human life.

My concern lies in the details of unfunded military programs such as cutting edge shipbuilding, new airframes to forward our JSTARS intelligence platforms, and needed technological upgrades to older aircraft such as the B-52, which are more cost-effective.

We can no longer afford to take the "same old" approach to war fighting by buying large numbers of weapon systems which may have no future security among the new threats of unstable nation-states, asymmetric war, or seeking out the networks of terror which left to grow, will certainly cause more innocent civilian deaths.

I ask you to be the visionaries of your services. You must look ahead farther than ever before and request appropriate levels of research and development and science and technology dollars to stay ahead of the threat. This is a trying time for all in the United States, our allies around the world, and especially our men and women in uniform, who deserve to know they have every advantage imaginable when they proceed into unknown air, sea, and land areas to seek out and rid the world of terror.

Mr Chairman, thank you for this opportunity to formally discuss the proposed budget with our distinguished guests—I have a couple of questions for them.

Moving on from Vieques, Mr. Secretary.

Secretary ENGLAND. Thank you.

Senator LANDRIEU. I do have two specific questions, Mr. Chairman, but I would first like to just read briefly from the President's State of the Union speech because it leads me into the first point I would like to make about the job before us. He said in the State of the Union: "Our discoveries in Afghanistan confirmed our worst fears and showed us the true scope of the task ahead. . . . We have found diagrams of American nuclear power plants, public water facilities, detailed instructions for making chemical weapons, surveillance maps of American cities, and thorough descriptions of landmarks in America and throughout the world. . . . Thousands of dangerous killers, schooled in the methods of murder, often supported by outlaw regimes, are now spread throughout the world like ticking time bombs, set to go off without warning. Thanks to the work of our law enforcement officials and coalition partners, hundreds of terrorists have been arrested. Yet, tens of thousands of trained terrorists are still at large. These enemies view the entire world as a battlefield. We must pursue them wherever they are."

He goes on to say: "First, we will shut down terrorist camps, disrupt terrorist plans, and bring terrorists to justice. And second, we must prevent the terrorists and regimes who seek chemical, biological, or nuclear weapons from threatening the United States and the world. Our military has put the terror training camps of Afghanistan out of business, yet, camps still exist in at least a dozen coun-

tries. A terrorist underworld—including groups like Hamas, Hezbollah, Islamic Jihad, Jaish-i-Mohammed—operates in remote jungles and deserts, and hides in the centers of very large cities.” “Our second goal,” he says, “is to prevent regimes that sponsor terror from threatening America or our friends and allies with weapons of mass destruction.” Finally he says, “We will work closely with our coalition to deny terrorists and their state sponsors”—and I insert, when they have such sponsors—“the materials, technology, and expertise to make and deliver weapons of mass destruction.”

My point this morning would be and my question will continue to be: What in this \$375 billion budget for defense are we doing to answer our President and our country’s call to focus on this exact threat, which is very different than the threats we have focused on in the past? Finding thousands of terrorists, not necessarily like the ones we just destroyed, identified in caves, but hiding in the center of jungles and cities, in large cities, in deserts, scattered throughout the world? What in this budget is helping us to prevent an attack of a weapon of mass destruction?

While I support missile defense, I would admit as a proponent of missile defense it is unlikely that the weapon will be delivered by a missile launcher, but much more likely that the weapon will be delivered by a crop duster, a ship cruising into one of our hundreds of ports, a briefcase carried through any number of a hundred entry points to the United States, or an aerosol can in one of the thousands of malls in the United States.

I think it is very serious as we talk about this budget to keep focused on the President’s words about what the new threat is and what in this budget is going to help protect Americans who are depending on us to do that kind of protection. My question is this, more specifically. We are setting up these new interim brigades and, Secretary White, you mentioned the urgency of doing this, and I could not agree with you more, getting these new brigades that can move more quickly, getting better intelligence, moving where the terrorists may be or where the conflicts may be, while we are uncertain as to where they will be in the future.

What have we invested in their training and preparation, particularly our two premier training centers in the United States, one in California, one in Louisiana? What have we invested in the standing up of these training facilities for these specific brigades?

Secretary WHITE. First of all, we have changed the scenarios and the way we have run the training facilities to move away from what I would describe as Cold War scenarios to the more complicated counterterrorist scenarios that you are talking about, so that the method of training in both of the national training centers is significantly different.

Second, as you pointed out, we are standing up the interim brigades as we go along. We will have one finished by the end of this year and there is one funded every year on to its completion in 2007. But I think we also have to realize that the military contribution is a part of a broad national effort. As Secretary Rumsfeld and Governor Ridge have talked about, it includes intelligence, economic initiatives, and political initiatives. It is the sum total of that that will enhance the security of the country, and we are certainly making our contribution to it in the Army budget.

Chairman LEVIN. If you would yield just for 10 seconds, Senator Landrieu. The first of three votes has begun and this is going to be a little more complicated than usual. If a few of us will go vote early in this first vote, come back, and then vote at the end of the second vote, we will be able to continue here without interruption. The next four Senators, if they are here, would be Allard, Dayton, Sessions, and Lieberman.

Sorry for the interruption, Senator.

Senator LANDRIEU. Just to follow up, and I am sure there is excellent training that is conducted throughout the United States and, perhaps because of these new battles that we are going to fight, more offensive than defensive, finding the terrorists before they find us and routing them out and finding them, I know that the training that goes on in Louisiana, because I have participated in these exercises, and the generals on the battlefield have called this training invaluable to carrying out the task that is before us.

My time has just about expired, but any investments that we can make in the training at these bases and creating additional training opportunities I think is crucial.

Finally, could you, for the record, provide the committee with more information on the ISR, the intelligence, surveillance, and reconnaissance, the role of the JSTAR, the new platforms that are necessary, I want to say, Mr. Secretary, I will always remember your quote: "We lost the horse, we lost the king, and then we lost the kingdom. So let us not lose the horse when we are talking about our intelligence assets."

Thank you.

Secretary ROCHE. Thank you, Senator, for your support.
[The information referred to follows:]

NEW ISR PLATFORMS

Secretary ROCHE. The Air Force is quite pleased with the role that Joint STARS and other ISR aircraft have played in Enduring Freedom. Last week during a CSPAN interview with General Jumper and I, I think the Chief called it "a magnificent aircraft." I couldn't agree with him more.

We are planning to continue to equip the E-8 with new technologies. One key upgrade will be to increase its ability to get data off board to our F-15E strike aircraft with a new Link-16 upgrade. That's a great example of the horizontal integration of platforms vision for the Air Force. We also plan to enhance connectivity with the Air Operations Center and other ground elements with a new DAMA SATCOM radio.

However, even with these and other modifications, the Joint STARS is not sufficient to meet our future needs. It's built out of an old 707 airframe that's going to cost more and more to maintain. We have a new AESA based radar technology that needs a lot of more power from the engines. The fiscal year 2004 budget will continue a major ramp-up of our activity to transition off the 707 airframe and onto a brand new 767-400. The new radar capabilities will be revolutionary. In fact, they will go far beyond what we can accomplish today, especially for combat identification of friend and foe on the ground and in the air, and for cruise missile defense.

The combination of longer range, heavier payload, higher altitude, and a truly extraordinary radar capability will eventually allow us to find and target threats with a very high degree of confidence and with much less risk to our manned platforms. This multi-sensor command and control aircraft, or MC²A, will be the hub of a constellation of manned and unmanned ground, air and space assets. We plan to buy the testbed in fiscal year 2003, and field the first aircraft in fiscal year 2010.

Joint STARS is the current workhorse for our GMTI capability and will remain so through the middle of the next decade. The future is the 767 based MC²A, and we will be focusing our priorities on spiraling far greater capability onto a brand new platform.

Senator LANDRIEU [presiding]. Senator Sessions.

Senator SESSIONS. Thank you.

Secretary England, we have spent a lot of time in this committee on the Vieques live fire question. It is not an itty-bitty matter. It is a matter that needs to be decided. I think the United States needs to be able to have a live fire range. This apparently is the only appropriate one. That issue, I agree with Senator Inhofe, needs to be decided by you. It needs to be decided in favor of the best possible training for the ships that we are deploying.

We are already reducing the number of those ships. They need the very best training possible, and I do not think this issue is going away. If you want to comment you can. I just want to share my view about it.

Secretary ENGLAND. Let me comment on this, Senator. First of all, we do have a study—one reason last year we decided to leave Vieques in 2003 was to get the emotion out so we could stay there and do nonexplosive ordnance. The whole objective last year was to be able to stay and do nonexplosive ordnance. By the way, we spent \$11 million in security and all that last year to be able to use the island of Vieques even for inert type of activity.

So we authorized last year a study by CNA to decide on the best kind of training we could do for our men and women in uniform. In my mind this is not an issue of Vieques, never has been. The issue is how do we best train our men and women in uniform.

While Vieques has some attributes, it has a lot of attributes that are missing. So we do not do a comprehensive training menu at Vieques. So we have a study under way to look at that and the study will be out in about the late April time period.

In the meantime, however, again I will tell you, the fleet commanders have decided not to do this at Vieques, not the Secretary of the Navy, but the fleet commanders have decided not to do the live fire there for various reasons. We are on the path that we set out to be on. We have the studies under way and I am convinced we will end up with the best answer to train our men and women in uniform. That is what this is all about.

Senator SESSIONS. Well, that has been looked at for some time and I wish you good luck if you find an alternative. We have had testimony here from the best minds on the subject that there are no alternatives available.

Secretary Roche, I know you and Secretary White were proud of the coordination between soldiers on the ground and pilots in the air. Secretary White, would you tell us what it was like for the soldiers on the ground to have the kind of air power that became available during the Afghan war?

Secretary WHITE. I think it made all the difference in the world. There have been some well-documented cases of Special Operating Forces on horseback who are tied in with space age technology to air assets, who could immediately bring precision munitions to bear in support of Northern Alliance forces. That really swung the battle in favor of our allies.

It is something that all of us who have been around in the business for a long time have always sought. We have the technology today to do it. We have the people that are capable of doing it, and it made all the difference in the world in Afghanistan.

Senator SESSIONS. Secretary Roche, this ground positioning system, tell me how that worked and precisely how your people were able to meet the needs of the soldier on the ground?

Secretary ROCHE. Senator, we have had a goal as we looked at the future to try to return to an era of General Arnold of the Army Air Corps supporting General Patton in the breakthrough after Normandy. This was one of the first things, in fact inspired by Secretary Wolfowitz chiding both Secretary White and myself to do better in this era.

What we were able to do is, these young people will use various and sundry things, basically a commercial GPS system and a set of binoculars that will give them a laser beam where they can get a range. Some have had to use paper maps, others have been able to just use a computer, convert these into GPS coordinates of the target, and then relay those by voice to the airplane.

Now, you can see how we can make a bunch of improvements in that over time. We are quite proud that our pilots can work for sergeants. It is perfectly fine. It has worked very, very well. GPS has allowed this. In other cases it has been a matter of putting a laser beam on a target and then certain systems both in the Navy—the AT-FLIR—and in the Air Force—the Lightning 2 pod has laser spot trackers—can pick up those spots, convert them to their own lasers, and bring down laser-guided weapons on them.

It is the very close coordination and the dedication to doing that which gives us a sense that we can transform how we work together.

Senator SESSIONS. I think it is cutting edge stuff, and I hope that you can keep that up and be able to broaden the capabilities there. The main weapon that was called down on the enemy was the JDAMs, is that correct, the GPS weapon?

Secretary ROCHE. JDAMs we used extensively. There are also laser-guided weapons as well. I can tell you that, interestingly enough, this was not just Air Force planes. It would also work with naval aircraft that had JDAMs. We for the first time had marine aircraft, naval aircraft, Air Force, coalition, all being centrally coordinated. So whoever had the weapon and was nearby was able to serve the sergeants.

Senator SESSIONS. It strikes me that this is a major breakthrough in warfare or at least a major transformation point in our warfare. If we are in a war that has more targets even than Afghanistan—and most enemies would have more targets than Afghanistan—we will need large supplies of these kind of weaponry. Can you tell us what this budget does in terms of increasing funding for JDAMs and whether it is sufficient?

Secretary ROCHE. Sir, I get a little confused between supplementals and other budgets, but the cumulation of what you have done for us will allow us to basically double the JDAM production and we will do it in stages. It is roughly 1,500 a month now. We will get it up in the first stage to the early 2000s, but we will have the facilities in place that we are investing in that if we need to we can move to 3000. Plus we have been working on a 1,000-pound weapon. We will now move to a 500-pound weapon for the targets where that is more appropriate.

Senator SESSIONS. You say you could move up even faster?

Secretary ROCHE. For a while there, I was tracking the number of JDAMs used per day as compared to the number we were producing per day and we got a little worried. At this stage of this particular conflict, we are not using very many and in fact we are able to build inventories up again.

Senator SESSIONS. It just strikes me that we ought not to have just a sufficiency of these weapons, but a surplus of these weapons.

Secretary ROCHE. I agree, sir.

Senator SESSIONS. Are you confident that the budget as outlined will provide us the sufficient surplus extra numbers that we need to provide potential military capability in other areas other than the one just in conflict?

Secretary ROCHE. We believe that is correct, sir, because the Navy is also investing money in increasing production. So it is both services are putting money in their budgets to increase JDAM production.

Senator SESSIONS. We will be looking at that closely. I do not think we ought to make a mistake on this issue. I think if the mistake is made it ought to be more rather than too few.

Secretary ENGLAND. Senator, we increased ours from approximately 1,400 in our 2002 budget to 9,880 in the 2003 budget. So we had a dramatic increase in JDAMs in the Navy budget.

Senator SESSIONS. Senator McCain.

Senator MCCAIN. I would like to apologize. I only have a few minutes because there are only a couple minutes left in the vote. I may have to come back and get in the queue again.

I want to discuss, Secretary Roche, the 767 tankers issue with you. When you wrote the letters to Congressman Dicks and Senator Murray and others, did you consult with the Secretary of Defense as to your position on the lease-purchase of these aircraft?

Secretary ROCHE. Sir, I did not consult with the Secretary of Defense personally, but with members of his staff, sir.

Senator MCCAIN. Which ones?

Secretary ROCHE. I believe we worked both with the Comptroller and with the Under Secretary for Acquisition.

Senator MCCAIN. So that was sufficient authority for you to proceed?

Secretary ROCHE. Well, it was sufficient authority, we believed, for us to ask for permission to go and negotiate, recognizing that if we ever had a financial lease we would bring it back to the Secretary.

Senator MCCAIN. Put in words in legislation, were you seeking legislation through the appropriations process which would authorize you?

Secretary ROCHE. We were seeking permission to attempt to negotiate a lease.

Senator MCCAIN. Through the appropriations bill. Did you consult with Senator Levin?

Secretary ROCHE. No, sir, I did not.

Senator MCCAIN. Or Senator Warner?

Secretary ROCHE. No, sir, I did not.

Senator MCCAIN. No member of the authorizing committee?

Secretary ROCHE. No, sir, I did not.

Senator MCCAIN. Why are you wasting your time here?

Mr. Secretary, do you believe in competition?

Secretary ROCHE. Yes, sir, I do.

Senator MCCAIN. Are you discussing this lease with, say, Airbus?

Secretary ROCHE. Yes, sir. Back as far as October, I made the point that if Airbus could come in and do something we would be delighted to have that.

Senator MCCAIN. Are you discussing this with Airbus?

Secretary ROCHE. Yes. I have met with Philippe Delmas and have opened up the door for him if he wished to do something.

Senator MCCAIN. But does not the legislation say the loan can only be Boeing 767s?

Secretary ROCHE. Yes, sir, but if Airbus did something that was particularly good I would come back to Congress, sir.

Senator MCCAIN. Oh, you would come back to get the legislation changed again on an appropriations bill?

Mr. Secretary, you do believe in competition, you said. In your letters both to Representative Dicks and to Senator Murray, which you did not share with any of the members of the authorizing committee, in both of them you said: "Beginning in fiscal year 2002, it would be in the best interest of the Air Force to implement this transition. We intend to work with USD AT&L and the OSD Comptroller to amend the fiscal year 2003 budget currently being vetted through the Department. This lease approach will allow more rapid retirement and replacement. If Congress determines this approach is not advisable, completing the upgrade through the purchase of new 767 aircraft beginning in fiscal year 2002 would be in the best interest of the Air Force."

Is there anything in the Air Force budget that calls for acquisition of 767s?

Secretary ROCHE. Yes, sir. They are for a new tanker, but it would not show up until 2008.

Senator MCCAIN. No, I am talking about in the fiscal 2003 budget which was just submitted to Congress, is there anything for a new tanker?

Secretary ROCHE. No, sir. In the POM we have it, not in the 2003 budget, because—

Senator MCCAIN. But you said in your letter that you would intend to work with the Under Secretary of Defense for AT&L and the OSD Comptroller to amend the fiscal year 2003 budget currently being vetted through the Department.

Secretary ROCHE. Because if we could start the lease earlier, sir, we would need some O&M moneys to go for the initial part of the lease.

Senator MCCAIN. So you did not seek authorization or appropriation in the fiscal year 2003 budget?

Secretary ROCHE. Sir, we did not seek authorization for any money.

Senator MCCAIN. Which is in direct contradiction to your letter to Congressman Dicks.

Secretary ROCHE. No, sir. If I may, Senator—

Senator MCCAIN. Yes.

Secretary ROCHE. It was a matter that plan A right now is to have a stream of money that would build to a KC-X that would be available in 2008. If in fact the lease would be available sooner,

we would not be spending money certainly on the old planes and we would ask for a redirection of moneys. That is what that meant, sir.

Senator MCCAIN. It is plain English: "We intend to work with USD AT&L and the OSD Comptroller to amend the fiscal year 2003 budget currently being vetted." Words have meanings, different meanings, obviously, to you and me. But I think that the casual observer would say that when you intend to work to amend the fiscal year 2003 budget and the money is not in the budget, that you did not amend the 2003 budget, which is what was stated in your letter.

So you are now seeking some relief from regulations concerning leasing arrangements. I just want to cite a quote for you on Mr. Daniels, the head of OMB: "Daniels was so cool to the Boeing proposal that many Capitol Hill observers believed the leasing deal would never be made. During last year's debate, Daniels not only warned against scrapping the rules designed to curb leasing abuses, but wrote to Senator Kent Conrad: 'The Budget Enforcement Act's scoring rules were specifically designed to encourage the use of financing mechanisms that minimize taxpayers' costs by eliminating unfair advantage provided to lease-purchases by the previous scoring rules. Prior to BEA, agencies only needed budget authority for the first year's lease payment even though the agreement was a legally enforceable commitment. In the late 1980s, General Services Administration (GSA) used this loophole to enter into lease-purchase agreements with a total long-term cost of 1.7," et cetera.

He is opposed to changes, according to this letter.

Secretary ROCHE. Yes, sir. Then by the time that bill was finished, the changes we had asked for were denied. If we can do a lease, it has to be under the conditions specified in the bill. It has happened in the past, sir, where we have been asked to try to lease 737s, were not able to come to a good deal, and could not bring something back to Congress. It will be the same way in this case, Senator. If we cannot get a lease that we can feel proud to show you, we will not do it.

Senator MCCAIN. Well, I have to go to vote or I will miss it, but I intend to pursue this line of questioning. You never consulted the chairman of the authorizing committee or the ranking member or any member of the committee. You did not get or consult directly with the Secretary of Defense over a \$26 billion deal.

I have only been around here since 1983. This is one of the more remarkable things that I have seen in the time that I have been a member of this committee. I intend to do everything I can to see that the taxpayers of America are taken care of in this situation, which clearly is a serious, serious issue here.

I have to go to vote. My time has expired.

Secretary ROCHE. May I answer that later when you come back, sir?

Senator MCCAIN. Please.

Senator INHOFE. I want to start the second round here and I want to spend just a couple minutes on the previous subject, Secretary England. Anticipating that there might be an effort—this is some time ago—to close this arrangement—Mr. Chairman, is it all

right if I go ahead and pursue my second round, since no one else is here?

Chairman LEVIN. Yes. I was going to go and have my round first. Have you voted?

Senator INHOFE. That is fine.

Chairman LEVIN. Have you voted?

Senator INHOFE. I have.

Chairman LEVIN. You go ahead. You have started.

Senator INHOFE. Anticipating what could be a problem, Mr. Secretary, I want to just read last year's defense authorization bill that we passed, a paragraph of it. "The Secretary of the Navy may close the Vieques Navy training range on the island of Vieques, Puerto Rico, and discontinue training at that range only if the Secretary certifies to the President and Congress that both the following conditions"—you are very familiar with this law.

I guess what I am saying here is you brought up a lot of concerns, the people there and what their reaction is going to be. These are things that are never brought up in consideration at other ranges. So it gets down to a very serious thing. I just wanted to see if you had thought it over and might have a different answer to the last question.

I do appreciate your very straightforward first response, but on this, in that the law is very clear that they should be able to do it if the military wants to do it, if the military wants to continue to train, would you preclude them from doing so?

Secretary ENGLAND. Senator, I am always going to obey the law. The law says that if I have an alternative before I leave I have to identify that alternative and do that in consultation with the CNO and the Commandant, and I will certainly do that, sir. I am definitely going to do what the law that was passed last year says. I thought it was excellent. I have no issue with the law and I will proceed according to the law.

Senator INHOFE. Would you preclude them from doing so if they wanted to continue live fire training?

Secretary ENGLAND. The law does not address live fire training, Senator. It addresses training on Vieques, and at the moment we are not doing live fire training on Vieques. We are doing inert training. We have been doing that since I believe some time in the year 2000.

Senator INHOFE. That is not the issue, though. The issue is live fire training.

Secretary ENGLAND. I do not think that is the issue, Senator.

Senator INHOFE. I do not think we are going to get anywhere at this hearing, but I have tried. I want to get everything in the record, to give you the opportunity to tell us whether or not you are going to allow it should the military request it. The law is specific when it says that we will continue to train there until such time as the CNO and the Commandant certify that there is an alternative that they are satisfied with.

Secretary ENGLAND. Senator, at this point I have not had a request in terms of a specific. The early request was overcome by events. We will look at the situation at the time it occurs. It is hard to put yourself in a situation when you do not know what that environment is, so I am not going to answer that question, as you

well know. I am not going to answer that question because I am not going to put myself in the hypothetical situation.

Senator INHOFE. I realize you are not going to answer the question. You have not answered the question.

Secretary ENGLAND. Right. I am not about to put myself in a hypothetical situation.

Senator INHOFE. Secretary White and Secretary Roche, let me ask you a question. In May 2001 *Sea Power* magazine interviewed Vice Admiral Amerault, the Deputy Chief of Naval Operations, Fleet Readiness and Logistics, whose statement suggests that this may not be an achievable goal, encroachment is a serious problem, and they go on to talk about the problem and say there is the potential to lose the range at Vieques in Puerto Rico and that could have a very serious readiness impact. It's a bell-ringer for us.

He concludes: "Vieques is just the beginning. We could lose any number of ranges based on encroachment." Have you seen encroachment as an issue on the ranges in the Air Force and in the Army, both Secretaries?

Secretary WHITE. Yes, we have.

Secretary ROCHE. Yes, we have. You have been very helpful in the case of one of them, sir, as have a number of your colleagues, and I thank you very much. This is a serious problem and I see—I agree with Admiral Amerault that this could have bad effect on all other ranges that are out there.

Senator INHOFE. I would like to, just real quickly in the remainder of my time, talk about two things that were left out of the budget. I recognize that everything cannot be in the budget, but in my opinion the two things that we needed the most that were left out are military construction and force structure.

On force structure, I have been concerned for quite some time about the new deployments that we have had over the last few years, places like the Balkans. I just got back from the Balkans last week. It seems like we are going to be there for a long period of time.

We are able to do some of these things because of the Guard and Reserve, but we have strained our Guard and Reserve, as you and I talked about, Secretary Roche, when we were going down to Oklahoma that time, and you and I also have talked about, Secretary White, to the point where a lot of the critical MOSs are not there.

When are we going to have to try to address the force structure, if you agree that that is a problem? Yes?

Secretary ROCHE. Yes, sir. Among other things, I went down and met with the recruiters for the Guard and Reserve and we are trying to do things like, if someone leaves the Active Force and they can fit a Guard position, giving them a waiver allowing them to do it. We are also trying to expand the roles of the Guard in things like Joint STARS, which is going very, very successfully in Georgia, and we will probably do more of that, or bringing the Guard into more of the information technology sorts of things.

So we have seen a Guard that right now has performed magnificently and is carrying an awful lot of the burden, and that is part of why we need to have a sense of what the long-term steady state requirements of Operation Noble Eagle as well as Enduring Force are in order to get some of these folks back to their jobs.

Senator INHOFE. Do you see, though, in addition to that, that 2 or 3 years out we are going to have to look at our force structure in terms of the regular services?

Secretary ROCHE. Our sense is that right now the services are working with the Under Secretary for Personnel and Readiness to see what ought to be expanded, the Guard, Reserve, or Active Force, in order to maintain the capabilities we currently have deployed if we need to keep those deployed.

Senator INHOFE. Secretary White.

Secretary WHITE. I think there is a general realization, with 35,000 Guard and reservists mobilized right now and the Guard picking up rotations in Bosnia, rotations in the Sinai, and so forth, that if we stay at this level of mobilization for an extended period of time, we are quite concerned about retention.

Right now we are at full strength basically in the Guard and Reserve. That is one of the reasons why the Secretary brought in the business of homeland security, the business of making sure when we take these obligations on to make sure that there are end dates to those obligations, like the commitment of 6,000 Guardsmen in the airports of the country. But it is a challenge that we are looking at very, very seriously, because the current level of deployment is stressing the force clearly.

Senator INHOFE. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator Inhofe.

Secretary White, National Guard personnel, while they are in a State status are permitted under the law to perform domestic law enforcement functions, such as airport security and protecting the U.S. Capitol. However, under the doctrine of posse comitatus they may not in a Federal status perform such functions, nor may active duty personnel perform such functions.

Last week Secretary Rumsfeld testified that the Department opposes efforts to revise the posse comitatus law at this time. At the same time, I understand that the Department is preparing to detail National Guard troops to other Federal agencies to perform law enforcement functions, and in the past the Department has opposed such efforts to get around the posse comitatus law.

Do you believe that such change should be made and that our troops, active duty or Reserve, should be assigned to Federal agencies to perform domestic law enforcement functions?

Secretary WHITE. I think in general, no, that the doctrine of posse comitatus has served the country very well and it is culturally a part of our heritage. We have, however, agreed on a short-term basis of limited duration, because of the significant challenge of border security to our overall homeland security posture. We have agreed to detail Federalized National Guardsmen under Title 10 to the three border agencies—Customs, INS, and the Border Patrol—for a limited duration.

We were very, very careful in this process to ensure it was of limited duration and only under that basis did we agree to do it.

Chairman LEVIN. There has been a great deal of concern and debate about the status of detainees that have been captured, as to whether or not they are prisoners of war or not. You are as the Secretary of the Army the executive agent for the Department of

Defense for administration of the enemy prisoners of war-detainees program. As the executive agent, you have a number of responsibilities, including providing appropriate reports to the Office of the Secretary of Defense, Chairman of the Joint Chiefs, and to Congress relative to that program. I do not believe we have gotten any reports from you. Have we?

Secretary WHITE. No.

Chairman LEVIN. We should, under the law, and I hope you will attend to that. But I want to specifically ask you about Army Regulation No. 190-8, which implements that directive, and I want to read it to you: "If any doubt arises as to whether a person having committed a belligerent act who has been taken into custody by U.S. Armed Forces belongs to any of the categories enumerated in Article 4 of the Geneva Convention relative to the treatment of prisoners of war, such person shall enjoy the protection of the present convention until such time as their status has been determined by a competent tribunal."

That competent tribunal under your Army regulation is a three-officer tribunal that is to determine the status of those people. I am not talking here now about a tribunal that is going to look at war crimes. That is a totally different thing.

Secretary WHITE. Right.

Chairman LEVIN. This is a three-officer tribunal which under our law, under our regulations, is supposed to determine the status of persons who have been taken into custody by the Armed Forces who have committed belligerent acts against us. I am wondering whether or not those tribunals have been appointed and, if not, why not?

Secretary WHITE. Well, I know that you had a discussion with the Secretary on this very subject the other day in his hearing. The view is that the Geneva Convention applies to the Taliban detainees, not to the al Qaida detainees, but in neither case do they enjoy POW status.

We have not been directed to conduct tribunals to be more definitive in terms of sorting out their status. So that is where it stands today.

Chairman LEVIN. Yes, but that does not quite answer the question. There obviously was doubt, I think in any reasonable judgment there was doubt as to whether or not those persons should be treated as prisoners of war, whether or not you are then required as executive agency to appoint the tribunal to determine their status. Is that not your obligation under your own regulation. It is not the President's determination. It is your determination under your regulations. It is not the White House counsel's determination. It is your determination.

First of all, did you participate in the decision that was made?

Secretary WHITE. No, I did not.

Chairman LEVIN. I think that the Army regulation reading as clearly as it does, where there is any doubt about the status of a person who is taken into custody who has committed a belligerent act, he is considered to be a prisoner of war and should be treated that way. Since you are responsible for that, I think that you should give the committee, at least for the record, an analysis with

your own counsel—and I would ask that the Army counsel be advised of this—as to why your regulation was not implemented.

Secretary WHITE. I will do that.

[The information referred to follows:]

DISPOSITION OF GUANTANAMO DETAINEES

Article 4 of the 1949 Geneva Convention Relative to the Treatment of Prisoners of War specifies the categories of people who fall into the hands of the enemy who are entitled to be treated as prisoners of war (POWs). If a detainee falls within one of the Article 4 categories of persons entitled to POW status, then he is a POW. If a detainee clearly does not fall within one of the Article 4 categories, then the detainee does not receive POW status. When there is doubt, then a tribunal under Article 5 of the Convention is appropriate to determine the status of the detainee.

The President has determined that the conflict with the al Qaeda is not covered by the Geneva Convention. The President has further determined that although the conflict with the Taliban is covered by the Geneva Convention, the Taliban detainees are not entitled to POW status under the terms of Article 4. Based on the President's determinations, there is no doubt regarding whether al Qaeda or Taliban detainees are entitled to POW status.

The joint Services regulation, *Enemy Prisoners of War, Retained Personnel, Civilian Internees and Other Detainees* (AR 190-8) (1 Oct. 1997), provides procedures for Article 5 tribunals should they be required. For example, the AR 190-8 procedure calls for a three-officer panel. As noted, an Article 5 tribunal is only required "should any doubt arise" regarding a detained individual's entitlement to POW status. No doubt has arisen regarding the POW status of al Qaeda and Taliban detainees.

Despite the fact that al Qaeda and Taliban detainees are not entitled to POW status, we continue to treat them humanely and in a manner consistent with the principles of the 1949 Geneva Convention Relative to the Treatment of Prisoners of War.

Chairman LEVIN. Thank you.

Senator Dayton.

Senator DAYTON. Thank you, Mr. Chairman. I am sorry I had to depart to be with a group from Minnesota and then go vote. I apologize, gentlemen.

One of the realities of our round of questioning is that it also for those of us at the far end of the table constitutes an opportunity to make an opening statement, so bear with my preamble, please. I want to do so because I think that the deliberations this committee is going to be making this year, Mr. Chairman, are really among the very most important that Congress faces this year.

The President's request, \$48 billion for 2003 and \$451 billion for the 5 years, is an enormous increase in military spending, so much so that, for that and other reasons, OMB dropped the customary practice of extending the figures for 10 years. Last week General Myers and General Franks made clear to all of us that those increases are not enough to do everything that they believe needs to be done. They talked about the desire to have a procurement budget for fiscal year 2003 of \$110 billion, which would be more than \$40 billion beyond what the President has proposed, which itself is a sizable increase.

I believe in a House hearing last week one of the Congressmen opined that the request falls 40,000 troops short of what the Army says it needs, that their aircraft procurement is only 100 versus the 400 that the three services combined would like, and the Navy shipbuilding is seriously inadequate to meet that scope of commitment.

So the military leadership it seems to me has done what they should properly do, which is to inform us civilians, yourselves, the

Secretary, the President, and Congress, this is what it would cost to do what you have outlined you want and believe we need to do. Yet, if you look at the consequences of that spending over the next decade, the paradox it seems to me is that, while it would significantly strengthen our national security, our national defense, our military strength, it also seriously weakens the financial security of this country.

That is where I think out of that context it is going to be very difficult to both assess your budget proposals and, frankly, to deny any of it. Fiscal year 1999 and 2000 were the first 2 fiscal years in the last 30 years in this country where the Federal Government's operating budget, the budget that excludes social security and Medicare expenditures, was in balance.

That fall I promised in my campaign, the President promised in his campaign, I think just about everybody who was running for Federal office that year promised that they would preserve that balance and put the social security and Medicare trust fund surpluses in what we called lockboxes, that the money would not be used for the operating funds, it would be used for paying off the national debt, so that in 10 to 12 years when the numbers of retirees increased we would have the ability to do so, so we could use some of the Medicare surplus some of us envisioned for prescription drug coverage for seniors.

Now, rather than keeping that balance for the next 10 years, the budget as proposed would run a 10-year combined deficit of almost \$1.5 trillion. That deficit would have to be paid for by wiping out all of the Medicare fund surpluses for those 10 years and 60 percent of the social security trust fund surpluses for those 10 years, which means that every additional dollar we spend on our military preparedness is a dollar that comes out of the Medicare trust fund or the social security trust fund and at the conclusion of those 10 years we are still in seriously high national debt and we have, I believe, seriously weakened this country's ability to meet its current and future needs for this society.

So in that light, I think your budget proposals are deficient in two respects. One is I think that the administration has failed to redefine what the threats are that we face in the world and are expected to face over the next 10 years, because, as the chairman said, these are long-term, long-range commitments and investments that we are making.

I understand that Secretary Rumsfeld has modified the two-war measure for preparedness. But as I understand it, those are essentially two wars against the former Soviet Union or against the former regimes in Germany and Japan. Where are those threats in the world today? Where are the nations that have anything approaching the equivalent military strength of the United States, that would be able to conduct or engage in that kind of protracted and highly costly war?

When our defense budget now equals the defense budgets of the next nine countries in the world combined, where is even the emerging possibility, the prospect of somebody who could engage us at that level?

Second—and I think these are entirely proper—the President has said we must include as part of national defense homeland defense.

I believe your budgets combined include \$12 billion of the \$37 billion the President has proposed for that. \$25 billion that is being spent in other categories really in my view should be considered part of our national defense spending.

Third, the President believes and you believe that we need to commit about \$8 billion, \$8.5 billion, in 2003 and increasing amounts thereafter to build the national missile defense system so that we are protected if a rogue nation shoots missiles at us.

But that it seems to me is implicitly the totality of threats that we are preparing to contend with over the next 10 years. First of all, I do not know that that is even appropriate. Second, I know that it is not affordable. So in that context as well, I think the other deficiency in these presentations is any real reduction in any of the ongoing expenditures to meet these new commitments. The ones that are referenced here, the programmed adjustment for fiscal year 2003, the \$9.3 billion, I think as others have asked, and I would be interested in further elaboration, too, are really minimal compared to what was stated by the Secretary a year ago of the need to seriously shift from older systems which are either outdated or not necessary for these threats of the future.

So this budget basically is one that in my view avoids any of the really tough decisions of what do you not do in order to be able to do what everybody wants to do. I guess I would ask you if you would respond to that. Yes, sir.

Secretary ROCHE. I would just make the following points, Senator. One, I think the Secretary has reiterated that we are trying in this new era in our programs to not worry about specific threats and try and predict them, but in fact to have a portfolio of capabilities that can adapt when we are surprised. That was the logic during the summer as we were preparing the budget and it turns out in September it was really brought home, that having a portfolio of forces really did things.

A good example is those what thought big-deck aircraft carriers were not useful. They were very useful this time. They are very useful also because of those long-range Air Force tankers.

Second, I think in terms of the amount of moneys we need, I understand how the services can say that there is a gap. From my own point of view, if we just had steadiness, if we could have steady budgets and steady growth, we can manage better, we can do better, and we can get well. We will take a little risk on not having everything fixed at once, but we do not have to go and fix everything now and then at some other point create another situation where everything obsolesces at the same time. So steadiness is probably more important to us than anything else, sir.

Third, when trying to get cost savings, as we were really working on early in the summer before Congress was able to help us, I can tell you when you try and do something like adjust the size of the B-1 force it is a very, very painful experience, Senator.

Senator DAYTON. You made that effort.

Secretary ROCHE. Yes, sir.

Senator DAYTON. Were rebuffed by the very forces—

Secretary ROCHE. In a very brutish fashion, we were reducing the B-1 force from 93 down to 60, plowing the money back in the remaining 60, realigning a number of bases, doing a number of

other things. It is working now, but it was sure a tough, tough thing to do. An enormous consumption of my time and the time of the members, who had to explain to their communities what this all meant.

Senator DAYTON. I thank you for pointing that out and I recognize that. I think that caused the Secretary last week to make the analogy to Gulliver who is being tied down by 2001 earmarks and the like.

Secretary ENGLAND. Senator, a comment about national missile defense. You mentioned \$8.5 billion. I know Senator Landrieu mentioned it also. The fact of the matter is there are people out there developing systems that will hit the United States. It is hard to ignore that fact. If they are developing them, you have to think they are probably doing it for a reason, and therefore certainly in my mind it is very prudent for this administration and the American people to defend themselves against a threat that is being developed.

Senator DAYTON. I do not disagree with you, Mr. Secretary. I guess my point is that, in addition to the homeland defense against terrorist attacks, in addition to this prevailing measure of preparedness to fight two major wars in two theaters simultaneously, that, as Secretary Roche said, if that is the portfolio we believe that we need to address, I guess we just need to recognize as a Nation that at our present structure for financing our government expenditures we are seriously in arrears.

Secretary ENGLAND. Well, we are spending this year, I believe, 3.3 percent of our gross national product on defense. The other day we mentioned when Secretary Rumsfeld was here the last time it was 10 percent. So we are at the lowest the Nation has ever been, I believe, at 3.3 percent. The question is what percent of the Nation's wealth is the Nation willing to invest in defense of the people, and it is really a pretty low number for that insurance policy.

Senator DAYTON. That may well be the case, sir. I am just saying I am not talking about percentages, I am talking about dollars, and I am talking about real dollars based on the economic projections that OMB has made. The numbers—and again, I think this is not your problem so much as it is ours—but the fact is they do not add up.

I need to go vote and I want to call on Senator Allard. I just want to leave also one query. Maybe you could respond in writing or subsequently. We spent a lot of time last year, your time as well, on a domestic BRAC. What consideration is being given to an overseas BRAC, closing down or consolidating these myriad bases, not even pulling out of countries. But I understand we have 52 bases in Korea, different sites in Korea, Japan, and the like. Is there some way we can achieve some real savings in the years ahead just by consolidating some of those operations? We do not have any Congressional members representing any of those.

Secretary ROCHE. Senator, that has happened. We have actually reduced the number of air bases in Europe, I can assure you, dramatically.

Senator DAYTON. Thank you.

Secretary ENGLAND. I am working on one, Senator.

[The information follows:]

OVERSEAS CONSOLIDATIONS

Secretary WHITE. The Army is working to reduce overseas sites and thus reduce costs by consolidating operations. Since 1990, the Department of Defense announced 28 rounds of overseas infrastructure reductions. The U.S. Army Europe has gone from 858 installations down to 241—this is equivalent to closing all of Aberdeen Proving Ground, Forts Hood, Lewis, Benning, Knox, Bliss, Drum, Sill, and Riley combined.

Currently, we have a couple of initiatives underway. We are relocating a heavy brigade combat team in Germany from 13 smaller installations to a single installation to improve training at less cost. This initiative is called Efficient Basing East. The United States Forces Korea is working with the Republic of Korea (ROK), under a proposed land partnership program, to reduce our use of ROK granted installation and training lands by consolidating onto larger installations and eliminating small costly installations. The benefits include reducing overhead and operating costs, enhancing force protection, improving command and control, and providing soldiers with modern living and working conditions. We will continue to look for ways to improve efficiencies overseas.

Senator DAYTON. Thank you.

Senator Allard.

Senator ALLARD. Thank you very much.

I want to address my first few questions to you, Secretary Roche. They have to do with the space-based radar. This is a high priority for me and I believe it is key to the Air Force's transformation. I have been encouraged to see the strong support for space-based radar, your support in accelerating that program.

What I am curious about is can you talk about what aspects of the program you will be focusing on with the increased funding that you have in the budget?

Secretary ROCHE. Yes, sir. The issue I have with the space-based radar is to make sure that this is done right and I do not have to come back and discuss a situation as I do on SBIRS-High, where the program is having difficulties. So first and foremost is to understand what is the concept of operations that we want the space-based radar for. We believe in the Air Force especially, Pete Teets and General Jumper and I, that what we are talking about is something that can do ground target moving indicators first and foremost, and therefore the issues for technology are how few in number, how slow are they moving, and how persistent can this system be.

So we are trying first and foremost to develop an architecture that will answer the question as to why we want this and therefore limit people adding onto it additional requirements which may cause its cost to go up very precipitously or cause us a situation where we are trying to solve something that is too difficult to solve. This system has to work and it has to serve commanders, and then have an ancillary role in terms of intelligence, surveillance, reconnaissance for other people.

To this end, the three of us are devoting our own time. We are the initial configuration control board. We will be going up to Lincoln Labs in Hanscom within the next 2 weeks to spend time on the concept of operations, what needs to be there, so as to start this program correctly before we get into a feeding frenzy as to who is going to build it, what are the appropriate sensors, how are those sensors going to integrate with other systems, to what degree should this satellite system serve as the only or should it be part of a portfolio. We will think that through so we have a success on

our hands and not something that just gets an appetite far ahead of our ability to satisfy.

Senator ALLARD. You mentioned some of the problems with SBIRS-High. We did some restructuring on SBIRS-Low and, like you mentioned, I understand there are some problems with SBIRS-High now. I understand that is in the acquisition process. Could you go into a little bit of an explanation of what kind of changes need to be happening with that acquisition process or maybe what you are doing to try to improve the acquisition process?

Secretary ROCHE. The first order of business, Senator, is to understand why we are suddenly having difficulties in a couple of space acquisition programs. Is it a matter that we have allowed the requirements just to build without discipline? Is there a matter that there is an expertise in the industrial base that has retired or is retiring and has not passed on the knowledge? Is it that we relied, I think foolishly, on total systems procurement responsibility where everything was devolved down to a contractor in the past years? I think that was a mistake, a big mistake.

Is it because we can only get 56 of our scientist and engineer billets in the space acquisition community filled, that we are missing the other, the remainders? We are trying to study that now. We are using the SBIRS-High as the most immediate case in point: What is there, what is wrong?

In each case, Senator, what we come upon is it is not the magic of the system, it is the basic management things. It is the basic technology things that are not working. It is sort of, well, why not? what is wrong here?

So we have challenged the entire space acquisition community to the point of saying that we are worried about continued confidence in them in terms of making sure these things start right and they stay on track, that we get early indications of difficulties rather than allowing something to go to such a point where it will cost an enormous amount of money to fix it. Then we have to discipline ourselves back in Washington to not add capabilities in the middle of the program, not change things, to be able to have something that is more steady.

So this field, besides having more attention to it in terms of trying to get some of our brighter people, trying to re-recruit scientists and engineers, we are taking a look at the fundamentals, because it appears it is in the fundamentals that we have had difficulty.

Senator ALLARD. Now, Mr. Secretary, I am also pleased that you are moving forward in your recent efforts to implement some of the recommendations on the Space Commission report, and also to see that the organizational changes you made are trying to integrate better between military space and the NRO, and I compliment you on that.

Are you planning to follow up on some of the other recommendations from the Space Committee, such as recommendations to develop a cadre of professionals that we need to reduce our space systems' vulnerability to attack?

Secretary ROCHE. Sir, I missed part of the question, but—

Senator ALLARD. Well, part of it is, I appreciate what you have done so far as far as following through with the Space Commission report. There are other areas specifically that were in the report

that I want to know whether you are going to follow up with. One of them is to develop a cadre of space professionals.

Secretary ROCHE. Oh, yes, absolutely.

Senator ALLARD. The other one, which I wonder if you would address, is the need to reduce our space systems' vulnerability to attack.

Secretary ROCHE. Yes, in both cases we are going to spend the time. By the way, one helps solve the other. If you have a professional cadre who really worries about this business, they will worry about how to red team it as well. I think you will find that we will be spending a good bit of time on making this an equal to our pilot community in our Air Force.

We believe in global reconnaissance and strike and that reconnaissance is key, our space community is key to what we do. In terms of our vision, it is global vigilance and the reach and power, and again space—I think you will find the commanders of the space units will start to come from the space community more. We will worry about their education, we will worry about their roles in command and how they feel about command.

So we are taking it very seriously by elevating things up to the Under Secretary, by making both General Jumper and myself and Pete Teets, as well as the Vice Chiefs of Staff, General Fogelsong, responsible as the executive agents for space. This community is probably going to get more attention than it may want for a while.

Senator ALLARD. I would like to wrap up with just one question to all of you and if you would respond, please. The President's budget reflects a savings of about \$200 million by decreasing headquarters staff and I am interested in how you are planning to accomplish this reduction in each of your areas. Will the reductions be in military or government civilian, or both, or will those reductions be in contract? If you can kind of give the committee some feel about how these reductions are going to occur at that particular level I would appreciate it. Thank you.

Secretary WHITE. We are looking at a reduction of both civilian spaces and military spaces. We have already completed the review of the Army's headquarters. As I said in my opening statement, we are at the field operating agency level now and we will achieve our 15 percent reduction. We should exceed it, as a matter of fact.

Senator ALLARD. Secretary England.

Secretary ENGLAND. Senator, we are not at the 15 percent yet. I believe we are at about 7.0 percent. Frankly, we would like to hold that for just a while because of the intensity of our conflict at the moment. However, we are working this whole issue of headquarters. We are really working well beyond that because the real savings are not just at headquarters; it is across the entire enterprise. So we are looking at every single thing we do. We get together regularly to look at this and we hope we are going to save far more than \$200 million. We are talking billions of dollars as our objective. So we have really set our sights well beyond just the headquarters staff.

Senator ALLARD. Mr. Secretary, one of the concerns I have is when they make cuts they always go down to the lower guys on the totem pole and you ought to be perhaps looking at the higher

level and they protect their own jobs. So I just would hope that does not happen.

Secretary ENGLAND. No. As a matter of fact, that is really what happened, I guess, the last time. Whenever the work force was cut, it was all cut at the lower end. As a result we have no young people in the business at the moment. We are very top-heavy, and in fact it is very expensive because it costs more to have longer-term employees than younger ones. You really would like to have a mix. It is good for the health of your organization.

So you are absolutely right, we do have to be smart in terms of how we do this.

Senator ALLARD. Secretary Roche.

Secretary ROCHE. Senator, in the past the Air Force has combined operating commands. In fact, they have done it at the top. SAC and TAC became the ACC, and in terms of our acquisition they blended units together. We have probably made in the headquarters now 7.5 percent, with about 7.5 to go.

We have a definitional problem that technology is causing us that we are trying to work out. The folks who are overseas who are in fact coordinating all of this air attack over Afghanistan are considered staff, whereas in the Navy they are on board an aircraft carrier and they are not considered staff. So we are working with OSD to say, can you—we do not mind the Pentagon part. That is not a problem. It is down in our component commands where the people who are really manning these combined air operating centers and directing all of this are considered staff, even though they are performing in an absolute warfighting role.

Technology is causing us difficulties. We can do things at a distance rather than having to be there, and yet we tend to think that is a staff function. So we are trying to work through these definitions.

Senator ALLARD. Thank you. I see that my time has expired. I think, Senator Lieberman, you are to resume.

Senator LIEBERMAN [presiding]. Thanks, Senator Allard.

Thanks, gentlemen, for your service and for your very interesting testimony. The theme of my questions has in some ways been echoed earlier, which is that, though the \$48 billion increase in the President's proposed budget for the Pentagon is obviously substantial and the highest in a number of years, we are faced with a multitude of demands that require choices. My concern is whether we have made enough of the choices to really drive transformation or whether we are still supporting with too much of the budget the programs that are serving us well, but whose utility is going to begin to run out.

Obviously, notwithstanding the \$48 billion, which is a very substantial sum, the actual buying power rises only modestly because of inflation, because of the increases in pay and benefits, which we all support, and because of current operations.

So with that preface, let me ask just a few questions, beginning with you, Secretary Roche, for the Air Force. The budget shows a large increase in F-22 procurement, but what I would call only a modest increase and in fact some drop in funding for so-called high demand, low density programs, which I always want to call high demand, low supply programs. For example, C-17 production drops

from 15 to 12 next year as compared to this year, despite General Franks telling us that we need more strategic airlift. The JSTARS acquisition stays at one per year, despite what seems to be very substantial interest from the CINCs who think that we have an inadequate—well, we do have an inadequate number of JSTARS to provide for full-time coverage.

Although bombers have increasingly demonstrated their importance, certainly over Afghanistan, I do not see that reflected in this budget, though I did note with some interest, Mr. Secretary, that the F-22 is now described as a “fighter bomber” whereas—

Secretary ROCHE. Yes, sir. The Navy always says “F and A” and we were saying “F”, but these things have been fighter bombers for some time, the F-16. Just think of the attack on SIRIC. It was all done by fighter bombers.

Senator LIEBERMAN. So let me ask that question. Why has the Air Force chosen to place such a priority on procuring the short-range tac air, which one could argue we have a lot of, rather than placing more emphasis on the other high demand, low density capabilities that I have talked about? It seems to me the CINCs are telling us they want more of these.

Secretary ROCHE. We are in violent agreement. If I can, the C-17, because it is multiyear, a lot of what would normally go in the beginning is being put in for long lead. It is to have an equal 15 a year come out at the line and in fact it exceeds 15 for a couple of years and at the very end is 13. So you cannot just look at the moneys funded in this particular thing for number of airplanes. It is a cumulative effect.

So the C-17 is not going down. In fact, it is 15 a year, which is a steady economic way to be able to do this at the Boeing line. I know we will be looking at whether we need more of the C-17s, given how we are working them to death in this situation over and above the normal war planning. This is the kind of example in the real world, as Secretary Rumsfeld has pointed out, that is a surprise and you have to be able to do things. So the C-17 is one of those high demand, low density things that is getting addressed.

The others, including the Ground Moving Target Indicator (GMTI), we are pressing on trying to put GMTI on drones, and so the NPRTIP will be doing that. In the case of Joint STARS, we are moving unfortunately one more 707. We want to then go beyond to make a GMTI-specific version of a different aircraft which is larger but can still take the radar gondola and then make the back end more battle management. This is an area we are addressing dramatically and it is a problem that we have been hooked to the old 707, which is just getting older and older and older and older as we go on.

So in fact we are doing that. With respect to the F-22, the program is 20 years old this year, Senator. This is the first time that we are finally going into production. But since the introduction of the last fighter bomber we have introduced the B-1, the B-2, the F-117, the C-17, the C-130J, the Joint STARS, et cetera, et cetera. This is an area that has to get addressed and so we are doing it, and its time has come.

Senator LIEBERMAN. Let me ask you one more question briefly and I want to turn this same focus to Secretary England. What

about the bomber force? What about the upgrading of the bomber force, particularly considering the remarkable performance in the last couple of conflicts we have been involved in of the B-2?

Secretary ROCHE. We are putting all the mods in the B-2 we ought to put in. What has changed in this over history is that each weapon has such an effectiveness because of precision that in fact you do not have the situation which created bombers, where you had to drop 1,100 weapons to get a .9 probability of hitting a certain part of a factory in Europe.

Each of these is so precise that you do not have that problem. So they perform beautifully, but we have used 18 bombers for the most part. We had four of the B-2s that we used initially when we were not sure of the air defenses. Post knowing about the air defenses, 10 B-52s and 8 B-1s have just done a remarkable job, a very, very small proportion of the overall force because the effectiveness of each weapon has been changed.

Senator LIEBERMAN. So you do not think we need to be thinking about procuring more bombers?

Secretary ROCHE. No, sir. I think procuring more of the weapons that make the bombers effective and upgrading the systems on the bombers is the appropriate thing. That is why JASSM will take the 60 B-1s and make them dramatically useful.

Senator LIEBERMAN. Secretary England, let me just ask you briefly—my time is running out. If I am not mistaken, at the current rate of acquisition, as you have suggested, in the next, what, couple of years, we are going to go under the 300-ship Navy.

Secretary ENGLAND. No, sir. We do not go under 300 ships. Even with our retirements, I believe the lowest we drop to is about 304 ships, sir. So we maintain our level through the FYDP.

Senator LIEBERMAN. Even though we have to do the 8 to 10 a year, that is the number I have heard, and we are at about 5 now?

Secretary ENGLAND. That also includes our submarines, sir, and we are adding two of those this year.

Senator LIEBERMAN. OK. I do not actually want to argue the numbers. I want to offer you a chance to make the case for why we need a 300-ship Navy. In other words, it was not so long ago that folks were arguing for a 600-ship Navy, and I believe in the standard, but I want to take you back to the fundamentals, because some might say in some ways just as Secretary Roche just said, high technology is allowing us to get so much more out of every platform that we can do it with less than 300.

So tell us why we need to keep it at that standard?

Secretary ENGLAND. The last study, which was last fall, conducted by OSD concluded we needed about 340 ships, Senator. That is because of theater missile defense and also another class of ship called the littorals, and that is one reason we went to DDX. We put a new program in this year, DDX, dealing with theater missile defense, also ship to shore in terms of fire support, and also for the littorals.

The Navy has a recent study. It concludes that we need about 375 ships. Now, I am not sure what the answer is, but the answer is more than where we are today, which is at about 310 ships. Over a long period of time, we do have to capitalize at about 8 to 10 ships a year. Ships last about 30 years. It turns out the average

age of our ships today is 16 years. Optimum would be 15 years. So we do not have an old fleet today. We do have some older ships, some of them very old, that we do desperately have to get rid of.

I believe this year we have built the base with DDX and with our other ships now in development, it turns out at this period in time most of our ships are still in some form of design. We need to get through this point so we can actually get some rate production and move into DDX.

The FYDP represents that. That is the way that we have this structured as we go into our out years. So this is still building the base so we can build more into the future. I believe it is the right decision at this point, Senator, but we do have to accelerate ship-building. There is no question about that.

Senator LIEBERMAN. I agree.

My time is up. Thank you.

Secretary ENGLAND. You are welcome, sir.

Senator LIEBERMAN. Senator Warner.

Senator WARNER. Thank you very much.

Let's turn to service end strengths. With the exception of the Marine Corps, the President's budget request for fiscal year 2003 includes no increases in end strength. Secretary Roche, I understand you have been quoted as urging an increase of 7,000 to 10,000 airmen. It is also my understanding the Army feels it might need upwards of 40,000 troops.

Now, to what extent in the course of the budget deliberations did this subject come up and how do you gentlemen feel about the reasons that were given by the Secretary of Defense that we would not try it this year?

Secretary ROCHE. Senator, I think the Secretary has asked the right question like any businessman would do. We know we need certain skills to increase; are there other skills that we do not need as much, or are there things we can move to the Reserve or move to the Guard or contract out? So I think the first order of business, and we are engaged in this, is a parallel track. One is to try to coordinate together in the services what our end strength situations are, and to do that we are going to have to find some answers to questions like the degree to which we have to maintain the capital of the United States.

At the same time he has asked us, quite rightfully I believe, to take a look at what things we can do without and what skills we have a very deep bench in and we do not need as many of. So you would do both of those in parallel, and that is being looked at at this time.

Senator WARNER. I understand while I was voting you talked, Secretary White, about the important role of the National Guard and where there are some stress points, particularly with regard to employers, the ancient problem that we have always had. Did you have a piece of that equation that you wanted to put in this record about the Air Guard? The Air Guard has performed brilliantly. Way back in the early days of the campaign in the Balkans, I took Air Guard planes in to Sarajevo in 1991, as far back as that. I have always been impressed with the way they responded.

Secretary ROCHE. They responded magnificently, sir. In this case, we would normally be using them to help rotate forces in Operation

Enduring Freedom, but we are tying up an enormous number of them here over the skies of the United States. There is a strain on them.

The Guard has been quite imaginative in almost having just in time Guardsmen. If they need to get someone back to a job for a day or two, they substitute someone for that person. They have been very, very imaginative in doing this.

But in the very long run we have to understand what it is we are asking of them and what ought to be done by Active Forces as compared to the Guard and Reserve Forces.

Senator WARNER. So their senior officers have a strong voice in the decisionmaking in your judgment?

Secretary ROCHE. Oh, yes. They are very close—in the case of the Air Force, both of them are very much involved in my deliberations.

Senator WARNER. Now let us go back to the original question, Secretary White.

Secretary WHITE. Well, the Secretary of Defense's position has been that the way we ought to unburden our structure is to start cutting back on deployments, that some of these deployments we have been in for years and years, the Sinai for example, and at least in that particular commitment he has come forward to say we ought to terminate it. So one way to do this is to cut back on the deployments that have such a high operating tempo and I think his direction is that we start at that point rather than immediately looking at plus-ups in end strength.

Senator WARNER. So you feel you can survive this period without any consequences on family structure, which in turn would affect your retention?

Secretary WHITE. I think we are hard-pressed right now, Senator. We talked about being hard-pressed before 9–11 a year ago. There are 35,000 Guard and reservists mobilized right now. It is a fairly unpredictable mobilization as to a rotation in Bosnia with the 29th Division from your home state, and that is causing a rising concern with employers and with families. The number one question is how long do we have to sustain this?

Senator WARNER. Thank you.

On the question of unmanned systems, several years ago this committee set a goal that by 2010 one-third of the U.S. military operational deep strike aircraft would be unmanned and by 2015 one-third of all U.S. military ground combat vehicles would be unmanned. Do you feel this budget enables sufficient funding to keep those goals on track? Secretary White.

Secretary WHITE. Well, yes. For the unmanned activities that we support in our interim brigades going forward, we think we have put the money to resource that from our perspective. Our commitment, obviously, is much smaller than the Air Force and the Navy in this regard.

Senator WARNER. One of the great chapters of this conflict in Afghanistan has been the unmanned aircraft.

Secretary WHITE. Yes.

Senator WARNER. Secretary Roche.

Secretary ROCHE. Yes, sir. I do not know about those specific goals. I can tell you that we have used these enough, as Secretary

Rumsfeld pointed out, to see how efficacious they can be, but to also understand the difficulties of operating with them. There is only so much bandwidth in the world and you cannot take the bandwidth of the brain and bring it back to a ground station. So exactly how to use them or not to use them is one of the conditions that we are trying to work on. The judgment of a pilot is still something that can be very important, although we have pilots who are manning these.

The new tactics and doctrine we are developing from them has been very important, but there are issues of when something goes wrong how to fix it in the air, how to change to a different system. So the issues of working with them are being understood.

Senator WARNER. I have to catch this last vote. Did you have anything to add to this question, Secretary England?

Secretary ENGLAND. Senator, I do not think we are going to hit those percentages by 2010, but I can tell you we have active programs both in the air and underwater, very active underwater, and we are working with the Air Force on the UCAV. So we are working. It is in our budget this year, sir.

Senator WARNER. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you.

Senator Carnahan.

Senator CARNAHAN. Thank you, Mr. Chairman.

I would like to direct my comments to Secretary Roche. I would like to discuss one particular provision of the 2002 Defense Authorization Act. According to the 2002 conference report, the Defense Department has been directed to report on how it intends to encourage teaming arrangements between Boeing and Lockheed on the Joint Strike Fighter. This report was due when the 2003 defense budget was submitted to Congress.

I recently wrote a letter to Secretary Rumsfeld requesting his cooperation in developing this report, but to date I have not seen any sign of the report. I would like, Secretary Roche, for you to consult with Secretaries Rumsfeld and Aldridge and get back to me some time this week with a certain date when this report would be completed and ready for our committee review.

Secretary ROCHE. Senator, I would be glad to, except, the way the Joint Strike Fighter works, I have now shifted the helm to the Secretary of the Navy. So if you could substitute his name for mine, he currently has the lead.

Senator CARNAHAN. Very good. Well, I thank you and would appreciate your help in this matter.

I have one more question that I would like to direct to both Secretaries Roche and England. Recent operations in Iraq and in Kosovo have shown that we cannot simply rely on stealth technology to avoid detection from enemy radar. Future air campaigns will bear little resemblance to the war in Afghanistan. Countries that President Bush identified as the axis of evil have far more advanced anti-aircraft capabilities.

Unfortunately, our only electronic jamming aircraft, the Navy's EA-6B, is over a decade old. Would you please explain the importance of honing our electronic warfare capabilities?

Secretary ROCHE. Yes, Senator. Electronic warfare or in fact trying to provide for the survival of aircraft in the air is a combination

of things. Stealth is one area, electronic warfare is another. With some of the new, modern electronically scanned—AESE, active electronically scanned antenna, radars, you have the notion of electronic attack. You can reverse the radar and jam.

So all of these have to be put together in a portfolio. There have been a number of programs to upgrade the types of pods and also the jammers on things like the F-15s. Secretary England has talked about a follow-on aircraft to the EA-6B or a follow-on program to the EA-6B. We look to it as well. But it is a combination of things. It is not just electronic jammers. But the jammers have been looked at both in terms of off-board jammers, towed decoys, upgrades to internal systems, electronic attack, stealth.

There is more to it than just jamming.

Senator CARNAHAN. Could you discuss also any plans you might have to develop new electronic attack technologies, such as the EA-18?

Secretary ENGLAND. First of all, the EA-6B, the Prowler, we have had cracking problems with the airplane and recently we had engine problems because of oil contamination. So we have had a difficult time with our EA-6Bs. As you observe, it is the only jammer we have left in the inventory. It performs jamming for all missions. So that is of concern, although we do have sufficient numbers today even with those problems.

But we are looking at a replacement. One of the possibilities is what is called a Growler, which would be an F-18E and F version. We have what is called an AOA, an analysis of alternatives, under way at the present time. That will be completed here in several months, and at that time we will have a preferred configuration to replace the EA-6B. We will be able to give you a definitive answer in terms of what is the best approach to do that.

One of the considerations is an EA-6B version. It would keep us from having another unique airplane, but, like I say, that analysis is still in work.

Senator CARNAHAN. Thank you very much.

Senator MCCAIN. Senator Bunning.

Senator BUNNING. Thank you, Mr. Chairman.

I would like to talk to the Secretary of the Navy for just a few minutes. In listening to your responses to Senator Inhofe about Vieques, Mr. Secretary, if you would have testified before this committee as you have testified in response to Senator Inhofe during your confirmation hearings you would not have received my vote, at least.

I thought when we confirmed secretaries of the Army, Navy, and Air Force they were supposed to be forthright in their answers and not try to evade questions. So today you have done just that. So I am embarrassed for Senator Inhofe and I am also embarrassed for you.

I also would like to ask you about the V-22 Osprey. Have we made any progress in making that airworthy?

Secretary ENGLAND. Senator, I believe we have. We will know very shortly. In April we start the flight test program, so we have incorporated into the airplane for flight test a lot of the fixes that came out of all the studies and analysis of the airplane that led up to the last crash that stopped the program. We have a much better

organization, I believe, both in our facility and also at our contractor facility in terms of how these problems are being worked.

My judgment at this point is that it is now up to the airplane to prove itself. The flight tests will start in April. It will run until some time later in 2003 and there will be several different configurations. Frankly, I believe the program will demonstrate that it can perform the mission for the United States Marines and also Special Forces. But that is what the flight test program is set to prove.

In the meantime, we are buying a minimum sustaining rate of airplanes, 11 airplanes this year.

Senator BUNNING. At \$1.5 billion in cost?

Secretary ENGLAND. I believe my number is \$1.32 billion, plus approximately \$600 million that we is budgeted for engineering development efforts.

Senator BUNNING. OK, you have requested \$1.5 billion for 11 of the aircraft in 2003, 2 more in the current year; or is that incorrect?

Secretary ENGLAND. Sir, I believe it is 11 this year. The number I recall is \$1.32 billion, but there may be spares or something with that. So we are in the same—

Senator BUNNING. So we are continuing to maintain the line.

Secretary ENGLAND. Yes, sir.

Senator BUNNING. On the aircraft that we are not sure we can make airworthy.

Secretary ENGLAND. Well, I believe it will prove its worth, Senator.

Senator BUNNING. Well, it may do just that.

Secretary ENGLAND. The issue we have, if we do not maintain the line and we prove the airplane, then it will be extremely expensive to get the program back on track.

Senator BUNNING. I can get to the DD-21 destroyer if we want to talk about startup again, because we have an additional \$961 million to do that again for the Navy, start up from scratch.

Secretary ENGLAND. No, we did not start up from scratch, Senator. We took the DD-21 program and we continued all the R&D that was going on. We did not stop the program. We did not have a line. We continued the program with all the development, but we expanded the program from just one version to three versions.

Senator BUNNING. An additional \$961 million.

Secretary ENGLAND. I believe that was programmed for DD-21 and we continued that for DDX. There is a whole range of technology. It is the R&D.

Senator BUNNING. It is R&D?

Secretary ENGLAND. It is R&D, yes, sir.

Senator BUNNING. But your testimony today is that the V-22 is going to succeed and be airworthy?

Secretary ENGLAND. Yes, sir, that is my judgment.

Senator BUNNING. A question on the EA-6B Navy reconnaissance and radar jamming aircraft. Is it true or is it not true that that was a joint decision with the Army to discontinue the EF-111 that did the same program the EA-6B does now?

Secretary ENGLAND. That was an Air Force airplane, the EF-111.

Senator BUNNING. Yes, I am familiar with it.

Secretary ENGLAND. Some years ago—I cannot remember the exact time—the decision was to have one jamming airplane and it would be the EA-6B.

Senator BUNNING. Now you are having problems with it.

Secretary ENGLAND. Well, we are having cracks with it. We just had an engine problem and we had contaminated oil, so we lost some engines. So they are recoverable. But the airplane is just getting old and we are having some problems with them. We are looking to replacement downstream.

Senator BUNNING. Would that be an upgrade of that aircraft or would that be as new aircraft?

Secretary ENGLAND. There is an analysis of alternatives being conducted right now, Senator, and I believe in a few months we will have the recommendation as to how to proceed.

Senator BUNNING. When you finally make that decision, will you inform this committee?

Secretary ENGLAND. Absolutely.

Senator BUNNING. Thank you.

Senator MCCAIN. Thank you.

Secretary Roche, you wanted to respond to my comment, and please proceed.

Secretary ROCHE. Thank you very much, Senator. I appreciate it. The point I hoped to make, sir, is that at this stage no moneys have been asked for. We do not know what the price of a lease would be. The second point is I am required to come back to the authorizing and appropriating committees once an amount of money and the conditions of a lease are put together. Therefore, based on the historic precedent of the 737, 757, and G-5 leasing experience that the Air Force was asked to attempt a few years ago, we were following that procedure.

I think the basic point, sir, that I would hope I could get an agreement with you on, is that the 707s are old airplanes. Granted, their age means that we probably are not going to find a class problem, but we might find a class problem, and we are heavily reliant on those almost exclusively in our tanker force. Therefore, introducing a new plane is one that is of great concern to me after I went to Tinker and saw catalytic corrosion, saw delaminating aluminum, and then checked on what happened when we refurbished the planes for Joint STARS, which takes them back to class A condition. Do these come in the force as brand new airplanes or do they behave for repairs like 10-year-old airplanes?

It turns out our data shows that they act like planes that are 15 to 20 years old. There is only so much you can redo when you take them back. So therefore the concern to replace tankers has been most on my mind. Trying to do that more quickly and save some money was also a point, sir.

Senator MCCAIN. Well, I guess we could continue this discussion for quite a while, but I have to tell you, my office is in the Russell Senate Office Building, which is named after the former chairman of the Armed Services Committee. I was privileged to serve when Senator Stennis was chairman. My great hero and mentor, Senator Tower, was also a chairman of the Armed Services Committee.

Here you orchestrated a deal without a hearing, without even informing the chairman and ranking member of the authorizing com-

mittee. I think I know where Senator Tower is today. He would not stand for it. He would not stand for it. It is not only an indictment of your behavior, but it is an indictment of the system we have here, where the appropriators have basically taken over the process. The authorizing committees are now very pleasant debating organizations, but we all know that the authorizing bill comes at the very end and all the money—and in a case like yours authorizing—is put into an appropriations bill.

Now we have reached the point where the Secretary of the Air Force with a 126-plane deal does not go directly to the Secretary of Defense, who might be interested. When I talked to him and said something about it, I thought it was outrageous, he did not know anything about it. Secretary Roche corresponds with members of the Appropriations Committees and lobbies with the Boeing lobbyists to get a deal which “authorizes” \$26 billion in a deal that is noncompetitive, because it names Boeing. It does not name Airbus, it does not name United Airlines, who has a lot of excess airplanes. It names Boeing.

Campaign finance reform is on the floor of the House today. Maybe this will cure some of this, because I know that Boeing has contributed millions in campaign contributions to both parties. So here we have a situation that is really kind of the ultimate of a process we have been on for a long time. In a way, I do not blame you for playing the game, Mr. Secretary. But the fact is that the chairman and the ranking member of this committee were not consulted by you. You did not even pick up the phone and say: Hey, we would like to lease these, we would like to get it put into an appropriations bill, where there is no place for it—appropriations are to give money for previously authorized programs. We are going to put into, we are going to try to get into the appropriations bill an authorization which will then allow eventually the purchase of \$26 billion worth of airplanes.

Now, my other question to you is—and you are free to respond—have you solicited any other offers? Have you solicited? Have you said, hey, anybody else want to offer up airplanes that we could use as Air Force tankers? Have you solicited anybody?

Secretary ROCHE. Again, Senator, if I could go back, and I am sorry if I am not communicating well to you, sir. No moneys were asked for. It was just the authority.

Senator MCCAIN. Why did you go to the appropriators and ask for it to be authorized?

Secretary ROCHE. Senator, what I understood, and it could be my mistake, what has happened in the past when the Senate asked the Air Force to try to lease 737s, which happened a number of years ago, it happened the same way. The Air Force could not come to a good deal for a lease and therefore did not do it.

So we were asking for the authority to try to do something, which then has to come back to the authorizing committee and to the appropriation committees in order to go into effect. But no moneys were involved.

The second point—

Senator MCCAIN. But it authorized the use of moneys, Secretary Roche. It authorized the use of moneys.

Secretary ROCHE. As best as I can read the language, sir, it gives me authority to attempt to negotiate a lease. I, or the Air Force cannot do anything unless we come back to the defense committees. We cannot move unless the defense committees approve. So effectively you have to, then, once there is a dollar amount and once there are terms and conditions, come to the authorizing committees and the appropriating committees as I understand it, sir. I could be mistaken.

Senator MCCAIN. Why did you go to the appropriations committee, Secretary Roche?

Secretary ROCHE. Again, sir, it was based on the historic precedent set by the 737s. There are again four 737s in the current bill, to ask me to go and try to do a lease on 737s for VIP travel.

Senator MCCAIN. Wow. That is remarkable, 100 airplanes based on the precedent that some VIP aircraft were requested.

Would you answer my question about——

Secretary ROCHE. The second part, about soliciting others.

Senator MCCAIN. Have you solicited any offers from any other entities besides Boeing and does the language that you orchestrated to be put into the bill allow for you to solicit any other company or corporation to make an offer, since it specifically states only Boeing aircraft?

Secretary ROCHE. First and foremost, I do not believe I orchestrated the language.

Senator MCCAIN. Well, I have your letters.

Secretary ROCHE. You have the letters, but the specific language——

Senator MCCAIN. I ask that they be made part of the record.

Chairman LEVIN. They will be.

[The information referred to follows:]



SECRETARY OF THE AIR FORCE
WASHINGTON

7 DEC 2001

The Honorable Patty Murray
Committee on Appropriations
United States Senate
Washington, DC 20510-6050

Dear Ms. Murray:

Thank you for your support of our KC-135 replacement program. The KC-135 fleet is the backbone of our Nation's Global Reach. But, with an average age of over 41 years, coupled with the increasing expense required to maintain them, it is readily apparent that we must start replacing these critical assets.

I strongly endorse beginning to upgrade this critical warfighting capability with new Boeing 767 tanker aircraft. I know there has been much discussion on how we should acquire these aircraft. A lease initiative specifying a "tanker replacement" would allow us to acquire the increased capability of the 767 in greater quantities and earlier than a traditional procurement. However, we support whatever approach Congress determines should be used. The most important factor is that this replacement program starts as soon as possible. To this end, we will work with the ASD (AT&I) and the OSD Comptroller to amend the FY03 budget currently being vetted through the Department.

Our long-term goal is to expand our tanker replacement vision from air refueling to include other key mission areas. We also intend to consider elements of command and control, as well as intelligence, surveillance, and reconnaissance (ISR). This initiative would also enhance our efforts to expedite development and fielding of a Joint Stars Radar Technology Improvement Program on a 767 multi-mission command and control aircraft platform.

I greatly appreciate your support in the FY02 Appropriations Act as we work to upgrade our overburdened tanker fleet. Your interest and continued support are crucial as we move forward with this critical recapitalization effort.

Sincerely,

A handwritten signature in cursive script, appearing to read "James A. Baker".



SECRETARY OF THE AIR FORCE
WASHINGTON

9 October 2001

The Honorable Norman Dicks
House of Representatives
Washington, DC 20515

Dear Mr. Dicks:

I appreciate your interest in jump-starting the replacement program for our venerable KC-135 tanker fleet. These critical aircraft, which are the backbone of our nation's Global Reach capability, have an average age of over 41 years and are becoming more and more expensive to maintain. Due to the effects of age, these aircraft are spending over 300 days on average in depot maintenance, which affects our ability to respond to the many global demands on our force.

I strongly endorse beginning to upgrade this critical warfighting capability with new Boeing 767 aircraft. If Congress provides the needed supporting language, we could initiate this program through an operating lease with an option to purchase the aircraft in the future. This leasing approach will allow more rapid retirement and replacement of the KC-135Es. However, if the Congress determines this approach is not advisable, completing the upgrade through the purchase of new 767 airframes beginning in FY 02 will be in the best interest of the Air Force. To implement this transition, we intend to work with the USD(AT&L) and the OSD Comptroller to amend the FY03 budget currently being vetted through the Department.

From the warfighter's perspective, this initiative could provide the opportunity to expand our tanker vision from air refueling and limited airlift to include other key mission areas. We intend to consider elements of command and control, as well as intelligence, surveillance, and reconnaissance (ISR) for the KC-X—in other words, a smart tanker. This initiative will further enhance our efforts to expedite development and fielding of a Joint Stars Radar Technology Improvement Program on a 767 multi-mission command and control aircraft platform which we are hopeful the Congress will also expedite in the FY02 Appropriations Act.

I very much appreciate your support in the FY02 Appropriations Act as we work to upgrade our overburdened tanker and ISR fleets. Your interest and support are crucial as we move forward with this critical recapitalization effort.

Sincerely,

Secretary ROCHE. I do not believe I orchestrated this. I asked for something because I felt—

Senator MCCAIN. You advocated it.

Secretary ROCHE. I advocated it, yes, because I feel that the tanker situation is sufficiently worrisome to me that the sooner we can fix it the better, which is one of the reasons you do leases, like Her Majesty's Air Force is leasing C-17s to get a capability much, much more quickly.

With regard to asking others at the time there had been competitions both in Italy and in France and in both cases the Airbus candidate lost. But I was open to it, and I stated so publicly.

Senator MCCAIN. I ask my question again: have you solicited any other offers from any other entity that may be able to compete, number 1, like we do usually, to compete for bids and things like that? Number 2 is, does the language prohibit any other, since it says only Boeing aircraft?

Secretary ROCHE. The language as it currently stands would prohibit it, but if I were to come back and say that X has a much better deal for the country, can in fact help Navy and Air Force planes be tanked, and it requires some change, I would assume that language could be changed.

Senator MCCAIN. Which is why your letters ask specifically for Boeing aircraft?

Secretary ROCHE. If I can on that point, sir, if I may. At the 11th of September, after the attack, there was a drop in commercial airlines. There were a number of cancelled orders. Very much like the situation a predecessor of mine a number of years ago faced when he found a number of DC-10s that were not usable, brought them into the Air Force, and converted them into KC-10s. I looked to see if there could be a deal that would be good for the American people, good for the Air Force, by picking up excess aircraft that were made excess because of cancelled orders with Boeing. That is what started it, sir.

Senator MCCAIN. I would again like an answer to the question: Have you solicited any group or organization or entity to make a proposal?

Secretary ROCHE. Sure. I said I have spoken with Philippe Delmas.

Senator MCCAIN. Have you solicited? I would like an answer. Have you solicited—

Secretary ROCHE. I said yes.

Senator MCCAIN.—anyone to propose, to make a proposal, in writing said, we would like to have proposals? Was it published anywhere, we would like to have proposals by different corporations, companies, anybody who thinks that they can fulfil this requirement?

Secretary ROCHE. In writing, no, sir. But I think I have solicited—I have not solicited Boeing in writing, either.

Senator MCCAIN. Boeing is in the law, Mr. Secretary. Why would you have to solicit them?

Secretary ROCHE. Senator, I have spoken to Philippe Delmas, who is the chief executive of Airbus.

Senator MCCAIN. But you have not solicited any. Now it is past December and here we are in February.

Secretary ROCHE. If he has a proposal I would be more than willing to look at it.

Senator MCCAIN. I thank you very much, Mr. Chairman. Again, I strongly urge that we have a full committee hearing on this issue. It is \$26 billion, which is on track to go to Boeing Aircraft in violation of what the head of the Office of Management and Budget deems inappropriate lease-purchase contracts. I strongly urge a hearing. I thank you, Mr. Chairman.

Chairman LEVIN. Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman.

Secretary England, as you well know from our numerous conversations, I am very concerned about the low current procurement rates of ships and aircraft. The Navy has over and over stated that its goals are to procure 8 to 10 ships per year and 180 to 210 aircraft per year. Yet the Navy's budget does not reach these goals until very late in the Future Year Defense Program. That is also of great concern to me because I have seen too often the pattern where the Navy or the other services sincerely intend in those out years to reach the goals, but then events intervene or budget constraints interfere and we never get to where we need to go.

The fact is that we are seeing a continual increase in the operational tempo. We are seeing increases in the average age per platform. Ship depot maintenance availabilities are more often than not exceeding the notational costs. Aircraft are requiring more maintenance per hour and are experiencing increasing failure rates on major components, resulting in significantly increased costs per flight hour.

My concern is that we need to start rectifying these deficiencies now and that we are fast sliding down a procurement hole that is going to be very difficult for us to climb out of and to meet our goals and current requirements. I was struck in my visit to Central Asia and talking to the service men and women, the sailors and the admirals on the U.S.S. *Theodore Roosevelt*, the operational tempo is incredible. I do not know what we would have done if we did not have our aircraft carriers and our carrier battle groups in this war, since so many of the strikes have originated from our aircraft carriers. I think it is in the neighborhood of 75 percent, according to your testimony.

So what are your thoughts on our current force structure and our budget plans and whether or not we have a match here for our mission requirements?

Secretary ENGLAND. Well, first of all, as Secretary Roche just said, I violently agree with you. I will use the same expression. Obviously, we do need more ships, we need more airplanes. We made some hard decisions this year and I believe we made the right decisions in 2003, just like the *Kennedy* that had trouble getting out to sea because the maintenance had not been done in the past and we had a lot of delays. It is no value to our Navy to have assets that do not operate.

So this year we put a lot of money, we put \$3 billion, into our operations and maintenance (O&M) accounts. So \$3 billion went into O&M accounts. By the way, the Navy had an increase this year of \$9.5 billion. \$4 billion went to the personnel account, \$3 billion went to O&M accounts, a little over \$1 billion went into R&D, and a billion dollars went into procurement.

But the billion dollars that went into procurement went into munitions because in the past years it had been way underfunded and we had to fund the munitions. So we put a lot of money into munitions this year, \$1 billion over last year.

Now, also we are doing two SSGNs. That is another billion dollars we invested, and they count. They are real assets of the United States Navy.

We had prior year shipbuilding accounts. Last year it was \$800 million, this year it is \$645 million. That is money we spend for

prior year contracts. We do not get anything for that. That is for bills from prior years, prior year accounts. We still have, by the way, \$1.6 billion to work off in that account, so we will be back here every year working that off.

We put \$400 million into our current shipbuilding account so we would forestall these problems in the future. So just our prior year shipbuilding and our \$400 million where we increased our funding level, that is another whole ship, frankly. But it will help protect the future and pay bills that we had run up in the past.

Now, this year we're doing what I call filling all the buckets. To the best of my knowledge, we filled all the buckets across the Navy and the Marines. So in the out years, we should not have to take money out of shipbuilding or airplanes. We should actually see the benefits of that money to buy airplanes and ships. I would certainly like to buy more this year, but we made priority decisions and I believe they were the right decisions, Senator.

Senator COLLINS. I do not dispute the need for more funding in each of the accounts. I guess maybe the question for this committee is whether the Navy's share of the \$48 billion increase overall is sufficient, given the shortfall in procurement accounts.

One other quick question before I go on to a question for Secretary Roche and for you as well. Is the down-select for the DDX still on track for April?

Secretary ENGLAND. Yes, it is.

Senator COLLINS. Thank you.

Secretary Roche, as you are well aware, the Mobility Requirements Study 2005 identified a sea and airlift shortfall, and this obviously applies, I guess, across the board. Could both you and Secretary England tell us more specifically how the current operations of Enduring Freedom and Noble Eagle have exacerbated the lift shortfall?

Secretary ROCHE. Yes, Senator. A couple of things come to mind. One, the older aircraft like the C-141s, a number of our C-5s, are breaking. They are old, they are just old. C-141s have to be retired. We are using them now until we get enough C-17s in place.

Second, we are using the C-17 more than we ever intended to and I am concerned that its maintenance is not getting enough attention because it is not being pulled off the line enough. We are looking for the future to say—there was the study having to do with expected scenarios of conflict, but then there are the realities of what we are doing in this long-term war on terrorism, and mobility is key since Afghanistan is totally landlocked. Everything that goes in, everything that comes out, has to go in by air, including the water our troops drink.

Therefore, we will look over the next couple of years at the C-17 situation to see if we should extend that line. At the same time, we are in this year's budget requesting the permission of the committee to have a multiyear funding for the C-130J, which is a longer haul, more retailing airplane compared to C-17, which is wholesale.

Senator COLLINS. Secretary England, would you like to add any comments?

Secretary ENGLAND. Senator, I really do not have much to add here. I believe we have been able to deal with the requirements for

Operation Enduring Freedom. Our deployed forces have 30 days of supply with them, so when our marines go into Afghanistan they have 30 days of everything with them. So to the best of my knowledge, we have not had an issue during Enduring Freedom. We have been able to supply our ships and our people. Fortunately, we have two countries that are very important to us, Bahrain and United Arab Emirates, and they have been very helpful to us. So my judgment is we have done quite well in that regard.

Senator COLLINS. My time has expired. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator Collins.

Senator SESSIONS.

Senator SESSIONS. Thank you, Mr. Chairman.

Secretary England, you were talking about this prior year funding debt you had to pay, obligated money that has fallen to you to pay so that you can not get to spend it. Is that what Secretary Rumsfeld felt is bad management and said he is going to try to end, or is that something we have to live with year after year?

Secretary ENGLAND. Well, I certainly hope we do not have to live with it. Like I said, this year we have added the funding of current contracts by about \$400 million. That is, we have brought the estimate to completion up by \$400 million, to hopefully forestall this problem in the future. When we look at this issue, it is for lots of reasons. Rates have gone up, perhaps changes that we imposed. Keep in mind, these ships are built over a long period of time, so obviously we introduce technology, et cetera. There are some costs associated with that, but that is really a valid cost because it improves our product.

But a lot of this, frankly, has to do with, I guess I would say, the imposed inefficiency of the yards. That is, we buy at very, very low rates, so we buy at very low rates and we pay top dollars. Therefore it is important for us to get the rate up so that we get the cost down and get better control of our ship costs.

I certainly hope this is not something we have to live with. We are working very, very hard to end these prior year shipbuilding accounts. Our Assistant Secretary, John Young, and I work this regularly and I believe we will be successful with this.

Senator SESSIONS. Well, I think it is important for us. It is difficult enough to manage and oversee a budget and approve a budget that has numbers shifting from 1 year to the next, and I appreciate your working on that.

Let me just make a point and ask a couple of questions. Today's Navy I understand includes about 315 ships, although I saw an article the other day that said 310. Do you have a hard number on that, Mr. Secretary?

Secretary ENGLAND. Let me see if I have an exact number here. I believe the number of ships today is 310.

Senator SESSIONS. Which is lower than we have been complaining about at 315, and we do have escalating operations and maintenance and personnel costs that have gone up and we want to pay our sailors and our personnel more, and it has kept us from recapitalizing the Navy at the rate we would like to. It has kept us below the 2001 QDR, the Quadrennial Defense Review, statement of what is necessary.

The fiscal year 2003 budget accompanying the Future Years Defense Program does not allocate future years investments sufficient to build the number of ships required to recapitalize the fleet. The request for years 2003 through 2007 as I read it is 18 ships less than was required in the QDR plans. So this is a result of retiring ships earlier than their projected service life, not building the required *Virginia*-class submarines called for by the Joint Chiefs attack submarine study, and low procurement rates for other ships.

So I am not criticizing you. It is not your fault that we are in this predicament, and I salute you for making some tough calls. You had to make some tough decisions looking at the numbers you were allocated.

Let me ask you about some potential ways that we could improve our ship effectiveness, the actual number deployed in a wartime environment, and see if you have thought about these and what ideas you might have about it. There are four areas that I think the Navy should examine, and Senator Kennedy is chairman of the Seapower Subcommittee and I am the ranking member and I will be seeking information on some of these issues this year in some hearings.

We could assign additional ships and submarines to home ports closer to their areas of operation. This is sometimes referred to as forward home porting. We could assign a ship to remain in a permanent forward area of operations and rotate crews back and forth, which is not historic Navy policy, but we do it on submarines, and that has some real potential, I think.

We could retain ships to the end of their full service life rather than retiring them early, and we are doing that. I was on the *O'Brien*, a Spruance class destroyer, a few weeks ago in Japan. It performed well in Afghanistan and it is now set to be decommissioned rapidly.

We could preposition additional ships in forward operating areas that would be maintained by very small crews during normal circumstances and that could be beefed up in times of emergency. This would be analogous to the manner in which the Ready Reserve Force ships have been kept ready to begin operations in a few days.

Are those some ideas that you are considering? If we did those, is it possible to get more ships in fighting areas where we need them? Recognizing, Mr. Chairman, that most Americans might not know that it takes three ships to maintain one ship in forward deployment the way we operate today.

Secretary ENGLAND. Senator, I believe you are right on. The fact is I think the CNO would also agree with you. We have initiated across the Navy, with the CNO in a leadership role, to look at a wide range of options as to how we get greater deployment out of our existing fleet.

Also, by the way, the faster we get them through the depots, the faster we get them through the maintenance cycles, that effectively increases the size of our Navy. So you are right, anything that effectively increases the size of the Navy is certainly worth looking at, and we are looking at all those ideas and other ones also.

Senator SESSIONS. So even if the number of ships were low, if you could maintain more ships in war-fighting areas, the impact would not be as great.

Secretary ENGLAND. You are absolutely right. It effectively increases the size of the Navy if we can do that. Like I said, we are looking at all those alternatives. It is the most efficient way to go, it is the most effective way to go, and we would be happy to come brief your committee on all these initiatives, Senator.

Senator SESSIONS. We will be submitting some follow-up questions on that subject, and know that we are still going to need some new ships, but if we can maximize those old ones I think that would be helpful.

Thank you, Mr. Chairman.

Secretary ENGLAND. Thank you, Senator.

Chairman LEVIN. Thank you, Senator Sessions.

I want to go back to the tanker leasing question and ask you, Secretary Roche, a few questions on this point. You were quoted in the press as saying that the language implementing any such lease would need to be changed. In other words, legislative language would be necessary in order for you to enter into such a lease, and I am wondering if that is accurate.

Secretary ROCHE. No, sir. I do not know the contents of that. What I am saying is that we are now—the facts are as follows, sir. We are now taking the language from the bill and seeing what the conditions are and if a lease can be done under those circumstances. If we can, then we would move forward and we would try to put one together. But it is a function of cost of money, it is a function of residual values. There are no dollars involved.

I have to come back to you once there is something that involves dollars. But it is the constraints, the guidelines. Originally, I had asked if there was a chance to waive the provisions of a capital lease for scoring purposes in order to have these aircraft get here sooner, but that is not my position, that we would have to change. We are trying to work with it as it is.

Chairman LEVIN. So you are saying there are no legislative changes or guidelines that would have to be amended in order for you to enter into such a lease?

Secretary ROCHE. Only if somebody like Airbus came along and made a deal that was so good, an offer that was so good, that we felt we would prefer it, and then we would come forward, yes, sir.

Chairman LEVIN. Other than that, changes in guidelines?

Secretary ROCHE. As best as we can tell now, sir, we are examining it because there are also policies on the floor that were done to explain what some of these provisions meant, like what is a new aircraft? Is it one with a tanker boom or is it one without a tanker boom?

Chairman LEVIN. Is there any funding in the fiscal year 2003 budget request to begin these leases if you decided to go forward?

Secretary ROCHE. No, sir, there is not, because I was trying to see if I had permission to go forward. In fact, there is no money at all in the budget for leasing. There is a plan B. If we can do something faster, fine, but we would stay on track with plan A, which was to develop the KC-X.

Chairman LEVIN. Is it possible you can enter into a lease without funding?

Secretary ROCHE. No, sir. I would have to come back and either amend the budget—as I understand it, Senator, have to amend a request or reprogram money to make the first payment or not make the first payment until next year and get permission to do so. So as far as I know, I cannot do anything unless I come back to an authorizing committee and an appropriations committee with something in hand, as compared to the authority to try and get the thing.

I face the same problems, Senator, on the four 737s that are there.

Chairman LEVIN. Just so that we are real clear, for one of two reasons, either of two reasons, you could not proceed without coming back to the authorizing committees?

Secretary ROCHE. Yes, sir.

Chairman LEVIN. The Appropriations Committee.

Secretary ROCHE. Yes, sir. As I read the bill, which I always thought was the case, once I got the money, I would have to have the money authorized and the money appropriated. It was a matter—

Chairman LEVIN. Once you got the—

Secretary ROCHE. The deal. Once I have a construct, so I had an “it,” to bring the “it” forward. I would require authorization for the “it” and I would require appropriations for the “it,” but I could not do anything with the companies if it was totally out of the question, which is the reason I was asking if we could go forward.

Chairman LEVIN. But not do something with the companies if it was—

Secretary ROCHE. Could not negotiate.

Chairman LEVIN. Let me just finish.

If it was totally out of the question. I asked you a direct question. Is there any potential lease agreement that you believe you could enter into without coming back to the authorizing and appropriating committees?

Secretary ROCHE. No, sir.

Chairman LEVIN. OK, let us leave it at that. You can qualify it if you want to. I do not want to cut you off.

Secretary ROCHE. No, you are absolutely right. The only reason I am pausing is the language says that I must come back before the Armed Services Committees, which is exactly what I would have thought in the first place. But again, the only qualifier was to start negotiations if something would never even have a chance would not have been sensible. Also, I was truly seeing to what degree could the scoring rules be amended, given the situation with the old tankers. They cannot be amended and, as Mr. Daniels has said, some leases are good leases, some leases are bad leases. I am not going to bring back a bad lease proposal.

Chairman LEVIN. Both civilian and military witnesses from the Defense Department and the services have stressed the importance of quality of life and the impact that substandard living and working facilities have on the ability to accomplish the mission. Last year the Readiness and Management Support Subcommittee received testimony that 69 percent of the Department’s facilities have

serious deficiencies, rated C-3, or do not support mission requirements, rated C-4, and it was stated that the administration is committed to restoring the installations and facilities. That was just last year.

This year, despite a \$48 billion increase in the overall defense budget, the administration is proposing to reduce funding for military construction by a billion dollars below what the Department requested last year and a billion and a half dollars below the level that was appropriated for 2002.

How do you explain this? I must tell you I am a little bit at sea. I guess maybe I should say also in the air or underground. But anyway, I am at sea as to try to figure what was meant last year. The Army was said to have underfunded long-term facilities. This is your testimony this year actually, Secretary White: "For too many years, the Army has underfunded long-term facilities maintenance."

So you come in with a budget request a billion dollars below last year's request and a billion and a half dollars below what we appropriated. So I do not get it. What is going on?

Secretary WHITE. Well, Senator, in the MILCON area if you add the normal MILCON with what we are putting into Army family housing and then you add the private capital that we are attracting to support RCI, the Residential Communities Initiative, if you put all those pieces together we are basically flat between the 2 years. They total up to about \$3.9 billion in each year.

Chairman LEVIN. If you want to put the three pieces together, what is the Navy's position?

Secretary ENGLAND. Similar. We are slightly down in the budget. We did increase housing allowance, however, by \$255 million and we improved our housing construction accounts, and in this year, in fiscal year 2003, we will have public-private venture, that is private money supporting the military, to the tune of \$700 million. I do not know what it was last year, but we worked very hard this year to bring private money into the mechanism.

So I do not know how that compares at the end of the day, Senator.

Chairman LEVIN. Well, let us try to compare them. Let us compare apples and apples. When you gave us your three pieces, Secretary White, did you include the same three pieces last year for your comparison?

Secretary WHITE. I do not know whether we included the RCI private capital. In fact, I do not think there was any RCI private capital in last year. The two that we had—

Chairman LEVIN. What about the third piece?

Secretary WHITE. Well, we have the normal military construction. We have the Army family housing. There are small amounts of money for base realignment and closure. Then there is the private capital, which is the third piece.

Chairman LEVIN. I just want to make sure you are adding all the same pieces for both years.

Secretary WHITE. Right.

Chairman LEVIN. Do you know whether you are or not?

Secretary WHITE. I think so, yes. I think it is a valid comparison.

Chairman LEVIN. On that basis you think it is level funding?

Secretary WHITE. Yes.

Chairman LEVIN. Now, in the Navy you do not know?

Secretary ENGLAND. I do not know what we had last year in terms of private venture funding.

Chairman LEVIN. Is your MILCON lower this year than last year?

Secretary ENGLAND. Yes, MILCON has decreased somewhat from fiscal year 2002, but I do not know what the total amount of investment dollars are, Senator. We will get back with you on that.

Chairman LEVIN. The reason for the reduction?

Secretary ENGLAND. Just hard choices we made. We had private companies investing, so that obviated the need somewhat for MILCON. We would obviously rather have private companies investing along with us. As the BAH goes up, you can attract more and more private venture capital.

Chairman LEVIN. Get us the figures, if you would, for the record.

Secretary ENGLAND. Yes, I will.

[The information referred to follows:]

Almost \$470 million in private capital will be invested in Navy and Marine Corps family housing as a result of housing privatization projects awarded in fiscal years 2001 and 2002.

Secretary ROCHE. Sir, I am prepared. We had three categories of investment: family housing, military construction, and sustainment. If you take all three, we are \$45 million less this year than we were the year before, and I think that is going to be a little bit lower. We specifically made the decision to increase money for family housing and to fix things, to fix runways, fix hangars, put new roofs on, refurbish, et cetera, which comes out of the sustainment account, which we plussed up by \$362 million.

The military construction of brand new buildings, we focused on only that which would be needed for new systems that are coming in, so for instance construction at Langley Air Force Base to accompany the F-22 teams that are starting to form. In total, we are very close to what was in the 2002 budget, sir.

Chairman LEVIN. But what do we do then with last year's testimony that the administration is committed to restoring installations and facilities if 69 percent of the Department's facilities have serious deficiencies? Where does that get fixed in this year's budget?

Secretary ROCHE. I believe in the sustainment we do a good bit of that, sir. We make a big dent in that through sustainment, which is to fix things. MILCON is to build brand new.

Chairman LEVIN. On that you are down?

Secretary ROCHE. No, sir. In sustainment we are way up.

Chairman LEVIN. On MILCON you are down.

Secretary ROCHE. On brand new buildings we are down because we are restricting it to new systems. But in sustainment we are trying to fix things as much as we can, and in family housing we are moving up. That is our moneys for family housing, not including privatization.

Chairman LEVIN. Well, in the materials that were given to us, the briefing materials, the Comptroller said that "the reduction was a conscious decision to defer military construction projects to reflect delay in an additional round of base closures in 2005." I am

glad to hear none of you used that as an excuse, since there was no delay. For the first time, we got a round of base closings. There was no delay we finally got one. I thought that was a pretty feeble excuse when I read it and I am happy to hear you fellows, you secretaries, have not used it today.

What we will need to do is review the reasons you did give, however. So we are going to need to see those figures for the record. Secretary White, if you would also provide those for the record.

Secretary WHITE. Yes, we will.

[The information referred to follows:]

MILCON FUNDING

The Army's military construction budget request is \$3.2 billion and will fund our highest priority facilities and family housing requirements. In fiscal year 2002, we presented a budget that was a down payment on our goal to better support our infrastructure. When we developed this year's budget in light of the events that took place last year, we had some very difficult decisions to make. The need to fund our military pay raises, Army transformation, OPTEMPO, the war on terrorism, increases in health care, and other key programs were all included in the decision leading to our request. Thus, the Army budget provides the best balance between all our programs, including military construction.

Below is a side-by-side comparison of Army Military Construction (MILCON), Sustainment-Restoration-Modernization (SRM), and Army Family Housing (AFH) funding in the fiscal year 2001, fiscal year 2002, and fiscal year 2003 President's budget submissions. The comparison shows that, although fiscal year 2003 is lower than the fiscal year 2002 level, it is much higher than fiscal year 2001. The Residential Communities Initiative housing privatization program is another important element of facilities improvement, adding private capital to the program, and leveling the comparison of fiscal year 2002 and fiscal year 2003.

Funding (\$000)	Fiscal Year		
	2001	2002	2003
Military Construction	1,039	2,139	1,637
Family Housing	1,140	1,401	1,406
Base Realignment and Closure	303	164	150
Sustainment Restoration and Modernization	1,899	2,387	2,364
Private Capital	0	260	720
Total	4,381	6,351	6,277

Chairman LEVIN. On the question of Army transformation, the budget request of the Army terminates 18 existing programs, including some that were restored by Congress at the Army's request over the last couple years. I am wondering whether or not the 18 programs that were terminated by the Army were your initiative or was that a direction of the Office of the Secretary of Defense?

Secretary WHITE. That was not a direction of the Office of the Secretary of Defense, Senator. It was our initiative. We had to make some tough choices and those were the programs we chose to kill.

Chairman LEVIN. I am going to ask each of you for a list of unfunded requirements. Do you have such requirements that are unfunded? I am not going to ask you for them right now. I will ask you those for the record. But before we get them in the record, are there unfunded requirements in the Army?

Secretary WHITE. Yes, there are. Again, what we have tried to build in this budget was a budget that would sustain us through an expected level of effort with the current war where a supple-

mental would not be required. But there are areas of the budget that we did not fully fund against requirements because we had to make tough choices.

Chairman LEVIN. Would you provide that for the record promptly?

Secretary WHITE. Yes, I will.

Chairman LEVIN. Secretary England, would you do that as well?

Secretary ENGLAND. Ships and airplanes, Senator. Obviously, we need funding for those capitalization accounts.

Chairman LEVIN. Even though you have them in the FYDP?

Secretary ENGLAND. We do build up to ten ships at the end of the FYDP, that is correct.

Chairman LEVIN. But you have unfunded requirements this year?

Secretary ENGLAND. Correct. We are not at the level we would like to be this year, yes.

Chairman LEVIN. Will you give us those, please?

Secretary ENGLAND. Yes, sir.

Secretary ROCHE. Yes, sir. I would like to make the point that a steady budget with steady increases will take care of things in time. We have unfunded requirements which will be met in later years. It is really an issue of bringing them into the near term.

Chairman LEVIN. But as of this year you have unfunded requirements?

Secretary ROCHE. Sir, we have had to make trades, sure.

Chairman LEVIN. Would you give us a list?

Secretary ROCHE. I would like to have bought tankers. [Laughter.]

Chairman LEVIN. Pardon?

Secretary ROCHE. For instance, I would like to have purchased tankers and not gone through the grief I am going through.

Chairman LEVIN. I can understand why, actually.

But you will give us the list of unfunded requirements?

Secretary ROCHE. Sure.

[The information referred to follows:]

UNFUNDED REQUIREMENTS LIST

Secretary WHITE. The budget request contains the Army's top priorities, but at this point we have not prepared an unfunded requirements list. We will provide the committee the list as soon as possible.

Secretary ENGLAND. The Chief of Naval Operations and Commandant of the Marine Corps have both provided detailed listings of program requirements not funded in the fiscal year 2003 budget. I believe they have ably identified additional specific needs of our Naval Services, and their correspondence is included for the record below. I would only add that our biggest budgetary challenge for the long-term health of the Department of the Navy is to ensure that we improve the pace of recapitalization, especially for major platforms like aircraft and ships, and for amphibious and littoral warfare capabilities. These are well represented in the details provided by the CNO and Commandant, but each must be evaluated in the context of all requirements. The global war on terrorism, other continuing demands on Naval forces and our people, and our desire to achieve transformational capabilities to better the posture of our forces against potential adversaries, represent additional challenges we have addressed in our overall request. The budget proposed by the Secretary of Defense and the President achieves the best balance among our highest priorities for national defense, and for the Nation as a whole.



CHIEF OF NAVAL OPERATIONS

20 FEB 2002

Dear Congressman Skelton,

In response to your letter of 24 January 2002, I am providing the Navy's list of requirements not selected for funding in the FY 2003 President's Budget.

The Navy's FY 2003 Budget has taken positive steps to help us take care of today's most pressing readiness problems. Our budget provides for operational levels that will maintain the high personnel and unit readiness necessary to conduct the full spectrum of joint military activities. The success of our Fleet in the war against terrorism attests to progress made in current readiness.

The FY 2003 budget, guided by the new defense strategy and emergent challenges of the past year, continues to build a force relevant to the threats and opportunities of the 21st Century. The strategy recognizes the key role of naval forces in continuing to provide "forward deployed forces to deter and/or prevent attacks." Despite the additional topline available in the FY 2003 budget, funding our key readiness and personnel appropriations accounted for much of that growth. This was a matter of choice, and a clear priority given the ongoing war effort. The challenges in our aircraft and shipbuilding procurement accounts are clear. The sooner we begin to address these long-term requirements, the more secure we can be in our future capabilities.

The President's Budget addresses FY 2003 Cost of War estimates. A topline increase of \$110 billion has been included in the DOD Budget to address continuing enhancements associated with the Cost of War in FY 2003. This request is being justified in a central account for flexibility and not distributed to the Navy for budget display. The Navy portion is ~\$2.4 billion. The president also included in the Defense Budget an allowance of \$10 billion to support variable operational costs of the War on Terrorism to ensure our ability to sustain action. Distribution of that amount will be based on actual requirements at the time of execution. These additions to our specific Navy budget request will be critical, however, there remain critical programs not funded in the FY 2003 budget, as listed in the enclosure.

If I may be of any further assistance, please let me know.

Sincerely,

VERN CLARK
Admiral, U.S. Navy

The Honorable Ike Skelton
House of Representatives
Washington, DC 20515

Enclosure: 1. Unfunded Requirements List

Copy to:
Chairman Bob Stump

Unfunded Requirements List

Requirement Number	Requirement Title	Category	Description	Value
34	CH-53E External Cargo Load Improvement	APN	Safety issue: reconfigures the external cargo control panel to reduce inadvertent external cargo release and allow multiple landing zone releases.	3
35	VH-60J Survivability Upgrade	APN	Upgrades VH-60 Presidential Support helicopter's survivability system software.	6
36	AV-8B Litening Pod	APN	Funds 32 pods, a precision targeting system that allows the AV-8B aircraft to autonomously detect and track targets, and to deliver precision munitions.	55
37	AV-8B Engine Readiness	Various	Funds shortfall in the Engine Life Management Plan (ELMP). This program is designed to identify and fix AV-8B engine problems prior to their occurrence in operational aircraft.	18
38	F/A-18 Radar Upgrade	APN	Accelerates upgrade of 12 F/A-18C/D radars from APG-65 to APG-73. Provides significantly better resolution in the air-ground mode.	24
39	VH-60 Replacement	APN	Restores Presidential Support fleet of VH-60 aircraft to the authorized level of nine to meet increased operational requirements.	36
40	CH-53E APR-39A(V)2 Radar Warning Receiver	APN	Funding provides a radar warning capability for the CH-53E to detect, identify and prioritize threat radars and missile guidance systems.	20
41	AV-8B Laser Guided Bomb Integration	APN	Funding provides GBU-12 capability on the AV-8B, which will double the amount of precision guided weapons the aircraft can carry per sortie.	2
42	Common Defensive Weapon System	APN	Begins replacement of WWII era .50 cal machine gun; funds 475 .50 cal Fabrique Nationale Herstal systems; provides a significant improvement in Force Protection/Self-Defense for USMC helicopters.	13
43	EA-6B USQ-113(V)3 Comm Jammer	APN	Funds the USMC requirement for 4 additional systems to buy out the requirement. USQ-113(v)3 provides a communications jamming capability for the EA-6B in support of current contingency operations.	2
44	NMCI	OMN/R	Additional S/PNET access requirements have increased as a result of 11 Sig O1 events. Increase estimated to be at least 20% over demand model. Data call for updated demand model to capture this new requirement is underway. (50.0M /yr 03-05, 43M 06/07). Additionally, transition management contract implementation costs were underestimated. NMCI support budget for FY02 was \$3M. Funding will support complete legacy application rationalization through deployment of Site Transition Execution Management (STEM) Teams, Information Assurance Tiger Teams (IAT3), Enterprise Application Group for Legacy and Emerging (EAGLE) teams, additional Customer Project Managers (CPMs) to support Echelon II commands, and further development of the NMCI eCommerce tool. (17M additional FY03; 30M FY04/05 and 26M in FY06/07)	67
45	Ship Depot Maintenance for 100%	OMN	Ship Depot Maintenance to 100% from 95.5% level in request	164
46	HELLFIRE	WPN	Procures 1500 Hellfire missiles to augment USMC and Navy surface and air requirements.	105
47	CBR related Early detection devices	OMN	Accelerates FD-PMU program with the purchase of chemical, biological, radiological, and environmental detection devices.	3
48	Naval Coastal Warfare (NCW)	OPN	Procures Small Boats for IBUs and Table of Allowance (TOA) equipment for all NCW Units	78
49	CDL-N (NFN requirement)	OPN	The installation of ANJISC-123A(V) 2 Common Data Link - Navy (CDL-N) (CHBDL) system is necessary to support Naval Fires Network (NFN). Recently announced aggressive NFN fielding plan calls for CDL-N installations on all Fleet Flag Ships LHDs and LHAs and adds requirements for additional ashore/mobile systems for forward locations ashore.	32
50	BLI	OPN	BLI modernizes the IT Infrastructure at OCONUS Navy locations. Host Nation Agreements (HNA), local national labor regulations and Status of Forces Agreements (SOFA) have proven to be severe impediments to a vendor provided services thereby necessitating the Navy to continue to provide IT services via a COCO Infrastructure. Additionally, Navy OCONUS commands have identified IT pier infrastructure at OCONUS piers and operational and logistical support buildings as a Force Protection issue.	13
51	INMARSAT (IT21)	OPN	Procurement and Installation of Upgrades and Broadband Global Area Networks	13
52	SRM-MCON	MCON	Antirismism, Physical Security site improvements	269
53	MH-60S CSAR/ASUW	APN	MH-60S CRD requires MH-60S to be CSAR/ASUW capable. Funding allows program to meet FY-06 IOC, provides organic armed force protection/anti-terrorism/CSAR/ASUW capability for the CVG/ASARC.	73
54	AT-FF ACADA	OPN	Expanding procurement of the Ship ACADA from 254 to 1070 to address new requirements for bases, EOD, MSF, surface ships, MSC, and medical units. Meets CFPC Urgent Fleet Requirement.	5
55	AT-FF CBRD	OPN	CONUS Naval Bases currently have minimal CBRD response capability. Base First responders including fire/hazmat/security require CBR personnel protection, limited detection, and limited decon capability. Defense of Naval bases is necessary to support warfighting and tenant commands. Bases are also tasked to provide military support to civil authorities.	20
56	HLS	WPN	Procures 405 Optical Sights and Fire Control units for upgrading the existing 25mm MK38 gun system(\$30K/sight). Sights provide day and night capability with a laser rangefinder.	12
57	Classified	Various	Chalk Coral, Acq Prog Mgt, Spec Pump Spt Eq, Retract Maple	67
58	F/A-18 Mod, ECP 560	APN	Upgrade Reserve F/A-18A precision guided munitions capability for 12 aircraft.	37
59	FLIR kits (AAS-51Q) for SH-60B	APN	Procure 4 Forward Looking Infra-Red (AAS-51Q) for SH-60B.	7
60	KC-130T CNS/ATM (Reserve)	APN	Addresses communications/navigation/surveillance and air traffic management requirements. Leverages of USAF program.	8
61	AV-8B Self-Escort	APN	Leverages allied non-recurring funding & significantly enhances aircraft survivability by giving autonomous beyond visual range capability.	11
62	Tactical Quiet Generator and Resistive Load Banks	APN	Funds procurement of Tactical Quiet Generators and Resistive Load Banks to replace current legacy mobile generators in excess of 30 years old, ensuring expeditionary capability of aircraft.	10
63	C-9C-20 Satellite Communication (SATCOM)	APN	Funds 4 Honeywell SATCOM units for C-9 and C-20 aircraft. Required for long-range executive level communications.	3
64	NFN	RDEN	Develops X, S, and Ku-band antennae for NFN.	5

Unfunded Requirements List

Req No	APN	Description	FY03
65	RD TEN	Funds development of Future Land Attack Missile	11
66	LHA(R)	Funds R&D for follow on LHA.	13
67	RD TEN	Fund RDTEC for EA-69 Follow-on	30
68	SCN	Funds two BA-4 conversions and NRE costs in FY03, 1 additional BA-4 in FY04. Accelerates fielding of required warfighting improvements--AADC, Force protection. Increases total in FYDP from 11 to 14.	458
69	RD TEN	Component Improvement Program	16
70	RD TEN	Funds risk reduction efforts for the CH-53E Service Life Extension Program. Will analyze and identify program options to ensure success.	15
71	RD TEN	Accelerates R&D effort to develop a laser guided 2.75" rocket. Leverages off of an Army development effort to provide a low-cost PGM capability.	3
72	RD TEN	Provides a cockpit display that allows pilot validation of ATARS mapping data to ensure reconnaissance mission success in the F/A-18.	12
73	APN	Aircraft engine modifications for a variety of airframes	19
74	WPN	Replaces 1,000 rocket motors to meet NSSM requirements through remainder of service life	12
75	APN	Funds an APT for the Fleet Replacement Squadron (FRS) MCAS Camp Pendleton, CA. Fulfills networked simulation requirement as defined in the Marine Aviation Campaign Plan.	13
76	APN	Funds an APT for Reserve Squadron at Edwards AFB, CA. Supports the Marine Aviation Campaign Plan.	13
77	APN	Funds an APT for Reserve Squadron at Belle Chase, LA. Supports the Marine Aviation Campaign Plan.	10
78	APN	Supports introduction of the KC-130J, funds the first APT to be located at MCAS Cherry Point, and fulfill networked simulation requirement.	26
79	CPN	Sonobuoy inventory is insufficient to meet 2 MTW NNOR and will fall below levels required for IDTC and Fleet deployed C2 readiness in FY04.	140
80	WPN	Funds approximately 45 additional SSSTs required to replenish inventory. SSST inventory will be depleted in FY03.	44
81	RD TEN	Accelerates delivery of autonomous UUVs that will provide enhanced reconnaissance and environmental survey capabilities. Acceleration of UUVs will provide the Navy with the ability to extend the host platform's sensors off-hull, greatly improving the warfighting capability of the host platform. This proposed funding plus up will accelerate sensor upgrades to LMRS, accelerate Mission Reconfigurable UUV (MRUUV) EDM IOC to FY07 and delivers multiple MRUUV payload packages by FY07.	68
82	SCN	\$57.1M funds work removed from the original RCOH package due to funding constraints that is best accomplished during the RCOH. Funds combat systems and auxiliary systems upgrades and maintenance items.	67
83	CPN	Restore Shallow Water Training Range for east and west coasts. Will enable improved training in littoral environment.	19
84	APN	This req't is for procurement of aircraft spares to support deployed aircraft in wartime. Failure to fund will result in failure to meet wartime E-6 endurance requirements.	15
85	APN	Procures FLIR contingency kits and GAU-16s for Block I minus aircraft.	87
86	CPN	Replace 20 year old switch that is obsolete and is no longer logistically supported. This switch is a critical component to Combat Systems Integration testing (CSIT) and Battle Group Interoperability Testing (BGIT), including the certification of integrated combat systems direction, weapons, sensor and computing systems. This switch is required to support new combat systems such as SDDS Mk 2 which are incompatible with current switch.	14
87	SCN	Procures two additional shipsets of nuclear AP and non-nuclear AP in FY03 and FY04. By having additional shipsets on the shelf a decision to add an additional VA class to the program could be done immediately - starting in FY05. Currently, if a decision is made to add an additional VA class hull to the ship construction plan, must wait 3 years before building can commence - while awaiting construction of nuclear core, components and long lead items.	415
88	APN	The F-16 Adversary force requires additional spares and GSE in order to reach full mission capability to support the sortie requirements of the TAR Matrix. The fully funded F-16 force will reduce the burden incurred by fleet a/c to provide Adversary sorties and provide increased dissimilar air combat training to fleet squadrons.	5
89	APN	Funds 1 UC-35 replacement aircraft and spares for the Operational Support Airlift (OSA) mission.	8
90	APN	Funds supply support for reserve F/A-18 and CH-53E aircraft required as result of increased Op Tempo. Replaces depleted shore-based consolidated allowance lists items.	7
91	APN	Funds an APT in Beaufort, S.C., providing networked simulator capability for the F/A-18D community in accordance with the Marine Corps Aviation Campaign Plan.	16
92	APN	Funds replacement of the existing obsolete visual display, image generator, and zero models in order for the initial and advanced simulator training to meet the extended service of the CH-53D.	3
93	CPN	Procures at EOQ - 96 rounds per year	32
94	RD TEN	Funds integration of a new 50Cal machine gun to replace the obsolete defensive weapon system on USMC helicopters.	5

Unfunded Requirements List

APPENDIX		DESCRIPTION		703
95	Air Surveillance and Precision Approach Radar Control System (ASPARCS) Phase II	RDTEN	Initializes Phase II interoperability upgrade of expeditionary air traffic control system.	10
96	F/A-18 ATARS Solid State Recorder	RDTEN	Funds solid-state recorder technology to provide ATARS with increased reliability and data storage growth.	6
97	Marine Shadow Unmanned Aerial Vehicle (UAV)	RDTEN	Funds system integration of Marine Shadow UAV program.	5
98	Facility Restoration & Modernization - Recapitalization Rate of 67 years (all investments)	O&M and MCNR	O&M DPG goal is Facility Recapitalization of 67 years by 2010. Navy is 93 years in FY03 and 64 years FYDP. Amount shown brings FY03 to 67 year recap rate. (DPG: Pg 26, Sect VI, Para 3)	340
99	Facility Sustainment - Fund 100% Sustainment	OMN	Requirement is derived directly from the OSD Facility Sustainment Module (3.0). (DPG: Pg 26, Sect VI, Para 2)	215
100	Eliminate Facility C3/C4 deficiencies by 2010 (all investments)	O&M and MCNR	Provides additional dollars to eliminate C3/C4 deficiencies by 2010 per DPG. (DPG: Pg 26, Sect VI, Para 3)	173
101	LPD-17	SCN	Restores program to 2 ships per year and completes build in FYDP. Adds 2nd ship in FY03. Revised profile: 2-1-1-1. LPD 17 is key to accelerating procurement and delivery to replace obsolete and costly LPD 4 class ships.	1,100
				8,672



15 February 2002

Dear Mr. Skelton,

Thank you for your letter of 24 January, requesting the Marine Corps' Unfunded Priority List for Fiscal Year 2003.

As I testified before your Committee, my greatest concern is to best enable the Navy-Marine Corps Team to succeed in meeting our Nation's challenges. The Administration's FY03 budget and associated Future Years Defense Plan provide us with valued funding for many of our transformational programs such as AAAV, V-22, and JSF. This budget will significantly assist your Marines in beginning a recovery from the last decade's funding shortfalls. We are deeply appreciative to the Congress for consistently ensuring the well being of our Marine Corps.

I do have some near term concerns, which are addressed in the enclosed list. My highest priority remains unchanged: Marines, their families and our civilian Marines. This priority is well covered in our budget request, from pay raises and BAH increases for our active and reserve Marines, through health care for our retirees.

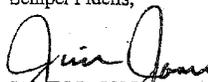
Taking care of Marines includes taking care of the places where they live and work. Fiscal constraints during the 1990s forced us to balance and choose between warfighting readiness, military construction, housing improvements and equipment modernization. We have made great progress in the FY 2002 and FY 2003 budgets in the area of infrastructure, but there are additional and much needed facilities required by your Marines. I have included a number of family housing, military construction, and restoration and modernization projects on this list, totaling roughly \$420 million.

Taking care of Marines also includes providing the most modern, effective equipment possible until our transformational items are fielded. Aviation and ground modernization continue to require attention, particularly with the increased requirements resulting from our campaign in Afghanistan and the continuing war on terrorism. The attached list includes upgrades for our existing aviation and ground equipment programs, or accelerates the buys of new equipment; in an attempt to mitigate the bow-wave anticipated when our transformational items are ready for purchase.

In addition to aviation and ground equipment, I must address my concern over the lack of adequate amphibious shipping resources. Subsequent to September 11th, the need for sea-based, rapidly deployable and sustainable expeditionary forces was revalidated. The LPD-17-class amphibious ships and the LHD-8 are critical to our warfighting requirement to lift assault echelons of three Marine Expeditionary Brigades. Today's amphibious lift can barely achieve two-thirds of this requirement.

I hope this list is of assistance to you and I thank you for requesting it. If I may answer any questions or provide additional details, please let me know.

Semper Fidelis,



JAMES L. JONES
General, U.S. Marine Corps
Commandant of the Marine Corps

The Honorable Ike Skelton
Ranking Member
Committee on Armed Services
U.S. House of Representatives
Washington, D.C. 20515

US Marine Corps FY03 Unfunded Priority List

ITEM TITLE	APPROPRIATION	AMT \$M	EXECUTIVE SUMMARY
MCAS Cherry Point, H-608, Replace Stocum Village Phase 2	FH	18.2	Replaces 127 junior enlisted family housing units at Marine Corps Air Station, Cherry Point.
MCB Camp Lejeune, H-614, Replace Tanawa Terrace (Phase 3)	FH	14.9	Replaces 103 junior enlisted family housing units at Marine Corps Base, Camp Lejeune.
MCB Hawaii, H-655, Replace Manning Court	FH	11.4	Replaces 36 junior enlisted family housing units at Marine Corps Base, Hawaii.
MAGTFIC 29 Palms, CA, TP-H-9801-M2, Renovate Joerua Heights	FH	11.8	Project renovates and extends the economic life by 25 years of 100 family housing units at 29 Palms.
MAGTFIC 29 Palms, CA, TP-H-0601-M2, Renovate Condon Heights	FH	6.4	Project renovates and extends the economic life by 25 years of 88 junior enlisted family housing units at 29 Palms.
Family Housing Operation and Maintenance	FH	12.0	Reduces backlog of Maintenance and Repair by 30%.
TOTAL FAMILY HOUSING:		78.9	
Jacksonville, FL, P-532 Reserve Training Center	MCNR	9.0	Constructs a new Reserve Training Center and Vehicle Maintenance Facility that will consolidate administration, supply, training and maintenance operations for Co. B, 4th Amphibious Assault Battalion.
Twin Cities, MN, P-152 Vehicle Maintenance Facility	MCNR	1.9	Constructs a new indoor Vehicle Maintenance Facility that will reduce the environmental risks and weather hazards for maintenance personnel assigned to Military Police Co., 4th Marine Division.
TOTAL MCNR:		10.9	
MCCDC Quantico, P-631, Bachelor Enlisted Quarters	MILCON	13.0	Provides 260 living spaces using the 2x0 standard room design for bachelor enlisted personnel attached to The Basic School at Marine Corps Base, Quantico.
MCAS New River, P-630, Bachelor Enlisted Quarters	MILCON	18.0	Provides 432 living spaces for Bachelor enlisted personnel using the 2x0 standard room design for permanent party personnel.
MCRD San Diego, P-283, Recruit Support Barracks	MILCON	10.1	Constructs a recruit barracks and medical rehabilitation facility for recruits injured during training or required physical fitness conditioning.
MAGTFIC 29 Palms, P-566, Enlisted Dining Facility	MILCON	12.1	Constructs a new consolidated dining facility and demolishes three existing inadequate dining facilities.
MCB Camp Lejeune, P-1030, Enlisted Dining Facility	MILCON	9.1	Replaces a structurally damaged 60 year old facility at Marine Corps Base, Camp Lejeune.
MCAS Beaufort, P-419, Enlisted Dining Facility	MILCON	10.5	Constructs a dining facility that replaces the existing inadequate facility at Marine Corps Air Station, Beaufort.
MCB Camp Pendleton, P-608, Physical Fitness Center	MILCON	7.8	Replaces inadequate physical fitness facilities in order to meet the individual physical fitness needs of Marines, family members, retirees, and authorized civilians at Camp Pendleton.
MCB Hawaii, P-008, Physical Fitness Center	MILCON	9.5	Replaces an existing inadequate fitness center with an adequate indoor facility to develop and maintain the physical fitness and conditioning for personnel assigned to Marine Corps Base, Hawaii.
MCB Arlington, P-001, Physical Fitness Center	MILCON	1.5	Constructs an addition to the existing Physical Fitness Center at Henderson Hall, Headquarters U.S. Marine Corps that will provide adequate space for combative martial arts and aerobics.

US Marine Corps FY03 Unfunded Priority List

MCB Camp Pendleton, P-804, Child Development Center	MILCON	8.4	Constructs a new Child Development Center for Marine Corps Base, Camp Pendleton.
MCB Hawaii, P-444, Religious Ministry Facility	MILCON	9.5	Replaces the existing inadequate Religious Ministry Facility with a facility that is necessary to promote and enhance the spiritual well-being and religious education for Marines and their families.
MAGTFCTC 28 Palms, P-807, Airport Surveillance Radar	MILCON	16.6	Constructs an Airport Surveillance Radar site at MAGTFCTC 28 Palms that will give radar coverage and positive control of Navy/Marine Corps Special Use Airspace.
MCB Camp Pendleton, P-009, ISR Camp, Intel Battalion	MILCON	15.6	Funds 4 additions to existing structures to provide Comm/Elec, admin, storage, and Company HQ spaces to consolidate Intel Battalion.
MCAS Camp Lejeune, P-227, Consolidated Armories	MILCON	6.3	Provides a replacement armory to control and secure crew served weapons and small arms for 2d Force Services Support Group (FSSG) and 2d Marine Division personnel.
MCAS Miramar, P-033, Refueling Vehicle Shop	MILCON	1.6	Provides a facility for tactical squadrons at Marine Corps Air Station, Miramar to maintain and repair their refueling vehicles.
MCAS Cherry Point, P-720, Ordnance Magazines	MILCON	8.3	Constructs ordnance magazines at Marine Corps Air Station, Cherry Point that will relocate ordnance out of an ammunition and explosive prohibited area and eliminate incompatible storage.
MCLB Barstow, P-930, Combat Vehicle Repair Facility	MILCON	12.5	Provides a replacement consolidated combat vehicle repair facility to refurbish combat vehicles at Marine Corps Logistics Base, Barstow.
ComMarForLant, P-820, MARFORLANT HQ Building	MILCON	9.8	Demolishes existing inadequate 1940s era facilities and constructs a modern, consolidated command headquarters for Commander Marine Forces Atlantic.
MCAS Yuma, P-442, Aircraft Maintenance Hangar	MILCON	14.1	Provides an adequate maintenance hangar and operational support facilities in order to meet the needs of both home ported and rotationally deployed squadrons at Marine Corps Air Station, Yuma.
MCAF Quantico, P-495, Aircraft Parking Apron	MILCON	11.1	Constructs an aircraft parking apron at Marine Corps Air Facility, Quantico that will eliminate airfield safety violations.
8TH & I, P-801, Motor Transport Facility Add.	MILCON	1.2	Constructs a Motor Transport Facility that will maintain 53 pieces of garrison mobile equipment for Marine Barracks 8th Bn.
Blount Island Command, P-001, Land Acquisition	MILCON	126.0	Acquires over 1000 acres of Blount Island in Jacksonville, FL to support the Marine Corps' Prepositioning Program.
TOTAL MILCON:		331.6	
Active Duty for Special Work- Active Component	MPWC	4.9	Provides OPTEMPO relief and augmentation for active component missions through the use of Reserve Personnel.
TOTAL MPWC:		4.9	
Facility Sustainment, Restoration and Modernization - Restoration and Modernization	OMMC	31.4	Restoration and Modernization Requirement to bring operational and training facilities to C2 level by 2010.
Chemical Biological Incidence Response Force (CBIRF)	OMMC	4.7	Maintenance and training on NBC equipment for CBIRF and Marine Expeditionary Units (MEUs).
Initial Issue	OMMC	25.0	Provisioning of material approved for issue, but not previously provided to an individual or organization.
Utility Privatization	OMMC	8.2	Supports utility privatization efforts/studies at USMC bases.

15 Feb 02

US Marine Corps FY03 Unfunded Priority List

Active Duty For Special Work (Travel and Per Diem)	OMMC	1.6	Op tempo relief for SVA and Latin America; KC130 support to MEUs; funds JTF HQs and Partnership for Peace exercises.
Enhanced Equipment Allowance Pool (EEAP) for the Combined Arms Exercise	OMMC	2.3	Increased maintenance costs associated with the EEAP for combined arms exercises at 29 Palms, CA.
Counter Intelligence (CI) Support	OMMC	1.0	Provides Temporary Additional Duty funds for CI personnel to support CINC requirements.

α

US Marine Corps FY03 Unfunded Priority List

Joint Service NBC Defense Equipment Surveillance and Consolidation Program	OMMC	7.1	Supports joint service equipment assessment program (testing) for NBC defense material and equipment.
Chemical/Biological Field Medical (AMAL)	OMMC	7.9	Funds authorized diembio medical allowance list (ama).
Low Altitude Air Defense Sustainment (LAAD Sust)	OMMC	1.0	Funds sustainment of critical items (software and hardware modifications for trainers) supporting the Low Altitude Air Defense (LAAD) capability for the Sirger missile system.
Installation Encroachment Planning	OMMC	5.0	Funding supports planning to identify encroachment pressures that restrict or eliminate training/operations on our installations. Planning identifies total requirements for land and facilities needed to conduct training and operations; proposes actions to acquire, sustain, restore, and modernize installations/facilities; critical to sustain combat readiness.
Family of Field Medical Equipment: AMAL/ADAL	OMMC	4.5	Funds authorized medical/dental allowances (AMAL/ADAL).
Marine Corps Ground Systems Replacement & Modernization Program (SRAM)	OMMC	1.0	Replacement and modernization of range safety equipment.
Collateral Equipment	OMMC	6.5	Collateral equipment funding for various Facility Sustainment Restoration and Modernization (FSRM) renovations and Japanese Facility Improvement Program (JFIP) projects.
TOTAL OMMC:		47.2	
Reserve NBC Equipment	OMMGR	0.8	Supports requirement to outfit 15,000 reserve Marines with NBC boots and gloves.
Reserve Manpower Management System 21st Century	OMMGR	1.2	Comprehensive integrated reserve manpower management model.
Initial Issue (Reserves)	OMMGR	6.5	Provisioning of material approved for issue, but not previously provided to an individual or organization.
TOTAL OMMGR:		8.5	
Projectile, 155mm High Explosive (HE) M795 (DODIC: D629)	PANMC	9.0	This projectile with increased range, lethality and accuracy replaces the current M107 projectile. \$9M funds 17,907 projectiles and increases the AAO from 50% to 60% by the end of FY 2005.
Cartridge, .50 cal, Linked (DODIC: A576)	PANMC	2.3	Funds 1.1 million .50 cal rounds used in M2 .50 cal machine gun equipped on LAV's and hardback HIMMVs, and used by Weapons Companies.
Cartridge, 7.62 mm, Linked (DODIC: A131)	PANMC	1.3	Funds 2.8 million 7.62 mm rounds used in M240 coaxial machine gun equipped on LAVs, the M240G machine gun, used by infantry units and helicopter self defense, and the M40A3 rifle used by the Ground Combat Element.
Cartridge & Launcher 84mm AT-4 M135	PANMC	10.0	Funds 6,250 rockets and increases AAO from 76% to 87% by the end of FY05.
Cartridge, 120mm High Explosive Antitank, Multipurpose with Tracer	PANMC	10.0	Funds 1,449 HEAT cartridges and increases the AAO from 82% to 91% by the end of FY05.
Non-Lethal Ammunition	PANMC	6.3	The Non-Lethal (NL) Family of ammunition is deployed with the NL Capability Sets. This package of COIS/GOTS munitions includes NL 12 gauge cartridges and diversionary charges.
TOTAL PANMC:		38.9	

US Marine Corps FY03 Unfunded Priority List

ANITPS-59 Radar Service Life Extension	PMC	9.6	Funds (11) post detection and signal processor upgrades.
HF Radios	PMC	22.3	Procures 1000 AN/PRC-160(C) radio sets which is the AAO. Replaces aging PRC-104s where diminishing manufacturing resources has created the inability to repair this legacy radio system.
AN/PVS-17 Night Scopes	PMC	3.5	Funds procurement of 1500 PVS-17s Mini Night Vision Sight with Gen IV tubes. Achieves AO of 6344.
Lightweight Multiband Satellite Terminal (LMST)	PMC	20.0	Procures 25 LMST and reach AAO of 50. Start replacing the AN/TSC-85C and AN/TSC-93C's within 9-12 months after award.
Tactical Data Network Data	PMC	20.0	Funds 30 shelterized Gateways and 447 Data Distribution Systems, which contain transit cased servers, routers, switches, etc; provides an additional server for each Data Distribution System (DDS).
LAV RAM Tire Assembly Replacement	PMC	10.7	The current LAV tire assembly is scheduled to go out of production in June 02. This enhancement procures 6,260 tire assemblies and outfits the entire LAV fleet.
Low Altitude Air Defense Sustainment	PMC	0.9	Upgrades 59 AN/UJS-3 Tactical Air Defense Radars; procures hardware and software to configure the Institutional Conduct of Fire Trainer (ICOFIT) to the level of the currently fielded weapon system.
LAV RAM 2 Speed Transfer Case	PMC	11.1	Procures 769 2-speed transfer cases. Covers the LAV fleet requirements. The current case does not possess a neutral position and requires the drive shaft to be removed for towing operations.
Modular Amphibious Egress Trainer (MAET)	PMC	5.5	Procures trainers at Camp Lejeune NC and Camp Pendleton CA. Egress dunkers enhance Marine Survivability and complement Aircrew Breathing Device.
Monitors	PMC	1.6	Safety issue. Weapons have exceeded useful life. Buys out AO for both the 60mm and 81mm mortars.
AAV7A1 PIP	PMC	5.1	Supports various modifications that include EAAK, AAV7A1 systems replacement, engine test stands, AN/PCS-5 integration, and the AAV7A1 A/C power system.
Sniper Rifle Scope (GRS)	PMC	2.2	Replaces 1:1 the existing 850 sniper scopes. The current scopes went out of production in FY00.
Modular Weapon System (MWS) (M-4)	PMC	3.2	Funds 2,475 MWS (M-4) Cartridges, parts and storage containers.
Counterintelligence Human Intelligence Equipment Program (CHIEP)	PMC	2.1	Funds 24 PRC-117F multiband radios, 142 palladium modems and torzezza cards to collect, receive, process and disseminate CI, IT and HUMINT information.
MACCS Sustainment, Air Operations C2 Systems, Direct Air Support Central (DASC)	PMC	1.2	Replaces Fiber Optic Cable Connectors. Relocates Electrical to Optical Converter within the Signal Entry Panel.
Tactical Hand Held Radio (THHR), AN-PRC148	PMC	5.0	Funds the remaining AO requirement of 1800 THHR.
Commercial Cargo Vehicle (Truck, Firefighting, Aircraft Crash and Structural Fire Equipment)	PMC	1.0	Funds 2 Ladder, Fire Trucks. GSA contract. AO=87. Avg age of existing fleet is 28 years. Industry standard is 8-12 years.
Tractor, Rubber Tired, Articulated Steering, Multi-Purpose (TRAM)	PMC	6.2	Remain/SLEP of final 59 TRAM's with attachments. Buys out AO. Provides the heavy material lift and earth moving capability.
Bridge Boat	PMC	15.8	Extends service life of 66 units. Existing units fielded in 1985 with only a 50% readiness rate.
First-In Command and Control System	PMC	32.8	Funds 11 systems consisting of a network management system (Joint Enhanced Command and Control System (JECSS)) and associated tentage, elec power and environmental control units. Complete AO of 14 systems.
Runway Sweeper	PMC	1.0	Buys out AO in FY04 vice FY05. Buys nine units.

15 Feb 02

US Marine Corps FY03 Unfunded Priority List

Tractor All Wheeled Drive W/Attachments	PMC	10.3	Funding procures 45 assets and buys out AO of 182 units. One-for-one replacement for the Small Employment Excavator.
Non-Lethal Weapons Capability Set (NLWCS).	PMC	1.4	Adds 12 NLWCS to the inventory. The set includes such things as riot face shields, shin guards, expandable riot batons, etc.
Aviation Refueling Capability	PMC	6.9	The ARC is a COTS refueler replacing the M931/M70 refueler. The Marine Corps has an AAO of 139 units. 100 units have been funded. This funding would buy out the remaining AAO (39) ARC units.
AN/TFS-59 (V) 3 Radar Environmental Simulator	PMC	4.5	Procures 6 systems to reach AO of 11.
Multipurpose Bayonet	PMC	2.1	This achieves the acquisition objective of 105,566 for Active and Reserve multipurpose bayonet.
1300G Road Grader	PMC	2.7	Procures 24 graders. Accelerates FY04 funding and buys out AAO of 125
High Mobility Multipurpose Wheeled Vehicle A2 (HMMWV/A2)	PMC	30.0	Procures 559 HMMWVs allowing USMC to achieve approximately half of the AAO.
Extendable Boom Forklift (EBFL)	PMC	5.6	Procures 43 units accelerating AO by 6 percent. AO bought out in FY04 vice FY05.
Third Echelon Test Set (TEETS)	PMC	14.0	Funds shortfall of TEETS Operational Requirements Document (ORD) change; procures 29 sets reaching 87% of AO.
Improved Moving Target Simulator (IMTS)	PMC	1.0	Upgrades entire AO (3 systems) providing 360 moving targets for Stinger gunners using video projection.
TOTAL PMC		259.1	
Target Location Designation Hand-Off System (TLDHS)	RDTE-G	1.9	Funding provides: Naval Surface Fire Support capability testing; enhanced interoperability; additional Close Air Support features; support Enhanced Target Acquisition and Location Systems (ETALS).
High Speed Vessel (HSV)	RDTE-G	10.5	Cooperative initiative with the Navy: Extends current lease for Joint High Speed Vessel.
AN/TFS-59 Radar Service Life Extension	RDTE-G	13.5	Conducts research on the 34 Row and Slotted Wave Guide Antenna Arrays.
Universal Communication Interface Module (UCIM)	RDTE-G	9.5	UCIM technical documents and prototypes for proof-of-concept, all to allow a third-party vendor to build UCIM functionality into a warfighting platform.
Light-Weight 155mm Howitzer Program (LW155)	RDTE-G	2.8	Accelerates program to field highly mobile indirect fire support systems; facilitates Marine Air Ground Task Force operational capability.
Chemical Biological Incident Response Force (CBIRF) Chemical Biological Individual Sampler (CBIS) Transition	RDTE-G	6.0	AT/FP Initiative: Funds will be used to transition successful Force Medical Protection technologies to mature CBIS systems.
Chemical Biological Incident Response Force (CBIRF) Small Unit Biological Detector (SUBD)	RDTE-G	6.0	AT/FP Initiative: Funds the integration, fabrication and testing of collector/concentrator and bio-sensor components into an engineering prototype.
Chemical Biological Incident Response Force (CBIRF) Electro-Static Decontamination (ESD)	RDTE-G	8.0	AT/FP Initiative: Evaluates the process efficacy on viruses, optimizes the photosensitizer for biological agents, begins chemical agent surrogate tests and optimizes the design for the prototype units.
Chemical Biological Incident Response Force (CBIRF) Reactive Nanoparticle Technology Research	RDTE-G	2.2	AT/FP Initiative: Funds the essential live agent testing for verification and validation of performance objectives, and most importantly certification for use by military and civilian communities.
Joint Operations Center (UOC)	RDTE-G	7.0	Funding for prime contractor system demonstration to reduce LRIP decision risk for two types of UOC: Ground Combat Element (GCE) UOC and Command Element UOC.

US Marine Corps FY03 Unfunded Priority List

Multi-Role Radar System (MRRS)	RDTE-G	4.1	Accelerates development to allow concurrent fielding with the other Marine Air C2 System MEB Capability Set components - CAC2S, Composite Tracking Network, & CLAWS
Joint Non-Lethal Weapons Clear-A-Space (CAS)	RDTE-G	1.5	A/TFP initiative: Designed to apply non-lethal force that will stun, briefly incapacitate, or cause personnel to immediately move out of a space (cave, room, etc.) without causing permanent harm to individuals.
Joint Non-Lethal Weapons Support for CINCAs	RDTE-G	1.0	Supports the CINCAs as they institutionalize NLWs into program development, requirement identifications, and participation in wargame/exercise opportunities.
Joint Non-Lethal Weapons Anti-Terrorism and Counter-Terrorism	RDTE-G	2.1	A/TFP initiative: Provides for the identification/characterization of operationally significant NLWs and the associated performance criteria in a quantifiable manner so as to allow for specific S&T and RD&E.
Joint Non-Lethal Weapons Human Effects Center of Excellence (HECOE)	RDTE-G	2.0	Provides crowd behavior models, develops risk assessments, establishes a human behavior test laboratory, and improves the database of NLW human effects.
Joint Non-Lethal Weapons Technology Innovation Center (NTIC)	RDTE-G	2.0	Supports the study/review of a broad range of future technologies and stimulate academia/industry in generating new technology.
Joint Non-Lethal Weapons Pulsed Energy Projectile (PEP)	RDTE-G	2.0	A/TFP initiative: Provides support for pre-prototype weapons development and biological effects testing.
Mobile Fire Support System 120 millimeter Mortar	RDTE-G	5.0	Develops the next stage of technological development to take advantage of the experimental results, including making the MFSS lighter, more modular and adapting the design to fire from LAVs.
Low Altitude Air Defense (LAAD) Sustainment	RDTE-G	1.4	Funds COTS/NDI replacement for the Remote Terminal Unit (RTU) in order to improve processors, memory, and communication interfaces.
Complementary Low Altitude Weapons System (CLAWS)	RDTE-G	3.2	Land-based complement to Sea-based Theater Ballistic Missile Defense (TBMD). Funds 4 missiles, equipment and support required for Milestone C testing.
Joint NLW Crowd Control Concept Exploration (CC CEF)	RDTE-G	1.5	Explore concept for stopping/dispersing a crowd at a variety of ranges. Includes target effect characterization, control effectiveness, and development/fabrication of an initial prototype system.
Joint Non-Lethal Mortar Munition	RDTE-G	4.5	Develop and produce munitions using non-traditional materials to limit collateral damage from residual fragmentation of the projectile.
Joint Non-Lethal Weapons Area Denial to Personnel Concept Exploration	RDTE-G	2.0	Provides for the development of an initial prototype design, characterization of its target effects, and modeling and simulation of its operational effectiveness.
Common Aviation Command and Control System (CAC2S)	RDTE-G	7.0	Funds Theater Missile Defense (TMD) R&D to correlate and combine associated missile tracks into an Integrated Tactical Display Framework (ITDF) for the Tactical Air Command Center.
Coastal Battlefield Reconnaissance and Analysis (COBRA)	RDTE-G	10.5	Funds acceleration development of the airborne subsystem; develops advanced processing algorithms for Surf Zone; researches compatibility with aerial platforms.
Marine Air Command and Control System (MACCS) Sustainment Program	RDTE-G	3.0	Funds a technical data repository, system configuration management activities, engineering support services and test bed facilities for Tactical Air Operations Module (TAOM).
TOTAL RDTE-G:		120.2	

US Marine Corps FY03 Unfunded Priority List

Selected Reserve Incentive Program	RPMC	1.0	Recruiting/retention tools (Montgomery GI Bill, SRB, EB) to enhance the ability of the Reserve Force to fill critical personnel shortfalls and retain qualified personnel.
Active Duty for Special Work-Reserve Component	RPMC	6.0	Enables more Reserve Marines to train, maintain and administer the Reserve Force.
TOTAL RPMC:		7.0	
CH-53E HNSV "B" Kits	APN	45.0	Funds an additional 64 Turned Forward Looking Infrared (FLIR) units to equip CH-53E deploying squadrons and to address training shortfalls for fleet, training, and reserve squadrons.
CC-130 APR-39 V2 Radar Warning Receivers	APN	2.1	Funds procurement and installation of 21 radar warning receivers for 13 KC-130F/R and 8 KC-130T aircraft. Required element of an integrated survivability suite.
CC-130 ARC-210 Radio	APN	4.1	Funds 14 ARC-210 radio kits required to meet comms/surveillance and air traffic management requirements and provides secure communications capability for KC-130s.
FA-18C/D ECP 563 Shortfalls	APN	68.0	Funding will complete upgrade of FA-18A aircraft. Includes kits and installs for 32 Lot 7-9 aircraft, as well as MDS, Color Displays, TAMMAC and AMU. Provides flexibility to the Strike Master Plan and bridge to JSF transition.
CH-53E External Cargo Load Improvement	APN	3.1	Safety issue: reconfigures the external cargo control panel to reduce inadvertent external cargo release and allow multiple landing zone releases.
H-60/S Survivability Upgrade	APN	6.0	Upgrades VH-60 Presidential Support helicopter's survivability system software.
V-8B Litening Pod	APN	55.0	Funds 32 pods, a precision targeting system that allows the AV-8B aircraft to autonomously detect and track targets, and to deliver precision munitions.
EA-6B Center Wing Sections	APN	16.0	Accelerates center wing section replacement to mitigate potential shortfall in aircraft availability.
V-8B Engine Readiness	APN	5.8	Funds shortfall in the Engine Life Management Plan (ELMP). This program is designed to identify and fix AV-8B engine problems prior to their occurrence in operational aircraft.
FA-18 Radar Upgrade	APN	24.0	Accelerates upgrade of 12 FA-18C/D radars from APG-65 to APG-73. Provides significantly better resolution in the air-to-ground mode.
H-60 Replacement	APN	36.0	Restores Presidential Support fleet of VH-60 aircraft to the authorized level of nine to meet increased operational requirements.
CH-53E APR-39(V)2 Radar Warning Receiver	APN	20.0	Funding provides a radar warning capability for the CH-53E to detect, identify and prioritize threat radars and missile guidance systems.
V-8B Laser Guided Bomb Integration	APN	1.5	Funding provides GBU-12 capability on the AV-8B, which will double the amount of precision guided weapons the aircraft can carry per sortie.
Common Defensive Weapon System	APN	13.0	Begins replacement of WWII era .50 cal machine gun; funds 475 .50 cal Fabrique Nationale Herstal systems; provides a significant improvement in Force Protection/Self-Defense for USMC helicopters.
EA-6B USQ-113(V)3 Comm Jammer	APN	2.0	Funds the USMC requirement for 4 additional systems to buy out the requirement. USQ-113(V)3 provides a communications jamming capability for the EA-6B in support of current contingency operations.

US Marine Corps FY03 Unfunded Priority List

EA-6B Band 8/10 Transmitter	APN	37.0	49 required to meet operational requirements and retire Band 9 transmitters. Current contract completes in FY03. Funding would keep line open. \$37M would buy out requirement.
KC-130T CNS/ATM (Reserves)	APN	8.1	Adds communications/navigation/surveillance and air traffic management requirements. Leverages off USAF program.
AV-8B Self-Escort	APN	11.1	Leverages Allied non-recurring funding & significantly enhances aircraft survivability by giving autonomous beyond visual range capability.
Tactical Quiet Generator and Resistive Load Banks	APN	10.2	Funds procurement of Tactical Quiet Generators and Resistive Load Banks to replace current legacy mobile generators in excess of 30 years old, ensuring expeditionary capability of aircraft.
C-9C-20 Satellite Communication (SATCOM)	APN	2.8	Funds 4 Honeywell SATCOM units for C-9 and C-20 aircraft. Required for long-range executive level communications.
CH-46E Aircrew Procedures Trainer (APT)	APN	12.8	Funds an APT for the Fleet Replacement Squadron (FRS) MCAS Camp Pendleton, CA. Fulfills networked simulation requirement as defined in the Marine Aviation Campaign Plan.
CH-53E Aircrew Procedures Trainer (APT)	APN	12.8	Funds an APT for Reserve Squadron at Edwards AFB, CA. Supports the Marine Aviation Campaign Plan.
AH-1W Aircrew Procedures Trainer (APT) Flight Simulator	APN	10.0	Funds an APT for Reserve Squadron at Belle Chase, LA. Supports the Marine Aviation Campaign Plan.
KC-130J Aircrew Procedures Trainer (APT)	APN	28.0	Supports introduction of the KC-130J. Funds the first APT to be located at MCAS Cherry Point, and fulfills networked simulation requirement.
UC-35D Cessna Citation Encore Aircraft	APN	8.3	Funds 1 UC-35 replacement aircraft and spares for the Operational Support Airlift (OSA) mission.
Supplemental Aviation Spares Package	APN	7.0	Funds supply support for reserve F/A-18 and CH-53E aircraft required as result of increased Optempo. Replaces depleted shore-based consolidated allowance lists items.
F/A-18D Aircrew Procedures Trainer (APT)	APN	18.0	Funds an APT in Beaufort, S.C., providing networked simulator capability for the F/A-18D community in accordance with the Marine Corps Aviation Campaign Plan.
CH-53D O/T Simulator	APN	2.9	Funds replacement of the existing obsolete visual display, image generator, and seat models in order for the initial and advanced simulator training to meet the extended service of the CH-53D.
TOTAL APN:		487.4	
AV-8B Engine Readiness	OMN	2.0	Funds shortfall in the Engine Life Management Plan (ELMP). This program is designed to identify and fix AV-8B engine component failures prior to their appearance in operational aircraft.
LHA	OMN	57.0	Dry-docking required for damage stability improvement alterations (\$19M/ship) on LHAs 1,3&4. Completes all stability alterations by FY03 vice FY06.
TOTAL OMN:		59.0	
AV-8B Engine Readiness	RDTE-A	7.8	Funds shortfall in the Engine Life Management Plan (ELMP). This program is designed to identify and fix AV-8B engine problems prior to them occurring in operational aircraft.

15 Feb 02

US Marine Corps FY03 Unfunded Priority List

CH-53E SLEP Risk Reduction	RDTE-A	15.0	Funds risk reduction efforts for the CH-53E Service Life Extension Program. Will analyze and identify program options to ensure success.
2.75 Inch Laser Guided Rocket	RDTE-A	3.0	Accelerates R&D effort to develop a laser guided 2.75" rocket. Leverages off of an Army development effort to provide a low-cost PGIR capability.
F/A-18 Expand 4/5	RDTE-A	12.0	Provides a cockpit display that allows pilot validation of ATARS mapping data to ensure reconnaissance mission success in the F/A-18.
Common Defensive Weapon System	RDTE-A	5.0	Funds integration of a new 50Cal machine gun to replace the obsolete defensive weapon system on USMC helicopters.
Air Surveillance and Precision Approach Radar Control System (ASPARCS) Phase II	RDTE-A	9.9	Initializes Phase II interoperability upgrade of expeditionary air traffic control system.
F/A-18 ATARS Solid State Recorder	RDTE-A	6.0	Funds solid-state recorder technology to provide ATARS with increased reliability and data storage growth.
Marine Shadow Unmanned Aerial Vehicle (UAV)	RDTE-A	5.0	Funds system integration of Marine Shadow UAV program.
TOTAL RDTE-A:		63.7	
LUU-19 IR Flare	PANMC	6.7	Funds IR paraflares that provide battlefield illumination not visible by the human eye. Improves aircrew and ground forces Night Vision Device (NVD) effectiveness.
TOTAL PANMC:		6.7	
Landing Craft Air Cushion (LCAC)	OMWOPN	44.0	Replaces obsolete and unseparable C&I suite with a CAN suite before craft enters SLEP PH II for Buoyancy box replacement. Funds completions of 4 craft in FY02, 8 in FY03. Saves maintenance costs and improves craft readiness by reducing COMNAV failures currently accounting for 72% of mission aborts. Also, provides limited corrosion abatement during PH I SLEP for craft hull.
LPD-17	SCN	1100.0	Restores program to 2 ships per year and completes build in FY03. Adds 2nd ship in FY03. Revised profile: 2-1-1-1. LPD-17 is key to accelerating procurement and delivery to replace obsolete and costly LPD-4 class ships.
LHD-8	SCN	536.0	Moves FY04-FY06 tail to FY03 to fully fund.
LHA(R)	RDTE-N	13.0	Funds R&D for follow on LHA.
TOTAL SCN and Other Navy Appn:		1693.0	
Helifire	WPN	105.0	Procures 1500 Hellfire missiles.
TOTAL WPN:		105.0	
TOTAL:		1878.4	

15 Feb 02

10

UNFUNDED PRIORITIES LIST

Secretary ROCHE. The Department's proposed fiscal year 2003 budget is a vital step forward, reflecting our priorities as we prepare for the challenges of the 21st century. It supports the war against terrorism, invests in Air Force people, and funds a broad-based transformation that, if sustained, will enable us to remain the world's most capable air and space force. The unfunded programs you have asked us to identify must be understood in context. We first need your support for the priorities of the President's budget, and the attached unfunded list complements rather than substitutes for the requirements presented in the President's budget request. Looking ahead, we also need to work together to assure this fiscal year 2003 budget

begins a process of sustained investment over time to advance Air Force transformation.

With this understanding, I am forwarding the following list totaling \$3.8 Billion, consistent in large part of programs already planned for the outyears that may be brought forward. We've excluded any variable ONE/OEF cost of war, such as the unbudgeted Reserve/Guard call-up, because these should be covered by the \$10 billion variable cost of war dollars already requested by the Department. Should the cost of war funds be redirected, the Air Force requirement of \$4.2 billion for Reserve/Guard call-up would have to be our number one unfunded request. Our list emphasizes capabilities highlighted by current operations and our continuing evaluation of war-related requirements. It also captures a number of requirements of critical importance that have emerged since the budget was prepared. We've included the costs to purchase aircraft that would permit us to accelerate the replacement of the aging KC-135E fleet, and procure four C-40-passenger jets. Nevertheless, we continue to explore whether there is a viable business case for leasing these aircraft. If neither of these options turn out to be feasible, we would revert to our previous modernization tanker plan, which would deliver our first new tanker in fiscal year 2008, and consider the requirement for the C-40s as we develop the fiscal year 2004 budget.

Our facilities strategy in the fiscal year 2003 budget emphasized the importance of "fixing the Air Force we have now first" then building new as appropriate. Under this strategy, investment is focused on sustainment of current facilities, upgrades to family housing, and construction related to new missions. With the MILCON entry on the list, we could further extend our infrastructure improvements.

FY03 Unfunded Priority List			
AF Priority	FY03 Amount (\$M)	Cumulative Amount (\$M)	Item Description
1	92.0	92.0	Weapons of Mass Destruction (WMD) First Responder Preparedness Program
2	491.0	583.0	Anti-Terrorism/Force Protection (AT/FP) & Nuclear Security Critical Requirements
3	8.1	591.1	Panoramic Night Vision Goggles (PNVG)
4	11.5	602.6	Air Force Special Operations Command (AFSOC) Depot Purchased Equipment Maintenance (DPEM) Engines/Aircraft Spares
5	163.3	765.9	Emerging Deficiencies Impacting Aircraft Mission Capable (MC) Rates
6	124.1	890.0	Mobility Air Force (MAF) and Combat Air Force (CAF) Self Protection
7	275.0	1165.0	Accelerate KC-135 Replacement Aircraft (FY05 to FY03)
8	81.7	1246.7	AF National Security Emergency Preparedness (AFNSEP) Support & Site R/National Military Communication Systems
9	57.2	1303.9	Upgrade 5 Air Operation Centers (AOCs) and North American Aerospace Defense Command (NORAD), Command and Control (C2)
10	100.4	1404.3	Distributed Common Ground Systems (DCGS) - Tasking Processing Exploitation Dissemination (TPED) Expansion
11	101.2	1505.5	Joint Task Force (JTF) Battlespace
12	144.9	1650.4	2-Yr Acceleration of Digital Data Link (Link 16)
13	273.0	1923.4	Additional C-40 (737-BBJ) Purchases
14	158.6	2082.0	Critical Communications Support for Operation Noble Eagle (ONE) and Operation Enduring Freedom (OEF)
15	33.7	2115.7	Nuclear, Biological, and Chemical (NBC) Passive Defense
16	244.0	2359.7	Airfield Expeditionary Assets (Harvest Falcon/Eagle)
17	298.0	2657.7	Aircraft & Engine Depot Maintenance Deferral Prevention
18	23.2	2680.9	Intercontinental Ballistic Missile (ICBM) Modifications Contract Renewal/ Growth
19	32.8	2713.7	U-2 Satellite Communication (SATCOM)
20	27.1	2740.8	Operational Testing Critical Shortfalls
21	85.3	2827.1	Critical Personnel Issues & Recruiting/Retention Bonuses
22	1.4	2828.5	Institutionally Relevant Advanced Academic Degrees (AADs)
23	21.0	2849.5	Critical Security Investigations
24	5.4	2854.9	Network Centric Collaborative Targeting (NCCT)
25	81.2	2936.1	Combat Search & Rescue (CSAR) Upgrades
26	161.4	3097.5	Civil Airspace Access Global Access Navigation and Safety(GANS) and Global Air Traffic Management (GATM)
27	7.0	3104.5	Space Warning, Surveillance Sustainment Shortfalls
28	91.0	3195.5	Expeditionary Engineering Equipment Shortfalls
29	6.5	3202.0	KC-135 Boom Operator Weapon Sys Trainers (BOWST)
30	14.5	3216.5	Space Launch Mission Assurance
31	37.3	3253.8	Munitions Upgrades
32	30.5	3284.3	Critical Range & Exercise Upgrades I
33	558.0	3842.3	Military Construction (MILCON) to FY02 PB Level
	3842.3		Total

Chairman LEVIN. Senator Sessions has a question.

Senator SESSIONS. Briefly. Secretary White, we had a nice tour in Korea the first week of January and I heard reports about inadequate housing, the inadequate compensation for family split-ups for tours there, really causing some problems in getting people to accept an assignment. They enjoy doing the work but they do not enjoy the matters that go with it.

Does this budget provide any relief and improvement in housing? We simply in my view need to do some consolidation of bases and improvement of housing in Korea.

Secretary WHITE. We have allocated resources to Korea, but I will have to get back to you for the record with the specifics of where the money will be spent.

[The information referred to follows:]

HOUSING IN KOREA

For family housing, the Army first looks for host nation funding whenever possible. In Korea, Republic of Korea funded construction (ROKFC) funds can be used for construction of Army family housing. The ROKFC program provides the funds to the Army for design and construction. In addition, this budget provides for 2 fiscal year 2003 family housing construction projects at Yongsan. One project provides \$3.1 million for replacement of 10 senior officer quarters, and the second provides \$1.9 million for renovation of 8 general officer quarters.

For barracks, we also look for host nation funding whenever possible; however, host nation funds are typically used for operational projects. Therefore, the Army has programmed substantial Military Construction Army (MCA) and Operation & Maintenance Army (OMA) resources to fund all required barracks projects in Korea by fiscal year 2009. The fiscal year 2003 President's Budget Request includes \$131.2 million of MCA funds for new barracks projects in Korea, and \$24.4 million of OMA funds for renovating existing barracks in Korea.

Senator SESSIONS. I will just repeat that I do not believe that is an exaggerated problem. I know you hear it probably everywhere you go.

Secretary WHITE. Oh, I do not think it is either.

Senator SESSIONS. I think we have a real problem there that is undermining some of the good things that are happening in the Army and if we can fix it it would be great.

Secretary WHITE. We have been there 50 years, 1 year at a time.

Senator SESSIONS. Exactly right. The facilities are 50 years old, many of them, and are just not adequate.

Just to get the numbers down on the Joint Direct Attack Munitions (JDAMs), I believe, Secretary England, you indicated the Navy has 18,000 in for 2003?

Secretary ENGLAND. No, sir, I believe the number is 9,880 for fiscal year 2003.

Senator SESSIONS. For fiscal year 2003 it would be 9,800. What about the Air Force?

Secretary ROCHE. Sorry, I will have to get the exact numbers. I was worried more about the production capacity. We are producing 1,500 a month right now for both services. We want to get that to 3,000 a month. We will be facilitating for 3,000 a month.

Senator SESSIONS. When do you think you would be getting to 3,000 a month?

Secretary ROCHE. We can get to about 2,000 at the end of 2003 and I think by the end of fiscal year 2004 we would be able to go to 3,000 a month. That is roughly, sir. We will get the exact details to you.

[The information referred to follows:]

JDAM NUMBERS

Secretary ROCHE. The current program will delivery 2,000 per month by March 2004 and 2,800 per month by July 2004. JDAM will have the capability to produce up to 3,000 per month by summer 2003.

Senator SESSIONS. Well, Mr. Chairman, I think that is probably not enough to meet our needs and maybe we ought to think about bringing on more production lines. Is that possible?

Secretary ROCHE. Sir, the way things are going now we are building up inventory. Remember, we are still producing JDAMs. We are starting to catch up very quickly because we are not using that many. We were using about 80 a day and that has now dropped down. So we are building up the inventory again. It is the capacity to be able to do it, which is effectively like opening up a second line.

Senator SESSIONS. But you would not want to be in a position of having to tell the President we are not prepared to undertake a military operation because we have to wait 6 more months to get our munitions?

Secretary ROCHE. No, sir, and we feel very sure that this is not a big risk. When you get to the point where you can do 3,000 a month, you are talking 36,000 a year. That is a heck of a lot of weapons.

Senator SESSIONS. But that is 2 years away.

Secretary ROCHE. But we can do 15 now and within a year we will be at about 2,000, plus there are other precise weapons. It is not just that JDAMs are the only weapon.

Senator SESSIONS. It turned out to be the weapon of choice right now.

Secretary ROCHE. Absolutely.

Senator SESSIONS. It is a magnificent thing. I just will probably ask some more questions in writing and we can talk about that maybe in confidential hearings. But I do believe we have to confront that question.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Sessions.

Just one more question for me, and it relates to your active duty strengths. Did any of you propose increases in your service's active duty strength for this year's budget?

Secretary WHITE. No, we did not, Senator.

Chairman LEVIN. Secretary England?

Secretary ENGLAND. Sir, we have an increase of 2,400 marines this year.

Chairman LEVIN. In the Navy?

Secretary ENGLAND. No, sir.

Chairman LEVIN. Did you request it?

Secretary ENGLAND. No, sir.

Chairman LEVIN. Secretary Roche.

Secretary ROCHE. I do not think so, although we are talking about an end strength increase, but I cannot remember which we have focused it to, sir. We talked about an increase of roughly 7,000. The Secretary has made the reasonable request that we go back to see if there are offsets, what skill areas are really needed,

are there other skill areas that we can put in the Guard and the Reserve, et cetera, before he makes decisions on those. So that is probably now part of the fiscal year 2004 process.

I lose track of, are we executing—

Chairman LEVIN. I lose track of your answer.

Secretary ROCHE. The answer to the question is yes, we asked for 7,000. I do not know whether we did it in the fiscal year 2003 process or we are doing it as part of the fiscal year 2004 process. That is what I cannot remember.

Chairman LEVIN. Let us know for the record which one it was. [The information referred to follows:]

Secretary ROCHE. As a result of increased demands after September 11, the Air Force approached OSD with a request for an additional 7,000 total force end strength (5,300 active duty) for fiscal year 2003. OSD advised us to look for alternative methods to meet additional manpower requirements without growing end strength. Since that time, we have been involved in internal Air Force studies to consider innovative approaches that will help us to operate within OSD guidance.

Chairman LEVIN. Recent press reports indicated that the Army had asked for 40,000 additional troops, the Air Force for 8,000 additional airmen, the Navy for 3,000 more, and apparently that is not accurate; that is what you are telling us?

Secretary WHITE. I think the 40,000 came from a hearing last year of the House Armed Services Committee where we discussed with Congressman Skelton whether the 480,000 was adequate or not and if it was not adequate what the plus-up should look like.

Chairman LEVIN. But then you had a press report that indicates that you requested it and that is not accurate?

Secretary WHITE. No, it is not accurate, no.

Chairman LEVIN. Is that correct also for the Navy?

Secretary ENGLAND. Correct.

Secretary ROCHE. We did ask for the 7,000, but I cannot remember which part it was, if it was the fiscal year 2003 or the fiscal year 2004.

Chairman LEVIN. You will let us know that for the record.

Thank you very, very much. I think we have concluded our hearing. We appreciate your presence, your answers, and we will stand adjourned.

[The prepared statement of Senator Thurmond follows:]

PREPARED STATEMENT BY SENATOR STROM THURMOND

Thank you, Mr. Chairman.

Secretary White, Secretary England, and Secretary Roche, welcome to this, your first of many annual posture hearings on the budget request and state of your service. The past year has been filled with challenges to both the Nation and your services. Although other challenges are still ahead, your personal response during these trying months has reinforced my belief that our services and the men and women who wear the uniform of your service are in good hands.

Although the Nation's immediate objective is to win the war against terrorism, your long term challenge will be to transform our military services to fight the battles of the future. The traditional manner of preparing for the next battle by re-fighting the last war cannot be the way of the future. The lesson of September 11 is that we will fight future battles not only in the lair of the terrorist but also here at home. They will be won as much by technology as by the ingenuity of our soldiers, sailors, airmen, and marines. The operation in Afghanistan is merely a glimpse of future warfare. We need to exploit the good, but not make it the focus of the transformation.

Concurrent with transformation, you must continue your focus on the quality of life of our military personnel and their families. Last year's military construction

budget raised expectations of future budgets. I find it ironic that despite an almost \$50 billion increase in the defense budget request, the military construction budget was cut by almost 10 percent at a time when the Department is striving to lower the facility recapitalization rate from more than 100 years to 67 years.

I hope each of you will review your future year defense program regarding the military construction program. It must be improved both for the active components and for the reserves. We cannot expect our military or civilian personnel to work or live in facilities that are deteriorating around them.

Best wishes to each of you as you enter the second year as the leaders of the best men and women to ever wear the uniforms of our Nation.

Thank you, Mr. Chairman.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

EXTENDED RANGE CRUISE MISSILE FUNDING

1. Senator LEVIN. Secretary Roche, the Air Force had been investigating what will be needed to replace the limited numbers of conventional air-launched cruise missiles, or CALCMs, that were in short supply after the Kosovo operations. This program has been called the extended range cruise missile, or ERCM, program. Based on a preliminary review of the budget documentation, it appears that the Air Force has dropped the ERCM line from the research and development budget. What has happened to the ERCM program?

What is the Air Force intending to do to fill the mission?

Secretary ROCHE. The purpose of the Extended Range Cruise Missile (ERCM) program is to explore conventional cruise missile capabilities to include variations of the Conventional Air Launched Cruise Missile (CALCM), and Joint Air to Surface Standoff Missile (JASSM). The program is currently unfunded since the fiscal year 2001 funds were rescinded, the fiscal year 2002 funds were not appropriated, and the program was not included in the fiscal year 2003 President's Budget request. However, in Feb. 2002, I reviewed the options to meet cruise missile requirements, but did not commit the Air Force to a solution. We will further assess this requirement as we develop our fiscal year 2004 Budget and review the success of the current Low Rate Initial Production of JASSM and its initial operational test and evaluation program. We expect to include a cruise missile initiative in our fiscal year 2004 budget.

The ERCM program was intended to be an interim solution to the long-range cruise missile program. However, with the increased CALCM inventory, JASSM to be fielded in fiscal year 2003, and the lack of additional ALCMs to convert to CALCMs, the Air Force will accept the risk to and continue to program CALCM and JASSM to fill its requirements. The Air Force still needs a conventional cruise missile with an extended range capability and is investigating JASSM-ER missile to fill that requirement.

PRECISION GUIDED WEAPONS

2. Senator LEVIN. Secretary Roche, the Air Force has announced big investments in precision guided weapons in fiscal year 2003. I know that the Air Force intends to buy many more Joint Direct Attack Munitions, or JDAMs. It would appear however, that while the Navy is buying more laser-guided bombs this year, the Air Force is not. Is that really the situation, and if so, can you explain why?

Secretary ROCHE. As a result of inventory shortages and high expenditure rates in Operation Enduring Freedom (OEF), the Navy had a greater need for laser guided bombs (LGB) than the Air Force in fiscal year 2002. To alleviate the issue, the Air Force loaned the Navy 3,500 LGB kits through 1 January 2002, along with up-front production from the latest LGB production contract. The Air Force is planning to receive a share of the Navy fiscal year 2002 production LGBs to replace the Air Force weapons given to them for OEF. Additionally, the Air Force will be placing a contract for \$58 million worth of LGBs this year.

QUESTIONS SUBMITTED BY SENATOR MAX CLELAND

AIR FORCE LOGISTICS CENTERS

3. Senator CLELAND. Secretary Roche, I was encouraged that the Air Force had expressed support for the three Air Logistics Centers (ALCs). However, after review-

ing the military construction budget for fiscal year 2003, I notice that there are no new military construction projects for any of the ALCs. If the ALCs are indeed vital—one of the needs that was outlined in the preliminary briefing is the need for investing in infrastructure—why is there no funding for military construction projects?

Secretary ROCHE. The Air Force prioritizes total force requirements, using Air Force and MAJCOM priorities, and the impacts to mission, readiness, and quality of life into one total force integrated priority list. ALCs remain vital to the Air Force, but in fiscal year 2003 we are faced with more urgent expenditures for operational capabilities.

4. Senator CLELAND. Secretary Roche, getting back to the long-term strategy, when can Congress expect a detailed long-term plan, in writing, for the ALCs? Why has it taken this long to get only a “preliminary briefing” that provides no details?

Secretary ROCHE. Although still in draft, the strategy reflects:

- The requirement for the Air Force to maintain a ready and controlled source of organic technical competence to ensure an effective response to national defense contingencies and emergency requirements.
- A commitment to creating “world class” maintenance, repair, and overhaul operations in the Air Logistics Centers through infrastructure recapitalization, workforce improvements, and corporate Air Force process improvements.
- Increased commercial partnering to leverage the core competencies of both the public and private industrial and technology sectors.

Before the Air Force can complete the strategy, it must ensure that sufficient resources required to implement the plan are integrated into future plans. The Air Force will accomplish this task as part of the fiscal year 2004–2009 planning development, and then provide Congress with a completed strategy in the Summer of 2002.

C-130J PURCHASE

5. Senator CLELAND. Secretary Roche, I want to thank the Air Force for their request for \$186 million to begin a 3-year procurement of 40 C-130Js. As a long-time supporter of this program, I am pleased with the Air Force’s recognition of this reliable aircraft. In the opening statement you provided to the committee, I was hoping you could provide information on the 168 C-130Js that you referred to. Do you have a time frame for the purchase of these aircraft?

Secretary ROCHE. The Air Force requires a total of 168 C-130Js (150 C/CC-130J, 10 WC-130J, and 8 EC-130J) to modernize our C-130 fleet. Through fiscal year 2002, the Air Force has procured 37 of these 168 aircraft (12 C-130J, 10 CC-130J (C-130J-30), 10 WC-130J, and 5 EC-130J). The C-130J multiyear procurement effort described in the fiscal year 2003 President’s budget request will procure 40 CC-130J aircraft from fiscal year 2004 through and including fiscal year 2008, resulting in a total USAF inventory of 77 aircraft. The Air Force plans to procure the remaining 91 aircraft from fiscal year 2009 through fiscal year 2015.

THE ARMY’S THREE COMPONENTS

6. Senator CLELAND. Secretary White, at your confirmation hearing you discussed your vision for creating one true Army out of the three components—the active Army, the Army National Guard, and the Army Reserve. In light of the attacks of September 11, it is quite evident that the Army was up to and continues to be up to the challenge in responding to the war on terrorism. Could you comment on the effectiveness of all three components as they have worked together to meet requirements that were unforeseen just 5 months ago?

Secretary WHITE. I am pleased to report that the performance of the Army in meeting the challenges of the last 5 months has been magnificent. I would especially like to comment on the critical role in safeguarding our Nation’s airports, critical infrastructure protection, and the security of the Salt Lake City Olympics, in which soldiers from the active and Reserve Components were key participants.

In missions around the world, all three Army components—Active, Army Reserve, and Army National Guard—work tirelessly on a daily basis to execute the war on terrorism. Today, the 29th Infantry Division of the Virginia Army National Guard is the commanding headquarters providing stability in Bosnia; the Army Reserve’s 344 Combat Support Hospital is completing a training rotation in support of the 101st Infantry Division at the Joint Readiness Training Center; and Guard and Re-

serve units are providing critical combat support and combat service support enablers necessary for the Army to execute its global missions.

We plan to fully integrate the Reserve Components into the Objective Force. Presently, the Army is transforming the 56th Brigade of the 28 Infantry Division, Pennsylvania National Guard, to Interim Force capability. This will bring cutting edge technology and capability to the Reserve components and will form the body of lessons learned to guide the Army in the procedures to transform the Reserve components to the Objective Force. I look forward to bringing to you the good news of Transformation and the continued success of our execution of the Nation's missions by the Army of the 21st century.

ARMY END STRENGTH

7. Senator CLELAND. Secretary White, the Army will have a significant long-term role to play in homeland security and I applaud Secretary Rumsfeld for designating you as the executive agent for planning how we will protect America from future attacks. The challenge for the Army is great. The National Guard has been providing security to over 400 airports, both the Guard and Reserve have mobilized over 24,000 soldiers, and the active Army has over 125,000 soldiers forward deployed in more than 100 countries. General Myers, in his testimony last week stated, "the domestic and overseas commitments of the war on terrorism, when coupled with other ongoing commitments, have stretched our active forces." Yet, the Defense budget request offers no remedies and requests that we maintain personnel levels at the fiscal year 2002 (fiscal year 2002) numbers despite the increasing requirements from the continuing war on terrorism. It is somewhat surprising that there is no request for an increase in end-strength. What are your thoughts on the end-strength of the Army and did the Army request an increase in their active duty strengths as part of their fiscal year 2003 budget request?

Secretary WHITE. To date, we have not completed our analysis of the requirements for the new defense strategy emerging from the recently completed Quadrennial Defense Review or assessed the pending modifications to the geographic commander's in chief war plans. The current operational environment places additional demands on the Army that were previously unrealized. Post September 11 events have only increased demands placed on the force, and the Army will likely require an end strength increase to fully meet these demands.

The Total Army Analysis (TAA) process will determine the size and composition of the Army within a constrained budget. The current effort, TAA 2009, is not complete but will account for the additional emerging requirements in the area of homeland security and the global war on terrorism.

In the meantime, the fiscal year 2002 Defense Authorization Act permits the Department of Defense to allow the Services to exceed their end strength by 2 percent in any fiscal year in which there is a war or national emergency. Full allowance of this provision would allow the Army to increase its Active component end strength to 489,600. To achieve this increase, the Army would move forward with a ramp of 4,000 in fiscal year 2003 and 4,000 in fiscal year 2004 to address the most immediate needs of the war on terrorism.

Achieving increased end strength does not happen quickly—there must be a ramp to ensure the recruiting increase is achievable, the training base can meet additional requirements, and high standards are maintained.

SPECIAL FORCES

8. Senator CLELAND. Secretary White, as each service continues to examine lessons learned from Operation Enduring Freedom, we traditionally focus on weapons systems and the performance of our soldiers; both of which have been magnificent. We have all been particularly impressed by the use of precision munitions and the personnel on the ground that have guided them onto the target. Special forces soldiers have for many years been the silent heroes—now we have seen the key role they play despite their small numbers. I am not sure the Army has a better combat multiplier than the special forces soldier. As you continue with your transformation planning, can we expect structure to change to increase the number of troops of this nature? What specific requests in the budget further support the impact special forces bring to the battlefield?

Secretary WHITE. The Department of the Army has taken several steps toward ensuring Army Special Operations Forces (ARSOF) are manned and equipped to continue the global war on terrorism with the same success witnessed in Afghanistan. With respect to the Army's budget, ARSOF requirements and funding remain

among the very top in priorities in the Program Objective Memorandum along with support for Army Transformation and the Interim Brigade Combat Teams.

During the current fiscal year, we have re-programmed funding to support fielding of the combat survivor evader locator radio for ARSOF soldiers. Initial requirements were one radio per Special Forces (SF) soldier, and we have already procured over 800 units. Additionally during fiscal year 2002, the Army has fielded 72 additional High Mobility Multi-purpose Wheeled Vehicles for SF units, and we are working to provide even more over the program years. We have also reprioritized the fielding of the Land Warrior system during fiscal year 2003–2009 placing the 75th Ranger Regiment ahead of all other Army units. Special Forces units have been added to the fielding plan and will receive Land Warrior in fiscal year 2008–2009 just after the Interim Brigade Combat Team. In October 2001, the United States Army Special Operations Command (USASOC) provided its estimate of ARSOF requirements to conduct the war on terrorism. This list included 123 initiatives generally aligned along the issues of personnel, materiel, sustainment, training, force structure, and facilities. The Army quickly approved 29 specific issues and another 79 are in various stages of staffing and coordination. The Department of the Army continues to work aggressively to satisfy these and future issues.

A number of the USASOC issues are under review by Total Army Analysis for out-year funding and support. Some of these issues include force structure, facilities improvement, and equipment fielding and upgrades. In the area of force structure, the Army is examining substantial ARSOF force structure increases to insure they are optimally manned, equipped, trained, and sustained for the war on terrorism. These programmatic increases and increased resources are intended to ensure that Army Special Forces remain the world's best special operations forces in the future.

We are currently reviewing potential increases in SOF aviation. USASOC initially requested capabilities through the addition of a MH–47 battalion and a MH–60 battalion. These critical aviation assets, which are ARSOF variants to the standard Chinook and Black Hawk helicopter, will substantially increase the combat capabilities of SOF units supporting combatant commanders in chief and the United States Special Operations Command.

Additionally, we have undertaken a careful review of the sustaining forces necessary to project ARSOF in support of the war on terrorism. The Army is working resource enhancements to the combat support (CS) and combat service support (CSS) capabilities of our SOF units through increases in SOF signal and support battalions and civil affairs and psychological operations forces. These increases are critical to the overall success of Army and Joint SOF units, as well as those of our coalition partners. These unique CS and CSS capabilities are essential to the prosecution and success of all of our SOF operations and complement our capability in post-conflict stability operations.

To reach increased ARSOF force structure goals, the Army has resourced a number of recruitment, training, and retention incentives. The Army has programmed additional resources for the SOF training and sustaining base through increases in SOF-specific training centers and schools. While increasing the training base for special operations is important, retaining these soldiers after training is imperative. The Army is working a number of financial incentives to retain ARSOF personnel. We are reviewing a critical skills reenlistment bonus initiative to retain retirement eligible SF noncommissioned officers (NCO) whose retention would ease recruiting pressures and reduce the demands for training new personnel. As with our SF NCOs, our SF warrant officer population is faced by a large retirement bubble whose retention is vital to maintaining readiness in SF units. These technicians serve as assistant SF detachment commanders and are the Army's only warrant officers with direct ground combat roles.

Finally, we need aviation continuation pay for our Special Operations Air Regiment warrant officer pilots or, as a minimum, a critical skills re-enlistment bonus for those who are retirement eligible. This is necessary to retain the Army's finest aviators who are conducting real world combat missions under extraordinary conditions on a daily basis. These initiatives and those joined to the Army Transformation will provide the Nation with ARSOF soldiers in the right force structure with the right mix of equipment to win the war on terrorism.

PRIVATE SECTOR EFFICIENCIES/MANAGEMENT REFORM

9. Senator CLELAND. Secretary White, Secretary England, and Secretary Roche, each of you bring key industry expertise to your service. During your confirmation hearings you alluded to the need to pursue better business practices and organizational efficiencies within your respective service. With the largest increase in de-

fense spending in two decades, we are reminded of the awesome responsibility we all share in ensuring every dime of defense spending is done so in a responsible manner. In addition to responsible budget expenditures, I welcome your comments on improved business practices, efficiencies, and organizational changes you have implemented that will ensure cost savings within your service.

Secretary WHITE. The Army has several initiatives underway to improve the efficiency and effectiveness of our operations. These are in addition to the initiatives that have been approved by the Defense Business Initiative Council. We have mentioned several times our effort to privatize our utilities purchases. This initiative can take several different forms. Industry can purchase and run the facility on an Army installation and sell the Army utilities at a reduced rate. In other cases the Army facility can be shut down and the utilities simply purchased from a local company.

In a similar area, we are looking at expanding the successful civic military partnership that was tested between the Presidio of Monterey and the City of Monterey, California. This demonstration involves the purchase of fire, police, security, public works, and utilities services from the local government. We feel this type of partnership will yield savings in other communities.

Our Army Knowledge Management strategy to transform the Army into a network-centric knowledge based organization is progressing. Substantial progress has been made within the Military District of Washington's "test bed" Army Knowledge Management implementation. Initial server consolidations have netted manpower and dollar savings. In addition, best business practices are being adopted for numerous command and control capabilities and collaborative tools are being used to improve communications and planning. We are especially proud of the national level of recognition that the Army Knowledge Office has recently received. The Army was ranked number 10 out of 100 by *Infoworld* magazine for the use of the Army Knowledge Office as an innovative e-business technology and also received an award from *Chief Information Officer* magazine for one of the Nation's top 50 web sites.

We are continuing to improve the management of our business processes through the application of earned value and performance measurement techniques. The Army Workload and Performance System (AWPS) has led to improvements in the scheduling and execution of work in our maintenance depots. We believe this tool can be applied across the Army. In addition to other maintenance applications, we are starting to apply AWPS in medical activities and in the base operations mission.

Finally, the new organization of the Army headquarters will align the Secretariat and Army staff for more efficient operations. There are clearer lines of authority, elimination of duplication, and a streamlining of how we operate. Some specific examples include:

1. The phased integration of the Reserve components into the headquarters staff to enhance integration and reduce combined staff levels. We will have "multi-compo staffs" just like we have "multi-compo units."
2. The Centralized Installation Management initiative will centralize the management of installation support in the continental United States into four regions thereby consolidating several Army Staff elements and enhancing services to local installations.
3. Changes to the Program Executive Office/Program Management structure provide direct lines of command to the Army Acquisition Executive to enhance the authority of the Acquisition Executive and improve Army acquisition practices.

Secretary ENGLAND. Within the Navy, we are taking steps to streamline cycle times through the use of evolutionary acquisition and spiral development. We are using these approaches in many programs. For example, both Cooperative Engagement Capability and Joint Strike Fighter are using spiral development to bring enhanced capability to the fleet sooner. The Standard Missile program and DD(X) are using evolutionary acquisition to allow insertion of new technologies and capabilities over time. In the case of the DD(X) program, this means bringing enhanced capabilities into an entire family of ships. These approaches enable the Navy to field mature technologies while providing for follow-on improvements in capabilities, resulting in affordable, more capable weapon systems delivered earlier to our warfighters.

Another way we are executing this responsibility is through the Office of the Secretary of Defense's Business Initiative Council (BIC). The purpose of the BIC is to recommend good business practices and find and implement cost avoidances and savings that can be used to offset funding requirements for personnel programs, infrastructure, revitalization, re-capitalization, equipment modernization, and efforts dealing with transformation. Just as we are transforming America's military capability to meet the threats of the 21st century, so must we also transform the way the Department works and what it works on.

Secretary ROCHE. Under the direction of Secretary Rumsfeld, we chartered the Business Initiative Council (BIC) to “improve the efficiency of DOD business operations by identifying and implementing business reform actions which allow savings to be reallocated to higher priority efforts . . .” (excerpt from BIC charter). BIC is an ongoing effort, which is “action-focused,” aimed at identifying and implementing good business practices and creating an environment that encourages innovation and good ideas. Twenty-eight initiatives have been approved to date; many of these offer potential savings, while others provide cost avoidance and/or unquantifiable savings, in terms of reduced cycle time, improved freedom to manage, streamlined procedures, accelerated information sharing/decision-making, etc. Some initiatives can be approved and implemented by the Department; others require congressional help. Some examples of the approved initiatives include:

- Recovery Auditing: Use contingency fee auditing services contract to identify and recover overpayments in Working Capital Funds to providers of goods and services.
- Web-Based Invoice/Receipt Process: Reduce occurrence of incorrectly prepared or missing receiving report and move toward paperless process; will allow DFAS to pay vendors more quickly and accurately.
- Enterprise Software Initiative (ESI): Streamline the acquisition process by providing best-priced, standards-compliant software products and expanding the use of ESI process as the benchmark acquisition strategy.

In addition to fully participating in the BIC effort, the Air Force is leading the way in reducing our headquarters staff. Our plan calls for fully complying with Fiscal Year 2000 National Defense Authorization Act (NDAA). We completed nearly half of our required reductions by the end of the last fiscal year and are aggressively working options for the remaining reduction. We have redirected people from headquarters duties to war fighting support and are continuing the SecAF/CSAF announced “Headquarters Air Force (HAF) Transformation.”

QUESTIONS SUBMITTED BY SENATOR MARY L. LANDRIEU

10. Senator LANDRIEU. Secretary White, following the aftermath of September 11, you were named, in the interim, to serve as the coordinator of homeland security efforts within the Department. Given the increased funding for combating terrorism, what efforts and strategies have you undertaken to ensure the right strategy is in place and that the budget addresses the right priorities?

Secretary WHITE. In addition to my role as the interim DOD Executive Agent for Homeland Security, the President directed me to serve as the acting Assistant Secretary of Defense for Special Operations/Low Intensity Conflict. The Office of the Assistant Secretary of Defense for Special Operations/Low Intensity Conflict oversaw the compilation of the combating terrorism inputs for the fiscal year 2003 budget. Following September 11, 2001 and the initial prosecution of the Global War on Terrorism, the Department began a process of reviewing its strategy, analyzing its missions, and identifying its resource priorities. The Department is using this analysis in preparation for our fiscal year 2004 budget input for combating terrorism.

11. Senator LANDRIEU. Secretary White, did you provide input on combating terrorism to the budget and will you coordinate the implementation of the policies driving spending on procurement, research and development, and training?

Secretary WHITE. Until the new staff for homeland defense and civil support is established, and consistent with the limitations established by the Federal Vacancies Reform Act of 1988, I will continue in both capacities to coordinate with the appropriate Office of the Secretary of Defense offices to ensure combating terrorism resources are sourced and proper procurement, research and development, and training strategies are pursued and implemented.

12. Senator LANDRIEU. Secretary White, would you describe how the establishment of Northern Command, which will be a combatant command for homeland defense, will affect your role as coordinator of homeland security within DOD?

Secretary WHITE. I am the interim DOD Executive Agent for Homeland Security. On March 8, 2002, the Secretary of Defense signed a memorandum directing the Deputy Secretary of Defense to lead a transition effort to establish a staff, at the appropriate level within the Office of the Secretary of Defense that, when established, will assume homeland defense and civil support responsibilities. The Secretary of Defense expects a plan to establish this new staff by late spring and hopes to stand it up this summer, subject to any legislative actions that may be required.

The Principal Deputy Under Secretary of Defense for Policy was designated by the Deputy Secretary of Defense to lead the transition team. It is likely that the new OSD staff will be responsible for providing policy and oversight for the new Northern command.

SCIENCE AND TECHNOLOGY FUNDING

13. Senator LANDRIEU. Secretary England, the Navy's budget request calls for \$1.6 billion for science and technology programs. This is a reduction of 23 percent from last year's congressionally appropriated levels. It also represents an 8 percent reduction from last year's Navy original budget request. This is the largest cut of any of the services.

How is the large cut in Navy science and technology programs consistent with efforts to transform the Navy into a force better suited to meet the emerging threats of the future?

Secretary ENGLAND. While the Navy's Science and Technology (S&T) fiscal year 2003 budget has decreased from the fiscal year 2002 Amended President's Budget request, it has actually grown by 7 percent, in real terms, since the fiscal year 2000 President's budget, in consonance with Congress' desire for real program growth. Within existing resources, DON has already rearranged its S&T investment portfolio to support transformation efforts. Examples of such efforts include:

Electric Power for Naval Platforms: Efforts in this arena include development and at-sea demonstration of cutting edge technologies such as superconducting and permanent magnet motors for podded propulsors; developing advanced prime power, including high speed superconducting generators and fuel cells. Efforts are also focused on developing, demonstrating and transitioning electrical auxiliaries such as the Electromagnetic Launch and Recovery System (EMALS) for carriers. When integrated onboard carriers, electric-based systems such as EMALS, will serve as leap-ahead technologies, offering vast improvements in terms of operations, maintenance and safety over existing hydraulic, steam and pneumatic systems.

Littoral Support Craft (Experimental) (LSC(X)): As part of the LSC(X) program the Navy will be developing and demonstrating—advanced hull forms, cutting edge propulsion, material and modular payload technologies. Once proven via LSC(X), many these concepts and technologies are likely to feed into the future Littoral Combat Ship and other existing and future platforms.

Revolution in Training: Sailors and marines stand as DON's biggest asset. As such, it is essential that we improve the training process. Along these lines, DoN is developing compact, reconfigurable and deployable training systems that significantly improve the effectiveness of existing simulation-based training. Other efforts include developing adaptive architectures that support efficient and effective Command and Control applications, such as Command Center of the Future and Knowledge Wall (a prototype which has successfully been deployed aboard the U.S.S. *Coronado*).

Autonomous Vehicles: Autonomous vehicles stand to significantly enhance DON's operational capabilities, while greatly reducing the risk faced by the warfighter. The Department is investing substantial resources in developing and demonstrating a wide array of advanced autonomous vehicles including Unmanned Combat Vehicles—Navy (UCAV-N) and Tactical Unmanned Ground Vehicles (UGVs). Other efforts focus on enhancing existing systems through the development of intelligent navigators, remote docking stations, and enabling collaborative behavior among unmanned underwater vehicles.

14. Senator LANDRIEU. Secretary England, how is it consistent with the Secretary's goal of investing 3 percent of the Department's funds in transformational science and technology programs?

Secretary ENGLAND. Science and technology serves as an "enabler" for the Service's larger transformational objectives. Within existing resources, DON has already rearranged its S&T investment portfolio to support transformation efforts. The Department has made a concerted effort to increase the S&T budget. The Department of the Navy's Science and Technology funding request has exceeded 2 percent per year average real growth since fiscal year 2000, and is approximately 2.7 percent. For example, during fiscal year 2003 budget development the DON increased its S&T Future Years Defense Program (Fiscal Year 2003–2007) by +\$355 million, with specifically targeted increases in areas including:

- Marine Corps S&T +\$156 million;
- Radio Frequency Systems Advanced Technology +\$83 million;
- Joint Experimentation +\$71 million;

- Force Protection +\$45 million; and
- High Speed Sealift Vessel +\$25 million.

However, in determining whether we are making progress towards a 3 percent goal, using the prior year appropriated level is not an accurate reflection of the Department's priorities because it includes significant increases for specific efforts that are not in consonance with Department core priorities, often including many items not requested by the Department with respect to necessity or timing. Such increases in the appropriated level create marginal returns against our key priorities and distort the baseline from which we hope to move towards the 3 percent goal as we try to include more transformational S&T technologies.

15. Senator LANDRIEU. Secretary England, how will these cuts affect the Navy's in-house scientific, engineering, and technical capabilities? How does the Navy plan to make up for these cuts in future years?

Secretary ENGLAND. Funding stability is one of the keys to ensuring stability and viability of the Navy's in-house technical workforce. While there have been adjustments in year to year funding, the overall trend in Navy S&T through fiscal year 2003 is upwards. Therefore, any particular year's decrease should not adversely impact our outstanding in-house workforce as long as the overall funding trend remains steady.

SCIENCE AND TECHNICAL WORKFORCE

16. Senator LANDRIEU. Secretary White, Secretary England, and Secretary Roche, in the fiscal year 1999, fiscal year 2000, and fiscal year 2001 authorization bills, the Senate Armed Services Committee (SASC) has provided the Department with regulatory relief and new hiring authorities so that the DOD can waive regulations and establish new programs that will enable them to attract and retain the finest technical talent in their laboratories. These are difficult issues for the government, since most technical workers receive lucrative offers from the private sector that leads them to forsake government jobs. Although legislation has been passed to help the Department in this area, the DOD has made very limited progress in implementing the new hiring programs. Over the past few years, Congress has authorized a number of pilot programs in defense laboratories to streamline procedures and waive unnecessary regulations in order to establish innovative hiring programs for technical staff and establish innovative cooperative programs with the private sector. Unfortunately, a number of these programs have been delayed due to legal and regulatory hurdles.

How are you working to remove those barriers so that these programs can continue and expand in order to improve the quality of defense labs and test centers, and improve the quality of technical talent that can be attracted to these important facilities?

Secretary ENGLAND. Some legislative provisions have helped the Service laboratories, especially Section 342 of the Defense Authorization Act for fiscal year 1995 and Section 1107 of the Defense Authorization Act for fiscal year 2000. However, constraints, in terms of coverage, duration, and scope, imposed by the Office of Personnel Management on the Section 342 personnel demonstrations have greatly limited the degree to which participating laboratories could experiment with innovative ways to hire, retain, and shape their workforce. Section 1107 eliminated controls on high-grade scientific and engineering positions, a move that has helped with retention of high-quality personnel scientific and technical personnel.

Of all the recent legislative provisions provided to help the Service laboratories with workforce problems, Section 1114 appears to offer the greatest possibility of relief. Its coverage is, however, limited to Science and Technology Reinvention Laboratories participating in the fiscal year 1995 Section 342 personnel demonstrations. Whether this potential will be realized will depend on OSD's ultimate interpretation and emphasis of this provision.

The Office of Naval Research initiated a Naval Research Enterprise Internship Program for graduates and undergraduates via Navy ROTC. The scholarship provides \$3,000 to \$5,000 to spend 10 weeks in the summer working with government scientists and engineers in the labs and warfare centers. Over 800 students applied for the 180 positions.

Currently, a joint Naval Research Advisory Committee study, with panel representation from the Army Science Board and the Air Force Scientific Advisory Board, and sponsored by the Director Defense Research and Engineering, is examining the difficulty of the Service laboratories in recruiting and retaining top-quality scientists and engineers, as well as other issues related to their ability to remain

world-class research institutions. The panel is currently examining recommendations from past studies of the laboratories, recent legislative reforms, including those mentioned above, and input from other experts, to develop a set of recommendations for improving the ability of these laboratories to attract and retain the best and brightest technical talent. The panel has just completed its visits to labs and is currently developing its findings and recommendations. It plans to submit a preliminary summary of its conclusions to the Services and OSD in April or May 2002. A formal report will likely not be completed until late Summer 2002.

Secretary ROCHE. The Air Force has implemented Laboratory Demonstration (LabDemo) for all civilian science and technology positions in the Air Force Research Laboratory and is pleased with the results of the past 5 years under the trial system. This is a demonstration project authorized under the 1995 legislation permitting reinvention laboratory demonstration projects. During this time, we have implemented additional changes from the original construct, such as permitting a roll-over of contribution-based salary adjustments to annual cash bonuses when there is a cap on giving the individual what they have earned. We are currently working plans and procedures to distribute and hire 40 scientists and engineers (S&Es) under authority of Section 1113 of the 2001 National Defense Authorization Act.

On the military side we plan to use Critical Skills Retention Bonuses on a limited basis and are seeking to identify the funds to do so for targeting the retention of S&Es at the mid-career level, where we are currently experiencing a retention problem. We have also initiated a "re-recruiting" campaign focused on the S&E career field, where we are individually recruiting current S&E personnel to continue their Air Force careers.

Our entire Air Force Flight Test Center at Edwards AFB, CA, is participating in the Department of Defense Civilian Acquisition Workforce Personnel Demonstration (AcDemo), authorized by the 1996 National Defense Authorization Act. We are particularly gratified to see an improvement in their ability to recruit high-quality recent-engineering graduates as the result of using the new AcDemo pay-setting and current recruiting bonus flexibilities. We have also significantly reduced our hiring time.

We recommend authorizing implementation of a DOD alternative personnel system as described in the Managerial Flexibility Act that will allow expansion of successful demonstration authorities to the rest of the workforce. This would allow us to take full advantage of all the various initiatives pursued in demonstration projects across the Federal Government, and craft a system that will facilitate personnel management across the Department, not just among the acquisition community and research laboratories. The Managerial Flexibility Act contains provisions like streamlined and expedited hiring and recruiting, retention, and relocation bonuses that will go a long way towards breaking down the barriers that prevent us from attracting and retaining the workforce needed for the 21st century. We are now working with OSD and OMB on fiscal year 2003 Omnibus proposals that also support streamlined hiring and a modern pay and compensation system (broad pay banding).

Secretary WHITE. The Department of the Army has made significant progress in developing new hiring programs to take advantage of new legislation addressing the scientific and technical workforce.

Section 245 of the National Defense Authorization Act (NDAA) for fiscal year 2000 allows DOD to explore ways to improve operational efficiency. DOD directed the implementation of section 245 in June 2001 and waived certain requirements of the DOD Priority Placement Program (PPP) for our pilot labs and test centers, allowing for a shorter, one-time clearance process for vacancies.

Each of the pilot labs is participating in personnel demonstration projects and has been testing various hiring flexibilities for at least 3 years. The labs have also provided additional recommendations to expedite hiring engineers and scientists, and we are supporting several initiatives such as geographically targeted recruitment and direct appointment into competitive service.

Within the personnel demonstration projects, managers view their broad-banded systems as more flexible and effective than the General Schedule system. We, therefore, also are working towards achieving a broad-banded system Army-wide to capitalize on the best features of these projects.

As a direct result of the program for labs and test centers, we anticipate an expansion of the one-time PPP clearance procedure for scientific and engineering positions, which will also cover non-pilot organizations with research, development, test, and evaluation responsibilities. This will further streamline the fill time and hiring process. Additionally, the Army has chartered an executive group to identify steps to further improve the quality and staffing of our scientific and engineering workforce.

Section 1113 of the fiscal year 2001 NDAA provides the authority to appoint scientists and engineers from outside civil service and the uniformed services. We surveyed our laboratory community in December 2001 to determine the greatest need regarding the number and types of scientific and engineering positions required at specific locations, and we are currently determining the final distributions. To gain efficiencies in the implementation of the new authority, we are collaborating with the other Services to facilitate recruitment and expect to begin hiring later this fiscal year.

17. Senator LANDRIEU. Secretary White, Secretary England, and Secretary Roche, do you have recommendations for this committee as it works to revitalize the defense laboratories and improve the quality of the Department's technical workforce?

Secretary WHITE. The Army laboratories have been active participants in multiple approaches to improvement of the technical workforce over the years, but more needs to be done. Not only will we be exploring other improvements to the scientific and engineering personnel systems, but improvements to the work environment and infrastructure are just as important. Attracting and retaining top quality scientists and engineers not only depends on pay, but also on the opportunity and mechanisms to put those talents to work in stimulating environments. During the previous series of base closings, two new laboratories were constructed at Adelphi and Aberdeen, Maryland, while other installations were closed. However, all facilities and equipment need to be constantly modernized for scientists to maintain their competitive edge. This is an area that we would ask you to join us in ensuring that our scientists and engineers have the best equipment and facilities in the world to support the best fighting force in the world.

Secretary ENGLAND. In light of the systemic problems facing the Service laboratories, and the urgent need to address them, it appears that incremental approaches and piecemeal legislative efforts may no longer be sufficient and timely. Moreover, we are approaching the point of diminishing returns on trying to make Title 5 practices responsive to the needs of a serious research laboratory. Perhaps a more sensible approach would be to tailor the governance to the research mission rather than the reverse.

Establishing one or more of the military research laboratories as special government corporations may have some merit. The customers for the corporations would be the government itself. The corporations would survive only to the extent that government-funding agencies were prepared to purchase the products/services of the corporations. Such a plan would appear to have several advantages over the partial or total privatization of a lab: (1) It almost certainly would be less expensive in the long run; (2) The staff of such an organization would remain Federal employees, and thus able to make decisions or render advice without conflicts of interest; and (3) It would be more executable.

Secretary ROCHE. The quality of our Scientist and Engineer (S&E) workforce is superb. Air Force scientists and engineers guide, produce, and sustain the concepts, technologies, and systems that are and have been key to successful Air Force operations. Our problem is not the quality of our workforce, but its shrinking quantity. The S&E workforce of today and tomorrow requires that we recruit, retain, and develop sufficient numbers of highly skilled and knowledgeable technical professionals; however, current trends could threaten the Air Force's ability to recruit and retain a viable civilian and military S&E workforce. For example, over the next 5 years, a quarter of the Air Force S&E civilian workforce is eligible to retire.

The Air Force is aggressively addressing the worsening S&E retention and recruiting problem and has constituted an S&E Functional Management Team to drive a number of initiatives designed to fix the recruiting and retention shortfalls of the civilian and military S&E workforce, such as Critical Skills Accession and Retention Bonuses to obtain and retain members, and re-recruiting key year groups of engineers (3-13) by highlighting the benefits of continued service. Additional initiatives for which we thank Congress include Direct Hire Authority and the authority to hire 40 S&Es for the Air Force Research Laboratory from outside the civil service—both of which were granted in the Fiscal Year 2001 National Defense Authorization Act.

I also believe that a strong research program and modern research facilities contribute to the recruitment and retention of a top-notch technical workforce. Towards this end, I ask for your support of our President's Budget request for the Air Force Science and Technology (S&T) Program. We have submitted a balanced budget that includes S&T at a funding level that meets our projected needs for future war-fighting capabilities, while sustaining our current forces.

TECHNOLOGY TRANSITION

18. Senator LANDRIEU. Secretary White, Secretary England, and Secretary Roche, the Department continues to have a problem getting good return-on-investment on its science and technology dollars, as well as a problem getting successful technologies pushed out of laboratories and into the hands of warfighters. This is due to a number of problems—including lack of funding, regulatory barriers, the slowness of the government's funding mechanisms, and others. Last year, the Senate Armed Services Committee proposed a new program to promote technology transition within the Department. This provision was lost in conference. Both the committee and the Department are anxious to continue trying to address this issue in the current year.

One of my priorities this year is to try to help the Department address the issue of the transition of good technologies from research programs into the hands of warfighters in the field. This is a complex issue, but we are working with the Department to address the important funding and coordination issues that occur when trying to move technologies through the system.

How are the services trying to accelerate the transition of technologies from their science and technologies programs into the hands of the warfighters?

Secretary WHITE. First, allow me to thank you and the committee for the tremendously helpful support and leadership you have provided in the past in trying to solve this challenge. We must ensure that technology has been matured sufficiently in our science and technology (S&T) program so it can transition quickly into systems development and demonstration (SDD), then to production. We can take time out of the transition process by maturing technology in the S&T phase to Technology Readiness Level 7—system prototype demonstration in an operational environment. By doing this, we spend more in S&T, but save time and money in SDD, then proceed faster to production.

Secretary ENGLAND. Although I believe the Navy is doing a good job of transferring Science and Technology products into the Fleet/Force, there is no question that we could do better. We have seen great success with the transfer out of the laboratory and into combat of items such as the thermobaric weapon, which has been used in Afghanistan.

One way we try to duplicate this kind of discovery to deployment transition within the Navy is by strengthening the partnership between the Office of Naval Research (ONR) and the schools, universities, government laboratories and industry, as well as nonprofit and for-profit organizations. We intend to take full advantage of the creative genius present in the schools and private sector to meet Navy and Marine Corps requirements.

The ONR Commercial Technology Transition Officer is designated as the senior Naval advocate for moving promising technology out of commercial research and into systems procured for the Navy/Marine Corps. Additionally, ONR established a "Swamp Works" office, similar in concept to the Lockheed-Martin "Skunk Works," but dedicated to addressing critical blue/green, Navy/Marine Corps problems with out-of-the-box solutions. ONR also established a Naval Fleet/Force Technology Office to strengthen communications between the Fleet/Force and the Naval S&T community by assigning Naval Research Science Advisors to serve with Fleet/Force commands. ONR also established the Naval Research Science and Technology Action Team (NR-STAT) in July 2001 to provide technology solutions (from all sources: government, military, industry, academic, etc.) to problems identified by warfighters. Since the events of September 11, NR-STAT has been a principal conduit for technology proposals/solutions in the war against terrorism.

Secretary ROCHE. I think the Air Force has done a remarkable job getting advanced technologies into the hands of our operational forces. Our track record of success in Afghanistan is outstanding. As you point out, technology transition is a very complex issue. One must trade off the technical maturity of the technology with the potential added capability that could be brought to the battlefield. There are, for example, severe supportability issues for fielding immature technologies.

In the last year or so, we have started a new process in the Air Force that brings the operational user, the Product Centers, and the Air Force Research Laboratory together early in the development process to identify those technologies that are most important to warfighter capabilities. These new Applied Technology Councils (ATCs) offer great potential for improving our ability to rapidly and effectively transition technologies into advanced capabilities. Additionally, the Air Force has begun to use our four-star Science and Technology (S&T) Summits to increase the awareness of senior leadership of the technologies in development that could provide new capabilities.

The Air Force continually looks for ways to improve technology transition and focus our S&T programs on those capabilities most dear to the warfighters and also tries to streamline ways to get these capabilities to them as fast as possible. Our S&T Program budget is approximately 75 to 80 percent outsourced with the remaining 20 percent supporting our scientists, engineers, support personnel, and other infrastructure costs. This high level of outsourcing promotes relationships between the scientists and engineers conducting the research and lays the foundation for technology transition. This continuous long-term investment, both in-house and on contracts, steadily advances state-of-the-art technologies. Most of the technology developed under Air Force lab sponsorship resides in the expertise of industry personnel and products. This expertise is applied to proposals for advanced systems acquisitions and transitions technology into the hands of the warfighter.

19. Senator LANDRIEU. Secretary White, Secretary England, and Secretary Roche, what guidance and recommendations do you have for the committee as we attempt to address this issue that is critical to both our military and many of our industrial constituents?

Secretary WHITE. We believe the key to speeding technology to the warfighter is in allowing the S&T community to mature technology sufficiently before it goes into production. The Department has implemented a metric for technology readiness (Technology Readiness Levels, or TRLs) that has helped us transition technology while minimizing risk to the acquisition program.

The committee could help the Services by pursuing an overall increase in Service Total Obligation Authority that would be directed toward the 6.3 budget activity for the purpose of performing the development and tests required to sufficiently mature technology as quickly as possible before it goes into production. The committee can also help by continuing to support manufacturing technologies efforts that work to transition emerging technologies into producible and affordable products to support the Army, and by helping provide realistic, high fidelity modeling and simulation capabilities to reduce both technical and operational testing costs during SDD.

Secretary ENGLAND. The successes we have achieved in transferring Science and Technology from the laboratory to the Fleet/Force depends on sustained long-term investment in S&T. Congress has been very supportive in terms of sustained investment, and we are grateful for your support.

Furthermore, the Navy is working to strengthen the partnership between the Office of Naval Research (ONR) and schools, universities, government laboratories and industry, as well as nonprofit and for-profit organizations. Continued robust government sponsorship of technology and basic research being conducted by these institutions will remain necessary to mature S&T requirements unique to the Defense Department.

Secretary ROCHE. I believe the most help Congress can provide the Air Force to accelerate the transition of technology into acquisition programs and to the field is to support adequate and stable funding. Science and Technology (S&T) funding that is stable or shows growth, promotes project stability to bring new technology to fruition in integrated demonstrations. Additionally, Congressional support of Air Force transformation to a spiral development acquisition model would be highly beneficial. This would allow us to move from a "be-all-end-all" system solution to incremental steps of increasing capability with the possibility to add technology and field interim systems to the warfighter sooner.

COMMITMENT TO THE B-52

20. Senator LANDRIEU. Secretary Roche, it seems to me that we can effectively fight the war on terrorism and make strides toward transformation. One aim need not suffer at the hands of the other. As an example, an old and venerable lady of war—the B-52—has transformed itself into an aircraft that can deliver the most modern and sophisticated weapons to target terrorist hideouts and destroy terrorist training camps. No longer is the B-52 a dumb bomber or a carpet bomber; rather, she has established herself as a preeminent bomber capable of meeting any mission. Can you please expound upon the role of the B-52 in Operation Enduring Freedom and how this 44-year-old lady has transformed herself into an airframe that can perform expertly for another 40 years?

Secretary ROCHE. Together the B-52 and the B-1 have flown 10 percent of all combat sorties in Operation Enduring Freedom, dropping 60 percent of the total bomb tonnage. Modifications to the aircraft have increased its survivability and lethality. The Situational Awareness Defensive Improvement (SADI) and the Electronic Countermeasures Improvement (ECMI) have improved survivability through enhanced situational awareness and aircraft protection. The Advanced Weapons In-

tegration (AWI) and Avionics Midlife Improvement (AMI) have increased lethality by allowing the B-52 to carry both modern guided weapons and standoff weapons. These improvements are the first in a series of time-phased modernization programs that will ensure the B-52 remains a viable weapons systems through 2040.

MODERNIZATION OF THE B-52 FLEET

21. Senator LANDRIEU. Secretary Roche, do the plans for increasing military expenditures to \$451.4 million by fiscal year 2007 call for the full modernization of the B-52 fleet, including the Ready Reserve B-52s at Minot Air Force Base? After all, the B-52 has been a stalwart in Operation Enduring Freedom and is expected to remain in service until fiscal year 2040.

Secretary ROCHE. The Air Force has initiated a time phased B-52 modernization program. The modernization program will increase B-52 lethality, survivability, flexibility, and responsiveness. The Air Force has a total of 94 B-52 aircraft. The B-52 force structure requirement is 76 aircraft. The additional aircraft are excess to need; therefore, the Air Force is not funding the modernization of the 18 excess aircraft.

INADEQUACY OF NAVY SHIPBUILDING IN PRESIDENT'S BUDGET

22. Senator LANDRIEU. Secretary England, the President's budget calls for the construction of five new ships and the conversion of two submarines. The President proposed a \$48 billion increase in defense spending for fiscal year 2003. I will support whatever amount is deemed necessary for the protection of this country. But, the President's budget, especially in light of the increase in expenditures, woefully shortchanges necessary shipbuilding that will both transform our military and protect our forces and our people. As you have said, the Navy must procure "8-10 ships each year to sustain current force levels over the long term," yet this budget calls for only five new ships. To paraphrase your submitted statement, you say the Navy plans to procure more ships in the out-years, but fiscal year 2003 is not the best time to accelerate ship procurement. Frankly, I can think of no better time. However, if the President and the Department of Defense deem the allocation of funds to the war on terrorism as the better recipient of funds than shipbuilding and procurement, and the war on terrorism is expected to last years, won't we simply always hear that this year, and the next year, and the year after, is not the right year to procure additional ships?

Can't the Department see that shipbuilding and procurement are essential to the war on terrorism?

Secretary ENGLAND. We are constantly assessing requirements and reevaluating our priorities due to changes in the threats and the President's budget represents the best balance of resources to requirements for those threats.

LPD 17 PRODUCTION ACCELERATION

23. Senator LANDRIEU. Secretary England, in your prepared statement, you specifically state that procurement of a second LPD 17 should not occur this year because "the LPD 17 design is still not complete. . . Although we need to replace our older amphibious ships, LPD 17 is not yet ready for rate acceleration." Generally, the Navy seeks 40 percent design completion before funding a new ship, yet the LPD 17 is anywhere from 91 percent to 95 percent design complete.

How can you say the LPD 17 is not ready for rate acceleration and has not completed its design, especially since as many as eight DDGs were under contract well before that ship was 95 percent complete.

Secretary ENGLAND. A key tenet of the LPD 17 program is to have a mature, stable design before proceeding with production. This will lead to more efficient and less costly ship production effort than has traditionally been experienced in Navy shipbuilding. The detailed design effort is now about 95 percent complete and the production design is currently 79 percent complete. During production design, the 3-D Computer Aided Design models are translated into actual work instructions for the production floor. At this time, less than 20 percent of the lead ship production has been completed. While production progress to date using the production design package has been satisfactory, production has not progressed to the point where I am confident that technical, cost and schedule risks have been sufficiently mitigated.

The comparison to the DDG program is interesting. With this year's budget request, we will have almost half of the 12 ships in the LPD 17 class authorized. The

DDG program had three of the 64 ships of the class under construction, and 13 ships under contract at similar point in detailed design completion. However, the lead ship production was much further along than LPD 17, with DDG 51 already in the water undergoing system light-off and testing.

JSTARS

24. Senator LANDRIEU. Secretary Roche, this war has proved that intelligence, surveillance, and reconnaissance (ISR) are at a premium. In fact in this week's *Business Week* you discuss the achievements of ISR in Afghanistan and how it was your goal to paraphrase *Business Week* that "the Landscape below [be] so well-mapped by infrared and video cameras lasers, and radar sensors that the enemy couldn't hide even at night." Our ISR capabilities have allowed us to achieve that goal. The men and women involved in ISR in the air and on the ground should be praised for their excellence in execution of their jobs. In particular, I want to laud the JSTAR for its intelligence, surveillance, and reconnaissance capabilities. Could you please comment on the JSTAR's role in Operation Enduring Freedom?

Secretary ROCHE. Joint STARS has been a key asset during Operation Enduring Freedom and is particularly significant in our continuing effort to target both the leadership and ground forces of the Taliban and al Qaida. Joint STARS has not only provided invaluable ground surveillance and threat warning to our forces in Afghanistan, but has also been pivotal during the targeting and execution battle management of attack operations.

The aircraft's synthetic aperture radar serves as the only system capable of providing wide-area ground movement surveillance, allowing us to monitor suspect Taliban and al Qaida vehicle traffic over a broad coverage area. The Joint STARS crew has also been able to screen the convoy routes of friendly forces, as well as the ingress routes of our own helicopter missions. Due to Joint STARS' robust communications capabilities, the mission crew can rapidly correlate information with other sensors, such as Rivet Joint, U2, Predator, and Global Hawk, to enable responsive identification, exploitation, and if appropriate, targeting of enemy forces. Joint STARS air battle managers, operating within the rules of engagement, direct on-station strike aircraft to engage enemy ground forces.

These dynamic capabilities have contributed extensively to our present success supporting the on-going Operation Anaconda Joint STARS surveys the area of operation for enemy movement and provides information on traffic of interest either through data-links or voice reports. Based on the developing situation, the Joint STARS crew works directly with ground and airborne controllers to rapidly process air support requests from our ground forces and assign strike assets to engage Taliban and al Qaida forces. Operating in conjunction with strike assets, such as the A-10, Joint STARS has provided highly effective and lethal support for our ground forces.

The contributions of Joint STARS in this operation demonstrate the versatility of this system and its ability to perform a spectrum of missions that support Operation Enduring Freedom.

NEWER ISR AIRFRAMES

25. Senator LANDRIEU. Secretary Roche, as a result, can we expect to see more technological growth and more or newer airframes for this particular weapon system in the fiscal year 2004 budget and beyond?

Secretary ROCHE. The Air Force is quite pleased with the role that Joint STARS and other ISR aircraft have played in Operation Enduring Freedom. Last week during a CSPAN interview with General Jumper and I, I think the Chief called it "a magnificent aircraft." I couldn't agree with him more.

We are planning to continue to equip the E-8 with new technologies. One key upgrade will be to increase its ability to get data off board to our F-15E strike aircraft with a new Link-16 upgrade. That's a great example of the horizontal integration of platforms vision for the Air Force. We also plan to enhance connectivity with the Air Operations Center and other ground elements with a new DALIA SATCOM radio.

However, even with these and other modifications, the Joint STARS is not sufficient to meet our future needs. It's built out of an old 707 airframe that's going to cost more and more to maintain. We have a new AESA based radar technology that needs a lot of more power from the engines. The fiscal year 2004 budget will continue a major ramp-up of our activity to transition off the 707 airframe and onto a brand new 767-400. The new radar capabilities will be revolutionary. In fact, they

will go far beyond what we can accomplish today, especially for combat identification of friend and foe on the ground and in the air, and for cruise missile defense.

The combination of longer range, heavier payload, higher altitude, and a truly extraordinary radar capability will eventually allow us to find and target threats with a very high degree of confidence and with much less risk to our manned platforms. This multi-sensor command and control aircraft, or MC²A, will be the hub of a constellation of manned and unmanned ground, air and space assets. We plan to buy the testbed in fiscal year 2003, and field the first aircraft in fiscal year 2010.

Joint STARS is the current workhorse for our GMTI capability and will remain so through the middle of the next decade. The future is the 767 based MC²A, and we will be focusing our priorities on spiraling far greater capability onto a brand new platform.

QUESTIONS SUBMITTED BY SENATOR BILL NELSON

CONCURRENT RECEIPT

26. Senator BILL NELSON. Secretary White, Secretary England, and Secretary Roche, the budget request does not include funding necessary to allow concurrent payment of retired pay and disability compensation (est. \$3 billion annually). How did you advise the Secretary of Defense on funding for concurrent receipt?

Secretary WHITE. Since the Army did not budget for this item, we did not advise the Secretary of Defense on this issue.

Secretary ENGLAND. Throughout the course of last year, the Department of the Navy has replied to numerous bills, within both the House and the Senate, which, in various forms, proposed concurrent receipt of military retirement and Veterans disability. In each case our replies have been staffed through both the Chief of Naval Operations and the Commandant of the Marine Corps. The Office of the Assistant Secretary of the Navy (Manpower and Reserve Affairs) coordinated consolidated Departmental replies that were staffed through the Office of Legislative Affairs and, when appropriate, the Office of Program Appraisal, to my office. As none of the numerous House and Senate concurrent receipt bills proposed have provided, or even proposed to provide additional funding to cover the increased cost to the services, I have advised against concurrent receipt.

Secretary ROCHE. The Air Force has not budgeted for this item in the fiscal year 2003 President's Budget and cannot absorb the significant costs without additional funding. Before any implementation decision, the department should thoroughly assess this benefit weighing the impact on the beneficiary and the department.

27. Senator BILL NELSON. Secretary White, Secretary England, and Secretary Roche, what is your personal opinion of the justifiability of eligible retirees receiving their full retired pay and disability compensation?

Secretary WHITE. My decision to support concurrent receipt is based on my belief that it is equitable to allow all entitled groups of retirees to receive full retirement and full disability compensation. Military retirees should not be singled out as the one group whose retired pay is offset because of compensation paid due to a service-connected disability. Those who make a career of military service are as deserving of full compensation as those who make a career of civilian service. Recently, the Army Family Action Plan Conference voted the issue of concurrent receipt as the most important of their top five issues affecting Army families.

Secretary ENGLAND. I would like to go on record as saying that I recognize the importance of properly compensating veterans for injuries sustained during military service. This is an emotional issue with retirees, veterans' groups as well as our sailors and marines. We are working with OSD and the rest of the DOD in providing input to the SAG Corp., who are independently analyzing whether or not we provide adequate benefits to our military retirees. That report should be complete next month.

Secretary ROCHE. We certainly recognize the importance of properly compensating veterans for injuries sustained during military service. We also recognize that there are two competing viewpoints on whether concurrent receipt is justified. Last year's Budget Resolution directed DOD to study this issue and report their findings. We understand that they have undertaken this study, beginning with an independent review of the matter. We anticipate that they will share the results with the Services in late spring.

28. Senator BILL NELSON. Secretary White, Secretary England, and Secretary Roche, if Congress provides funding to pay for concurrent receipt as authorized last year, would you recommend that the President veto the appropriation?

Secretary WHITE. I am not able to provide a sound recommendation to the President without first analyzing the impact of concurrent receipt on the Army. No such analysis has been conducted at this time.

Secretary ENGLAND. Concurrent receipt would cost DOD roughly \$3 billion per year. Compounded over time, the current estimates are that the cost for 10 years would be \$40–\$50 billion. With numerous programs competing for each budget dollar, the Department of the Navy cannot afford to bear its share of that burden without significant additional funding from Congress. In addition, the Navy and Marine Corps have current bills to pay and future requirements which need funding. At this juncture, I certainly would not recommend a Presidential veto of any proposal offering additional funding to DOD and the Department of the Navy. I will caveat that remark by saying that I await the result of the SAG study and a determination by the Services that concurrent receipt with additional congressional funding will not jeopardize current obligations or future requirements.

Secretary ROCHE. Realizing the substantial commitment involved with funding concurrent receipt, we would review and assess the entire bill's impact and make an appropriate recommendation.

MILITARY CONSTRUCTION AND BRAC

29. Senator BILL NELSON. Secretary White, the budget request reduces funding for “low priority” new construction that was planned in previous years. Construction is slowed obviously in anticipation of BRAC authority in fiscal year 2005, yet this budget request does include new construction that will, in some cases, just be starting in fiscal year 2005. What specific guidance from the Department of Defense have you been given with regard to military construction?

Secretary WHITE. Department of Defense guidance to the Army was to fund the President's objective of transforming the military for the 21st century while continuing to improve the quality of life, readiness, and infrastructure. Specifically, the guidance directed the Services to fully sustain the planned inventory of facilities; then, commensurate with BRAC, fund restoration and modernization and replacement at a 67-year recapitalization rate for approximately 80 percent of the current infrastructure by fiscal year 2010 while concentrating funding on C–3 and C–4 facilities; and meet new footprint construction to meet force structure changes in the year needed. Guidance is also to eliminate substandard family housing by 2007.

Secretary ENGLAND. The Department of the Navy did not reduce the Military Construction account in anticipation of BRAC 2005. The Secretary of Defense provided broad guidance to:

- Seek to provide modern, ready and effective installations infrastructure to support the operations and maintenance of U.S. forces and provide a quality working environment for U.S. military and civilian personnel;
- Fund facility restoration, modernization and replacement at a 67-year Recapitalization rate by fiscal year 2010;
- Concentrate funding on C–3 (have serious deficiencies) and C–4 (do not support mission requirements) facilities most critical to an installation's mission; and
- Fund the cost of new footprint construction in time to accommodate new system acquisitions and force structure changes.

Secretary ROCHE. DOD Fiscal Guidance, provided to Service Secretaries in Aug. 2001, told us to “fund to support a trajectory that moves infrastructure to best practices (funding that sustains a rate of recapitalization at approximately 67 years) by fiscal year 2010 for required base structure, which should be set at approximately 80 percent of current infrastructure.” Similarly, according to Defense planning that is commensurate with appropriate BRAC, components shall fund facility restoration, modernization, and replacement at a 67-year recapitalization rate for approximately 80 percent of the current infrastructure by fiscal year 2010.

30. Senator BILL NELSON. Secretary White, how did you use that guidance to determine what kinds of projects are acceptable and which are not?

Secretary WHITE. Our military construction budget request will fund our highest priority facilities. Transformation, barracks, strategic mobility, Army National Guard division redesign, and chemical demilitarization programs are funded in this budget request. Substandard family housing is on track to be eliminated by 2007.

The remainder of this budget request supports the restoration and modernization projects at a recapitalization rate of 123 years.

Secretary ENGLAND. The Navy convenes a Shore Installations Programming Board and the Marine Corps convenes a MILCON Program Evaluation Group each year to consider, evaluate, and prioritize military construction projects. Projects are selected based on a number of different criteria, including Department of Defense/Department of the Navy guidance, Service criteria, fleet priorities and the most critical readiness, quality of life, and compliance needs.

Secretary ROCHE. We developed our program in accordance with Defense plans that are within budget constraints.

31. Senator BILL NELSON. Secretary White, Secretary England, and Secretary Roche, in your estimation, what kind of a military construction backlog could be created under this strategy, and how do you plan to fund the “bow-wave” of projects that were delayed after BRAC is decided?

Secretary WHITE. There will be no additional backlog in the Army’s military construction program. The Army currently has a backlog of military construction projects that is reflected in the condition of our facilities which are rated C-3 as reported in our installation status report. The backlog, or bow-wave, is large and will require a program of focused investments and higher funding to improve our facilities. Our plan is to follow Office of the Secretary of Defense guidance to increase funding for sustainment of our existing inventory to 100 percent of our annual requirement; to increase our rate of recapitalization of facilities to a 67-year rate by 2010; and to reduce facility deficits in 20 years.

Secretary ENGLAND. Since the Department of the Navy did not delay projects in anticipation of future base closure, there is no MILCON backlog “bow-wave.”

Secretary ROCHE. The Air Force did not consider BRAC when prioritizing the fiscal year 2003 President’s budget. We developed our fiscal year 2003 Presidents’ budget submittal based on the prioritized needs of the Total Air Force, within available funding.

32. Senator BILL NELSON. Secretary White, Secretary England, and Secretary Roche, what criteria, in your opinion, are most important in BRAC assessment?

Secretary WHITE. The Fiscal Year 2002 Defense Authorization Act includes the authority to conduct an additional round of base closure and realignment actions beginning in 2005. In April 1998, the Department of Defense delivered a report to Congress reaffirming the Army’s need for additional BRAC rounds. The report named no installations and provided only rough estimates of excess Army base capacity. A much more thorough analysis of all Army installations will be necessary to implement the fiscal year 2005 authority. There are no installations currently under future BRAC analysis.

The criteria for assessment of new BRAC have not been determined. According to the 2002 National Defense Authorization Act, Congress has required the Secretary of Defense to publish the proposed criteria in the *Federal Register* by December 31, 2003. The selection criteria ensures that military value is the primary consideration in making recommendations for closure or realignment of military installations.

Secretary ENGLAND. Per section 2913 of the amended Base Closure and Realignment Act, “military value” must be the primary consideration in making of recommendations for the closure or realignment of military installations in 2005. The amendment further provides that “military value” shall include at a minimum:

- Preservation of training areas suitable for maneuver by ground, naval, or air forces to guarantee future availability of such areas to ensure the readiness of the Armed Forces;
- Preservation of military installations in the United States as staging areas for the use of the Armed Forces in homeland defense missions;
- Preservation of installations throughout a diversity of climate and terrain areas in the United States for training purposes;
- The impact on joint war fighting, training, and readiness; and
- Contingency, mobilization, and future total force requirements at both existing and potential receiving locations to support operations and training.

Secretary ROCHE. New construction is prioritized by the Air Force according to need. Construction is also evaluated in relation to all mission requirements of the Air Force including readiness, modernization and quality of life. The MILCON budget for the Air Force does not take into account future BRAC rounds. MILCON in the past has not been predicated on BRAC and will not be as we approach BRAC in fiscal year 2005.

For fiscal year 2003, the Air Force's facility and infrastructure priorities are to sustain existing facilities, improve quality of life by investing in housing for both married and single members, ensure compliance with existing environmental statutes, and support requirements for new missions and weapon systems.

The current legislation states military value will be the primary consideration in making our recommendation for closure or realignment. Our review will be based on mission and force-structure first, and then the final OSD selection criteria transmitted to Congress. Emphasis will be placed on installations that maximize operational and training capability today and in the future.

33. Senator BILL NELSON. Secretary White, Secretary England, and Secretary Roche, what assessment problems of the past rounds are you eager to avoid?

Secretary WHITE. Based on the results of the assessment criteria used in past rounds of BRAC, there were no significant problems identified.

Secretary ENGLAND. Prior rounds of base closure followed the law in effect at that time in assessing military value as the paramount consideration. The specific elements of "military value" to support BRAC 2005 will be developed by OSD, in conjunction with the military departments. We would expect consideration for and greater sensitivity to sustainable readiness (i.e., contend with "encroachment" issues in and around military bases and training ranges) to support future national defense needs.

Secretary ROCHE. New construction is prioritized by the Air Force according to need. Construction is also evaluated in relation to all mission requirements of the Air Force including readiness, modernization and quality of life. The MILCON budget for the Air Force does not take into account future BRAC rounds. MILCON in the past has not been predicated on BRAC and will not be as we approach BRAC in fiscal year 2005.

For fiscal year 2003, the Air Force's facility and infrastructure priorities are to sustain existing facilities, improve quality of life by investing in housing for both married and single members, ensure compliance with existing environmental statutes, and support requirements for new missions and weapon systems.

Throughout the first four BRAC rounds, the Air Force identified and resolved a variety of assessment issues. Solutions were incorporated in each successive round to where the Air Force is now comfortable with its assessment process.

34. Senator BILL NELSON. Secretary White, Secretary England, and Secretary Roche, arguably, National Guard and Reserve facilities modernization and maintenance backlog reduction should be BRAC neutral and the pause in active military construction that you apparently have decided upon could be an opportunity to reduce deferred new and improved facilities work. Why then are there no National Guard or Reserve military construction projects in your fiscal year 2003 request for units or activities in Florida?

Secretary WHITE. The Army Reserve is currently designing and constructing four projects with a total programmed amount of \$80 million in Florida. In fiscal year 2001, the Army Reserve awarded a Joint Armed Forces Reserve Center project in Orlando, an Aviation Support Facility in Clearwater, and Phase I of a multiphase Armed Forces Reserve Center in St. Petersburg. In fiscal year 2002, the Army Reserve will award the remainder of the multiphase project to construct an Armed Forces Reserve Center in St. Petersburg. These recent projects took care of our most pressing construction needs for Florida. The facility requirements for our other Florida construction needs are still in the early stages of development.

The Army National Guard (ARNG) military construction budget request for fiscal year 2003 is \$101.595 million for 13 projects. The ARNG selection process is determined by prioritizing construction projects based on state priority; condition of existing facility regarding health, safety, and environmental issues; age and condition of existing facility; equitable distribution of project funding to each state; new mission/force modernization; and joint use.

Additionally, Florida's number one priority for this year, a Combined Support Maintenance Shop at Camp Blanding, is funded in the ARNG Future Years Defense Plan in 2007 at \$14.1 million.

Secretary ENGLAND. There were no requirements for Naval Reserve military construction projects in Florida that merited consideration in developing the fiscal year 2003 budget request. Reserve military construction requirements in Florida have largely been met from construction projects funded in recent years.

Secretary ROCHE. We developed our total force facility program in accordance with Defense planning that is within budget constraints. The Air Force Reserve and Air National Guard fiscal year 2003 MILCON covers new military construction projects at Portland, OR (AFR), and at Jackson MS (ANG) and Sioux City IA (ANG).

STATIONING OF THE ATLANTIC FLEET

35. Senator BILL NELSON. Secretary England, for example, all Atlantic Fleet nuclear aircraft carriers are now crowded into one Naval Station in Norfolk. Is it wise to allow this vulnerable concentration of valuable ships to continue or would it be more prudent to station one or more of our nuclear aircraft carriers at other locations? This should obviously impact on stationing and construction decisions. What approach is the Navy taking in this particular case?

Secretary ENGLAND. The Department is in the process of validating our force protection requirements and implementing the necessary improvements to ensure the protection of our assets. The stationing of carrier assets on the east coast will consider all factors associated with home porting, including operational, security, economic and quality of life issues.

FUTURE MILITARY CONSTRUCTION

36. Senator BILL NELSON. Secretary England and Secretary Roche, how long a view is reflected in this MILCON request—that is, are you merely trying to avoid committing to construction at installations that may change after 2005, or are you looking well into the future, carefully considering how to station your forces well into this century?

Secretary ENGLAND. The Fiscal Year 2003 MILCON request seeks to improve the living and working conditions for our sailors, marines, and their families in the immediate future. The analysis of the force structure requirements and resulting infrastructure requirement and BRAC 2005 recommendations is just now beginning. Once the infrastructure rationalization is complete the MILCON program will reflect the identified priorities.

Secretary ROCHE. We did take a long-term view when developing our fiscal year 2003 military construction budget request. Our program was developed using a facility investment strategy that includes the following objectives: accommodate new missions; invest in quality of life improvements; and sustain, restore, and modernize our infrastructure. Because we cannot predict the outcome of future BRAC rounds, we did not consider BRAC when making our prioritization decisions.

This year's military construction request includes \$339 million for projects that target new mission beddown and force realignment requirements with need dates in 2004 and 2005.

37. Senator BILL NELSON. Secretary England and Secretary Roche, what principles or criteria are guiding your deeper view future of Navy and Air Force infrastructure requirements?

Secretary ENGLAND. Quality of life and quality of the work environment are important factors in retaining sailors, marines, and their families. We must continue to invest to support our number one resource—people.

As the Naval Team transforms to capabilities that support Naval Operational Concepts we will rationalize the infrastructure to minimize our footprint ashore while providing the required support to the fleet and fleet Marine force. The streamlined infrastructure will address all antiterrorism force protection issues.

We will collaborate with OSD, Army, Air Force, and defense agencies to eliminate unneeded support facilities. We will implement better business practices to delivery quality, cost-effective services that support the warfighter.

Secretary ROCHE. Our \$677 million family housing replacement and improvement request is consistent with the Air Force Family Housing Master Plan and has us on a glide slope to eliminate housing unit deficits and recapitalize our inadequate units by 2010.

Our \$150 million dormitory investment request was built from the Air Force Dormitory Master Plan and keeps us on target to eliminate our dorm room deficit and convert or replace our worst dormitories by 2009.

Finally, we have included funding necessary to fully sustain our physical plant and to start to buy down the backlog of restoration and modernization requirements associated with our existing physical plant. If we are able to sustain our programmed level of restoration and modernization investment beyond 2007, we expect to eliminate that backlog by 2010.

THE NATIONAL GUARD AND THE WAR ON DRUGS

38. Senator BILL NELSON. Secretary White and Secretary Roche, over the years, our National Guard support for State counterdrug efforts have paid huge dividends

in reducing drug traffic and terrorist threats along our borders. The counterterror benefits of these programs are apparent; however, DOD consistently underfunds this effort in annual budget requests. Even now, underfunding the fiscal year 2002 Guard support for State counterdrug activities will result in the loss of 800–1,000 Guard members supporting counterdrug efforts around the Nation. In Florida, we will lose 70 of our 160 Guardsmen and women support of State and Federal efforts to stop the flow of drugs.

Will the new homeland security command contemplated by DOD have the mission to support Federal and State counterdrug operations?

Secretary WHITE. The Department is currently reviewing the missions the Northern Command will undertake with regards to homeland defense and civil support. The Department provides considerable support to civil authorities in the area of counternarcotics. We are also reviewing our counternarcotics policy. Therefore, it is premature for me to commit to any future role the new command will have in the counterdrug program.

Secretary ROCHE. The Chairman of the Joint Chiefs of Staff directed that Joint Forces Command assemble an implementation staff to determine the area of responsibility, inter-relationships and mission for the designated Commander in Chief (CINC). These implementation deliberations will define the regional influence for the contemplated Command. The interface for the new CINC with the various standing, functional entities operating within the region will be documented. The list of considerations includes counterdrug, counterterrorism, counterproliferation and all other principal DOD mission areas. Once the implementation staff formulates a concept that receives CJCS and SECDEF approval, an affirmed plan of action will detail the subordination, supporting and supported functions for all impacted organizations within the area of responsibility.

39. Senator BILL NELSON. Secretary White and Secretary Roche, what is your commitment to the National Guard's participation in counterdrug/counterterror operations in support of State law enforcement agencies?

Secretary WHITE and Secretary ROCHE. The Department is currently reviewing our counternarcotics policy. Therefore, it is premature to commit to any future level of National Guard participation in counterdrug operations in support of State law enforcement agencies.

40. Senator BILL NELSON. Secretary White and Secretary Roche, a number of my colleagues—in the Senate, on this committee, in the House—and I recently wrote to the President asking him to try to find the funds necessary to keep the Guard's counterdrug support operating at its current levels. Are you aware of this shortfall and are you engaged in the effort to try to identify funds that could be used to cover the immediate requirement? Will you request funds for this effort as part of the fiscal year 2002 supplemental appropriations request that we understand is currently under consideration?

Secretary WHITE and Secretary ROCHE. Staff is working at finding a funding solution for a reasonable level of National Guard support to the States.

Since we are currently reviewing our counternarcotics program, it is premature to commit to a future request for counternarcotics funding.

SPACE OPERATIONS

41. Senator BILL NELSON. Secretary Roche, the Department of Defense budget request indicates a range of support for increased or improved capabilities in space to support military operations—particularly in intelligence, geo-location, and communications. The budget request also reduces funding for important space programs that have failed to progress adequately—such as the Expendable Launch Vehicle (ELV). The Department's emphasis appears to be on the payload, but there is significant risk to our national capacity to reliably get our critical defense systems into space without support for the launch programs, such as the Space Launch Initiative.

Some in the space community caution NASA to maintain the "firewall" between military and civil space activities. This cautious approach to NASA–DOD cooperation ignores the reality of greater inter-agency integration with common objectives to save money and denies NASA a critical and appropriate role in supporting public safety and global security. I have argued that a national space policy that limits DOD's role in reusable launch vehicle (RLV) development may need to be revisited to allow significant DOD contribution to the Space Launch Initiative. What is your position on the future of cooperation with NASA for critical, common space functions

such as space lift? Will you use the Shuttle to meet DOD space delivery requirements?

Secretary ROCHE. The USAF fully supports cooperative efforts with NASA to maximize synergy on common space functions such as spacelift. Due to national policy restrictions and overall costs, DOD has no plans to use the Shuttle for major DOD payloads. However, the DOD does use the shuttle for a variety of space experiments and small payloads. We are fully engaged with NASA planning for future launch and range capabilities. The USAF and NASA have conducted a joint review to harmonize future RLV technology efforts. Although our organizations have differing launch requirements, we see benefit in working closely with NASA in a building block approach to achieve affordable, routine, and responsive access to space. Additionally, NASA and the Air Force have formulated a Memorandum of Agreement that establishes policies, roles, and responsibilities in pursuit of advanced launch and test range technologies that are applicable to expendable & reusable launch vehicles and ballistic missile testing. In meeting the goal of a coordinated national focus on next-generation technologies, NASA and the Air Force have established the Advanced Range Technology Working Group to serve as a forum of U.S. parties who have an interest in space launch support technologies.

42. Senator BILL NELSON. Secretary Roche, the Air Force reduces funding for and is restructuring the Evolved Expendable Launch Vehicle (EELV) program. A reduction of \$400 million from fiscal year 2001 funding projections. What exactly is the problem? How will the Air Force reduce risk in this program from this point on? [NOTE: Boeing has expressed concern over use of Russian engines in Lockheed Martin's Atlas V version of an EELV.]

Secretary ROCHE. EELV development program is on track and we expect first launches of the Atlas V and Delta IV this year. EELV funding was adjusted as necessary to meet requirements of delayed launch dates of Satellite customers. The EELV Program has extensive and detailed mission assurance processes. In 1999, the White House directed a Space Launch Broad Area Review and the AF has implemented additional mission assurance efforts, to further reduce risk.

43. Senator BILL NELSON. Secretary Roche, in a briefing provided by the Air Force to the Armed Services Committee, the Air Force request provides \$1.6 billion in this request for Space Operations funding including 50 launches (33 DOD, 4 Commercial and 13 Civil), and sustains 2 ranges and 45 facilities. Is this number of planned launches correct?

Secretary ROCHE. The number of planned launches is correct, however the break-out is as follows: 16 Civil launches (3 shuttle launches and 13 expendable launch systems); 31 DOD launches (13 space launch and 18 ballistic missile tests); and 3 commercial launches. These figures are subject to change due to satellite program requirements and Air Force priorities.

44. Senator BILL NELSON. Secretary Roche, does the fiscal year 2003 budget request fully-fund DOD and Air Force requirements for launch support and range sustainment/improvement? Where have you accepted the greatest risks in this funding level?

Secretary ROCHE. The fiscal year 2003 budget request fully funds launch and test support operations, sustainment, and modernization. The greatest risk we face is the challenge of keeping the modernization of range systems on track while concurrently supporting ongoing launch and test operations.

QUESTIONS SUBMITTED BY SENATOR BEN NELSON

CHEMICAL AND BIOLOGICAL WEAPONS

45. Senator BEN NELSON. Secretary White, Secretary England, and Secretary Roche, I am concerned that a desperate regime making desperate decisions about its survivability, will not hesitate to use chemical and biological weapons on our service men and women. Have you addressed this in your service budgets and more importantly have you addressed this with our commanders as a very viable threat, more so than in the past?

Secretary WHITE. Congress established a Joint Service Chemical and Biological Defense Program (CBDP) to provide world-class chemical and biological defense capabilities to allow our military forces to survive and complete their operational missions in battlespace environments contaminated with chemical or biological warfare agents. The program is under the oversight of Deputy Assistant to the Secretary of

Defense for Chemical and Biological Defense, and all funding is centralized in a Department of Defense account. Funding requests may not be included in the budget accounts of the military departments.

Currently the individual Services, working within the framework of a Joint Service Agreement, have planned and supported a robust coordinated program. This program is coordinated with the Joint Staff and the CINCs each year during development. The fiscal year 2003 budget request for the CBDP is approximately \$1.374 billion, which is significantly larger than any previous year's budget. The budget request focuses on research, development, and acquisition programs supporting contamination avoidance (to include detection and identification) and NBC battle management (to include reconnaissance and early warning), force protection (to include individual protection, collective protection, and medical support), and decontamination supporting our warfighters.

In addition to the primary focus on warfighter requirements, this year's budget invests a significant amount towards chemical/biological defense homeland security initiatives. This includes the procurement of CB installation protection and emergency first response equipment, as well as CB defense equipment to support the Weapons of Mass Destruction Civil Support Teams (WMD-CST). In addition, research funding is provided to support a biological counter-terrorism research and a biological defense homeland security support program to develop and deploy a multi-component, multi-organizational defense capability targeted to urban areas, other high-value assets, and special events. Collectively, the past and future efforts of the CBDP will ensure that our military forces have the full dimensional protection required to succeed in the presence of chemical and biological warfare threats.

With respect to the our instructions to our Major Commands regarding the viability of this threat, and more importantly our response to the increased concern over chemical and biological defenses, we have included in our draft strategic campaign plan specific instructions addressing the chemical biological elements. These instructions direct a review and update of contingency plans for response to consequence management missions both at home and abroad, increased production of trained personnel for military occupational specialties with critical shortages and the associated equipment, establishment of the chemical/biological elements of force protection planning and response, and training inherent to achieving a C-1 readiness rating for selected units that provide needed consequence management and nuclear, biological, and chemical defense capabilities.

Secretary ENGLAND. Yes. Our fiscal year 2003 budget includes a total of \$14.2 million for chemical, biological, and radiological defense/response. Assessments of these threats are conducted on an ongoing basis and the results are passed to our commanders continually.

Secretary ROCHE. Yes, I have. Clearly, the Air Force must be prepared to fight and win in nuclear/biological/chemical (NBC) warfare environments. We have always dedicated resources to protecting our troops in this difficult warfighting environment. The wartime use of NBC weapons has been addressed through several programs in the Air Force budget.

The goal of the Air Force Counterproliferation Program is to improve and maintain a credible and effective deterrent—to the threat or use of NBC weapons—an approach that integrates counterforce and defensive capabilities, particularly as it pertains to first surviving, then transitioning immediately to operating in this environment. The Counter-NBC Operations Readiness Initiative is an ongoing effort that will establish Air Force-wide standards for readiness and capabilities to counter NBC attacks by developing and implementing new doctrine and policy guidance, concepts of operations, standards, reporting, and training.

The Air Force has programmed \$345 million from fiscal year 2003–2007 to fund the Air Force Chemical Biological Defense (CBD) program, which provides protection, detection, and decontamination capabilities to USAF forces. We have also programmed \$22 million from fiscal year 2003–2007 for the Weapons of Mass Destruction (WMD) Program which improves our first responder capabilities.

For our commanders, the counter-chemical warfare (C-CW) concept of operations (CONOPS), is leveraging the emerging airbase hazard environment knowledge to improve sortie generation while reducing the risk to personnel. Each major command is being trained on implementation procedures, so airbases can adjust tactics, techniques, and procedures for responding to CW attacks. Also, we recently completed a number of related documents (The Commanders' Guidelines on Force Protection and Operations in a Biological Warfare Environment, the Biological Warfare Doctrine Senior Leader's Guide, and the USAF WMD Threat Planning and Response Handbook) that provide our leadership with procedures for responding to chemical/biological warfare events. Further, we are standing up the Agent Fate Working Group to better understand the environment and action commanders can

take to protect forces and carry out the mission. Finally, we have developed a Seniors Leaders Course that will be available for presentation to commanders at all levels beginning this year.

46. Senator BEN NELSON. Secretary White and Secretary Roche, it has often been reported to this committee that our strategic airlift is inadequate. I would like you to comment on how this occurred and if the fiscal year 2002 purchases of C-17s along with the proposed purchases in fiscal year 2003 will adequately fill this vulnerability.

Secretary WHITE. Several congressionally-mandated mobility studies since the Gulf War have highlighted the shortfall in strategic airlift. The Mobility Requirements Study (1992), Mobility Requirements Study: Bottom Up Review Update (1995), and the Mobility Requirements Study—2005 (2001) each concluded that strategic airlift was inadequate. At a production rate of 15 C-17s per year, the Air Force will have a total of 90 C-17s in fiscal year 2002 and 105 C-17s in fiscal year 2003. These will not adequately fill the strategic airlift requirements identified in Mobility Requirements Study—2005.

Secretary ROCHE. The most significant contributor to our airlift shortfall is a less than planned C-5 mission capable rate. C-5 shortfalls are being addressed in ongoing modernization efforts and congressional support for 100 percent spares funding. The proposed follow-on C-17 multiyear procurement brings the fleet total to 180 aircraft. This continued C-17 procurement combined with C-5 modernization will allow the Air Force to meet airlift requirements and provide options to continue growth if new demands are identified as a result of the Global War on Terrorism.

47. Senator BEN NELSON. Secretary White, the Army is close to having the first of several new and operational Interim Brigade Combat Teams in order to allow the Army to become more responsive. Do our future purchases of strategic airlift coincide with the fielding of these brigades?

Secretary WHITE. Decisions for currently programmed future purchases of strategic airlift were made as a result of requirements identified in Mobility Requirements Study—2005. This study was begun in 1998, before Army Transformation was announced. It modeled an Army of Excellence force structure and did not include Interim Brigade Combat Teams. Regardless, every C-17 produced increases our capability to rapidly deploy Interim Brigade Combat Teams.

BUILD-UP/POSITIONING PHASE

48. Senator BEN NELSON. Secretary England, before the United States began Operation Desert Storm there was a build-up/positioning phase of more than 5 months.

If we were to launch a similar operation now, can we expect that it would take the same amount of time?

Secretary ENGLAND. This is an operational and joint issue, so providing a definitive answer is difficult; however, there are substantial improvements in our strike, logistic, support, and mobility capabilities that should be addressed. Reflecting back to the period of preparation leading to Operation Desert Storm, we can be proud of our Nation's maritime services. At the time of the Iraqi invasion of Kuwait, the U.S. had substantial forces already at sea—most in adjacent theaters of operation. These forces demonstrated flexibility and readiness by responding quickly to provide timely combat response.

Desert Storm was a great success. Upon its completion, all of your Armed Forces—to include the Army and Air Force as well as the Navy and Marine Corps—conducted thorough self-examinations of operational procedures. We learned a number of valuable lessons that we since have applied to our operations in several theaters.

All services now preposition large stocks of combat and combat service support equipment forward—a good portion of this being aboard ships at sea already in theater.

Prior to Desert Storm, the Marine Corps already had three Prepositioned Squadrons located in the Mediterranean, at Diego Garcia, and at Guam and Saipan. The ships can support a Marine Expeditionary Brigade (approximately 17,500 marines) for up to 30 days with combat and combat sustainment equipment and supplies. Since the Gulf War, Navy has deployed two of three new Maritime Prepositioning Force (Enhanced) or “MPF-E” ships, one each to the squadrons in the Mediterranean and Diego Garcia. These ships add critical new capacity to the Maritime Prepositioning Squadron (MPSRON), including some cargo loads added as a result of lessons learned from the Gulf War.

Since Desert Storm, the Air Force has prepositioned munitions at sea in three ships operated through the Navy's Military Sealift Command (MSC). The Army Prepositioned Afloat Program, whose ships also are managed by MSC, includes Army Prepositioned Stock Three (APS-3) equipment and sustaining supplies sufficient to equip a heavy combat brigade with combat support and combat service elements. This equipment is embarked in a fleet of special and general-purpose ships, located at Diego Garcia and Guam, and ready to get underway within 24 hours of notification.

An example of the many ships operated by MSC is the Large-Medium Speed Roll-on/Roll-off ship (LMSR), built to preposition Army stock forward and at sea. These ships were built to meet shortfalls identified by a Mobility Requirements Study. The Navy has 18 converted and new construction LMSRs in commission, meeting both surge and prepositioning requirements. The LMSR is capable of carrying approximately 1000 vehicles ranging from HMMWVs to Heavy Equipment Trucks (HETs) to M-1A2s, plus carry containers of ammunition, Meals Ready to Eat, and other consumables and needed equipment. Although called a "medium speed" ship, it is capable of 24 knots. In addition, we've added 14 new Ready Reserve Force (RRF) program Roll-on/Roll-off (Ro/Ro) ships and established the VISA (Voluntary Intermodal Sealift Agreement) a contract with merchant shipping, both U.S. and foreign flag, giving us the option of utilizing them during emergencies.

An important advantage of having prepositioned stock at sea is that there are no sovereignty issues, and the ships are able to "swing" between theaters, having the agility to respond to contingency operations in either the Persian Gulf or the Korean Peninsula, to give just two examples.

To complement our greater logistics capability, the Navy and Marine Corps have transitioned into a more combat capable striking force. The Desert Storm-era carrier air wing was able to strike a maximum of 162 aim points per day; today's air wing can strike 693 aim points in the same period. The Marine Corps extended its ability to strike with ground forces far inland, as it demonstrated recently when it established Camp Rhino near Kandahar, Afghanistan. We continue to increase our ability to project power ashore as we bring on line such programs as the distributed Naval Fires Network, Super Hornet, and the MV-22. Starting in fiscal year 2005, Navy will put Theater Ballistic Missile Defense (TBMD) to sea on AEGIS ships. This is an example of a capability being developed in our naval forces that should shorten the logistics time needed to be ready for regional conflict. TBMD at sea can provide a protective umbrella for forces moving into theater, meaning that capability won't have to be moved by air transport, thus allowing more initial lift to be used for offensive capabilities.

As an example of our enhanced capability to respond, I offer our response to Operation Enduring Freedom—Afghanistan. Following the attacks of September 11, the Navy and Marine Corps were positioned, in theater, ready to conduct offensive operations against Afghanistan within 24 hours, and we commenced full scale joint operations on October 7, less than 1 month afterwards.

Even with the improvements of the past several years, issues remain requiring our constant attention. The VISA program and Ready Reserve Fleet maintenance and readiness funding levels come under regular scrutiny and need to be preserved. We also must work to ensure we continue to have sufficient Merchant Marine manpower to meet our requirements in today's economic environment. This is the main issue: we can build the ships, but we also must be certain we can man them. It's important to remember that our enhanced capabilities come at a price, and we commit ourselves to provide the essential financial resources if our Maritime Prepositioning Force is to continue to be ready to respond when tasked.

Overall, your Navy has made a lot of progress since Desert Storm. We were very good then, but we're better now. It is difficult to predict exactly what our requirements or the operational timelines may be in any given theater, and I defer to the regional Commander in Chief in determining them, and addressing specifics for any given operation.

QUESTIONS SUBMITTED BY SENATOR STROM THURMOND

OBJECTIVE FORCE

49. Senator THURMOND. Secretary White, the Army's budget briefing suggests the "need to accelerate development of critical enabling technologies from the 2020 time-frame into near-term so that is possible to begin fielding the Objective Force in 2010." What do you consider the critical enabling technologies? What are the funding requirements to meet the 2010 fielding date?

Secretary WHITE. Before making the decision to accelerate the fielding of the Objective Force this decade, the Army assessed the availability of potential key technologies both from within and external to the Army. As the core building block for the Objective Force, the Future Combat Systems (FCS) will further define the list of required key technologies for the Objective Force. Once the FCS Lead Systems Integrator (LSI) is selected, the list of key technologies will be refined against the LSI's proposed concept to develop the list of critical enabling technologies. The Army will continue to conduct periodic assessments of these technologies to ensure they are on schedule. Potential technologies for FCS include 105 millimeter range cannon munitions; command, control, and communications for networked fires; hybrid electric power systems; active protection systems; multi-role armament and ammunition suite; standoff sensors; and robotics. The fiscal year 2003 Army science and technology budget submission of \$1.62 billion supports our current technology efforts. Total bundling requirements to meet the acceleration of the Objective Force this decade are being refined for development of the Army budget.

MAINTENANCE AND PRODUCTION FACILITIES

50. Senator THURMOND. Secretary White, although the Army fared better than the other Services in the fiscal year 2003 military construction request, the request is approximately \$285 million less than the fiscal year 2002 request. More disturbing is the 40 percent reduction in the funding request for maintenance and production facilities. Since the Army relies heavily on maintaining its aging equipment, how do you justify such a significant reduction in the construction of maintenance and production facilities?

Secretary WHITE. Our military construction budget request is \$3.2 billion and will fund our highest priority facilities and family housing requirements. In fiscal year 2002, we presented a budget that was a down payment on our goal to better support our infrastructure. When we developed this year's budget in light of the events that took place last year, we had some very difficult decisions to make. The need to fund military pay raises, transformation, operations tempo, the war on terrorism, increases in health care, and other key programs were all included in the decision leading to our request. Thus, the Army budget provides the best balance between all our programs, including military construction.

CHEMICAL DEMILITARIZATION PROGRAM

51. Senator THURMOND. Secretary White, the Army is the executive agent for the destruction of chemical munitions. The program has been criticized because of an estimated 60 percent cost and delays. Based on this assessment, will the Army meet the destruction deadline? What actions will the Army be taking to get the program back on track?

Secretary WHITE. The current schedule for destruction of the U.S. stockpile of chemical agents and munitions extends past the April 29, 2007 completion date required by the Chemical Weapons Convention (CWC). The CWC provides for a one-time, up to 5-year, extension to this deadline. If granted, this would extend the time available for disposal to April 29, 2012.

The revised schedule, approved by the Defense Acquisition Executive in September 2001, reflects completion of disposal operations at six chemical stockpile sites between 2007 and 2011. Schedules for the Pueblo, Colorado and Blue Grass, Kentucky sites will be published once the technology decisions are made. These technology decisions are expected for Pueblo in the third quarter of fiscal year 2002 and at Blue Grass in the first quarter of fiscal year 2003. The largest contributor to schedule changes was the incorporation of our chemical agent destruction experience at Johnston Island and Tooele, Utah into realistic forecasts for other incinerator sites. Even with the acknowledged delays, the Army has destroyed 20 percent of the U.S. Category 1 chemical weapons nearly 10 months earlier than the April 2002 destruction milestone.

The Army is accelerating the effort to neutralize the bulk chemical agent stockpile at Aberdeen Proving Ground, Maryland as much as 3 years ahead of the original schedule. The Army is studying the feasibility of a similar effort to accelerate disposal of the bulk VX nerve agent stockpile at Newport, Indiana and will continue to evaluate options at other storage sites. In addition, the Army has consolidated the management of the Chemical Demilitarization Program under the Assistant Secretary of the Army (Installations and Environment), who has extensive experience in managing environmentally sensitive and complex government facilities and programs.

The revised milestones and associated costs are being incorporated into a new set of requirements by which the Office of the Secretary of Defense and the Army will track the program's schedule, cost, and performance.

The non-stockpile portion of the program recently met two major CWC deadlines, the deadline for destruction of 40 percent of former production capacity and the deadline for the destruction of all Category 3 items (unfilled munitions and devices and equipment specifically designed for use directly in connection with the employment of chemical weapons). The non-stockpile product remains on track to meet all schedule requirements.

FORWARD DEPLOYMENT

52. Senator THURMOND. Secretary England, the Navy is planning to forward base three submarines in Guam. I find that ironic since we closed Navy facilities on Guam during the mid-1990s as part of the post-Cold War reductions.

What is the basis of this stationing decision? Do we have the facilities on Guam to support this deployment?

Secretary ENGLAND. From 1964 to 1981, the Navy did homeport SSBNs in Guam as we did in Scotland and Spain. The need to forward base SSBNs ceased before the end of the Cold War due to increased range of the later sea-based ballistic missiles.

We have never homeported SSNs in Guam. With the end of the Cold War and following the directions of Quadrennial Defense Reviews, the Navy reduced its presence in Guam to only that needed to support its forward deployed forces. Additionally, the SSN force in the Pacific was reduced from 40 in 1939 to 26 in 2000. Unfortunately, the CINC's demands on the SSN force to meet immediate real-world needs remained high, and some of the more pressing national and fleet requirements could not be met.

In November of 2000, CINCPACFLT proposed homeporting three SSNs in Guam to improve the ability to meet national fleet requirements. This proposal was facilitated by:

(1) Refueled first flight *Los Angeles* class submarines with more reactor core life than ship's hull life are available through 2015. Their excess core life will allow the ships to be operated at a maximum rate within OPTEMPO and PERSTEMPO limits.

(2) Existing infrastructure, including the submarine tender (U.S.S. *Frank Cable*) in the western Pacific and government housing and facilities, is available.

(3) Forward basing the SSNs will reduce transit time to/from station, equating to greater time "in theater" and additional mission days to fulfill previously unmet national and fleet requirements.

The Navy concurred with CINCPACFLT's request. The facilities in Guam are adequate to support this decision. The current infrastructure, however, will only support three SSNs.

THE ROLE OF THE SUBMARINE

53. Senator THURMOND. Secretary England, with the demise of Russia's submarine fleet, the submarines' principal role of submarine-hunting has been diminished.

What role does the Navy now consider the most significant for the submarine fleet?

Secretary ENGLAND. The world has changed significantly since the cold war, making the full spectrum of capabilities that our submarine fleet possesses more important than ever. Where before the greatest threats to our security were easily defined through the foreseeable future, the specific threats to our Nation and our allies today are not, but the capabilities that we must counter are. Therefore, no one role can be prioritized above another at a given point in time because the threat is widely variable. The answer to the question of which role is the most significant for the submarine force is a broad one, as broad as the range of capabilities that U.S. submarines possess.

The submarine mission areas of intelligence, surveillance and reconnaissance (ISR), strike warfare, antisubmarine and anti-surface warfare, mine warfare, special warfare and strategic deterrence are well known, but this question is best answered with a discussion of the capabilities provided by U.S. submarines, encompassed by the Submarine Force Joint Strategic Concepts.

U.S. submarines assure access for joint forces: stealth, endurance, payload, and agility enable our submarines to operate “out front” and prepare the battlespace in denied, hostile, or sensitive areas. Because they can operate where other platforms cannot, submarines can neutralize enemy anti-access systems or operate in spite of them, often enabling attacks against time-sensitive targets. This is a valuable expeditionary capability for assuring access for joint forces.

U.S. submarines exploit their unique access to develop and share knowledge: Using their long dwell time (i.e. endurance) and undetected, close-in presence, our submarines collect information about adversaries and their capabilities that other assets cannot collect, thereby improving U.S. national and theater-level situational awareness. Offboard vehicles and sensors will expand the reach of our submarines, and fully-netted systems will enable them to share knowledge of a battlespace in real time.

Because of their stealth, access, knowledge, and firepower, U.S. submarines are a potent deterrent: In addition to strategic deterrence, our submarines provide the Secretary of Defense and Combatant Commanders with unlocatable, close-in, presence in support of diplomatic and military objectives. Accurate and timely knowledge combined with early and unpredictable conventional attack capabilities from our submarines strengthen our leaders’ deterrent options against aggression.

Undetected presence and access enable U.S. submarines to project power with surprise from close-in. Stealthy and survivable, our submarines provide an early and rapid precision strike capability against time-sensitive targets, as well as attack capabilities within contested or sensitive areas.

In summary, the same fundamental characteristics that made the U.S. submarine force the world’s preeminent force against the threat of Russia’s submarine fleet—stealth, endurance, payload, and agility—are what make us equally relevant against the vast array of threats before us today.

FORWARD DEPLOYED STAGING BASE

54. Senator THURMOND. Secretary England, I understand that based on the successful deployment of Special Forces from the *Kitty Hawk* during the operation of Afghanistan, the Navy is looking at the notion of an Afloat Forward Staging Base designed to meet the Special Forces requirement without straining the carrier fleet. What can you tell us about this concept?

Secretary ENGLAND. The CNO has directed a study on the feasibility of acquiring a naval platform dedicated to providing, among other things, an operational capability similar to that provided by U.S.S. *Kitty Hawk* last year. Teams from Naval Sea Systems Command and Military Sealift Command are exploring many sea-borne platforms to assess their ability to provide this capability.

F-22 PROCUREMENT

55. Senator THURMOND. Secretary Roche, last Fall Secretary Aldridge said that the number of F-22s to be built will fall somewhere between 295 and 331 aircraft. He attributed this limitation on a cost overrun estimated to be \$9 billion. According to a recent *Inside The Air Force* article, the Air Force is considering the “prospect of procuring 420 extra F-22 Raptors.” If the article is correct, how will the Air Force fund this additional buy? What is the threat that requires this significant increase in the number of aircraft?

Secretary ROCHE. The Nation needs an adequate fighter force for the new defense strategy. The need for new fighter aircraft, particularly the F-22 is driven by three major factors:

(1) We need new combat aircraft—recapitalization of our aging fighter/extended range strike fleet is urgently required. The maximum desired average age of this fleet is 12.5 years—the current average age of our fighter inventory is about 15 years, and will be in almost 18 years by the year 2020, even with the proposed buy of new fighter/extended range strike aircraft. This aging fleet is causing both technological and operational obsolescence as evidenced by our growing O&M costs and deteriorating mission capable rates.

(2) We need transformational combat aircraft not just to meet the threat today, but to meet the threat 10, 20, and 30 years into the future. The greatest future threat to our fighter force is the proliferation of advanced (“double-digit”) surface-to-air missile systems (SAMs) to threat countries. The F-22’s capabilities in the areas of stealth/supercruise/data integration will be crucial for gaining access against the anti-access threat environment—not just for air forces, but for the entire joint force.

(3) We need sufficient numbers of new combat aircraft, not just for meeting warfighting requirements, but also for the rotational base for sustained engagement around the world. We must buy enough new fighters to fill out 10 equally-capable aerospace expeditionary forces (AEFs). Without sufficient aircraft to fill out our AEFs, our defense strategy deployment demands will be too great for people and their equipment.

At the present time we are implementing the Defense Acquisition Board's unanimously-approved plan for low-rate production as announced by Under Secretary Pete Aldridge on 15 August 2001. The board accepted the Air Force program cost estimates, but used the independent Cost Analysis Improvement Group estimate on the number of aircraft that money would buy (an estimated 295 F-22s). Mr. Aldridge stated that "If the Air Force can, in fact, get the cost estimate at their level, they can buy more airplanes." Given this, the Air Force has programmed to procure a total of 339 F-22 Raptors, if production goals are achieved as forecasted. There is no programmed plan by the Air Force to procure any additional F-22s at the present time. However, as I've stated in previous testimony the need for the airplane is very clear, it is long overdue, and the numbers remain a question as we go through reviews.

The F-22 is a key program for Air Force recapitalization needs. The previous Chief of Staff of the United States Air Force stated in Congressional testimony that the 339 number falls short of recapitalizing all of our F-15 fleet. Also, as stated in the 1997 QDR Report, "in the future, the Department will consider replacements for the F-15E and the F-117 long-range interdiction aircraft when they reach the end of their service lives. To make that decision, the Department will consider a range of alternatives, including the possible acquisition of variants of the F-22 for these roles." This need to recapitalize the F-15E and F-117 fleets was included in the 1997 QDR report as part of the F-22 three-plus-two option. At the 19 May 1997 press conference (held by then Secretary of Defense William S. Cohen) to announce the QDR 1997 release, an explanation of this three-plus-two option was given as follows:

"The QDR also will task a COEA, or a cost and operational effectiveness analysis, to look and see what should be the right replacement for the half a wing of F-117s and the two wings of F-15Es as they get older. It's quite possible that a derivative of the F-22 may be the solution for that."

The policy of DOD has been to consider the fact that at some point the Air Force will need to recapitalize beyond the capabilities of just the F-15 fleet. For this reason alone, it is prudent that the Air Force continue to examine the number of F-22s needed to meet future needs.

However, the cost of recapitalization is important also. I have made it clear to the chief executives of the firms involved in producing the F-22 that if they allow the unit costs to go out of control that there are not going to be very many F-22s because I will not be able to justify them to Congress. Also, though, I'm sure that if we get that cost down that Congress will let the Air Force buy more.

Cost is relative, though, as General Jumper, our current Chief of Staff of the United States, Air Force has stated before: "if we committed the same percentage of national resources for the F-22 that we did for the F-15, we would be buying an inventory of 1,000 F-22s." It's also relative in that the cost of the F-22 is one part of the equation. The other part of the equation is the cost of not having the capability provided by the F-22. This aircraft has the capacity to change war for the joint team. The F-22's introduction will maintain America's technological advantage and ensure our ability to defeat next generation threats. The cost of not providing the Nation air superiority must be considered as well in any review of the F-22.

Finding additional money for transformation and modernization is a challenge that faces all of DOD, not just the Air Force. Excess infrastructure continues to waste precious dollars that could be better used elsewhere. I applaud the Congress for approving a round of base closings in 2005. More effective business practices need to be implemented. I applaud Secretary of Defense Rumsfeld's creation of the Business Initiative Council (BIC) to identify better ways to do business and reduce cost. The incentive of the BIC is that any savings a Service identifies are then retained by that Service. I support Secretary Rumsfeld's efforts to identify non-essential missions for military personnel. Hopefully, efforts in these types of areas will help the Air Force find additional money for transformation and modernization.

I agree wholeheartedly with Secretary Rumsfeld's statement on transformation made at the National Defense University that, "while transformation requires building new capabilities and expanding our arsenals, it also means reducing stocks of weapons that are no longer necessary for the defense of our country." In other

words, transformation needs to be rewarded, but in some cases trade-space needs to be created. Legacy systems operating with outdated concepts of operation and led with industrial age organizational structures should be considered as candidates for divestiture. However, those elements within the military that develop and apply new concepts of operation, are organized to meet new demands, and are making the best use of cutting edge technology warrant additional investment to continue their transformation journey.

Clearly, more F-22s would require additional investment. A strategy for increasing investment in this or any other transformational capability will involve consideration of other priorities, the potential to achieve savings elsewhere, the overall availability of DOD resources, and most importantly approval by senior leadership.

CRITICAL SKILLS

56. Senator THURMOND. Secretary Roche, the Air Force, as well as the other services, is feeling the demands of the increased force protection requirements. In the Air Force the impact is especially felt by the security forces who are constantly on the go. What are your plans to increase the number of personnel in this high demand specialty, as well as other demand occupations?

Secretary ROCHE. We have reviewed our new tasking from Operations Enduring Freedom and Noble Eagle in detail, and verified additional new requirements for Security Forces and other specialties, such as OSI and Intel. As an immediate fix, we implemented Stop Loss and partially mobilized a significant number of personnel from the Reserve and Guard Forces to help us in this area. We are increasing recruiting and training of Security Forces personnel this year. In addition, we are examining multiple options to increase manning and capability in all stressed career fields in the future. Realizing the resource constraints we are facing, we are taking steps to help offset our increased requirement in the years ahead through the exploration of new technology, reducing overseas taskings, etc.

THE ROLE OF THE MILITARY OFFICER

57. Senator THURMOND. Secretary White, Secretary England, and Secretary Roche, Charles Moskos, a leading military sociologist, wrote that over the past 50 years the ideal officer has shifted from the combat leader to the manager or technician to, most recently, the soldier-statesman/scholar. This has led to the rise of military officers more capable in the political-military realm than in troop leading. According to Mr. Moskos, elevating such leaders at the expense of combat leaders can only hurt the military's ability to carry out decisive actions. What are your views on this finding?

Secretary WHITE. Officers are expected to be combat leaders, managers, and statesmen/scholars. The Army develops officers to function at three different levels: tactical, operational, and strategic. Tactical level operations generally occur at platoon through division and involve primarily a direct leadership style. Operational level actions require direct and indirect leadership styles and include actions that occur from corps to theater to joint task force. Operating in the political-military realm normally only occurs when officers are functioning at the strategic level, and sometimes at the operational level. Officers functioning as strategic leaders are not only experts in their own domain—warfighting and leading large military organizations—but are also expected to be astute in the departmental and political environments of the Nation's decision-making process. They are expected to deal competently with the public sector, the executive branch, and the legislature.

The complex national security environment requires an in-depth knowledge of the political, economic, informational, and military elements of national power as well as the interrelationship among them. It is incorrect to assume that officers must be exclusively combat leaders, managers or statesmen/scholars. The role of the officer is determined by span of control, the level of the assigned headquarters and the extent of influence the assigned position exerts. We train and develop our officers' interpersonal, conceptual, technical and tactical skills across all of our training domains. Additionally, the focus of these skills changes based on rank and position of the officer. In our troop leaders, the focus is clearly on warfighting and the warrior ethos.

Secretary ENGLAND. While the Navy and Marine Corps certainly require their officers in command to have a broad understanding of the geopolitical environments in which they operate, this is not accomplished at the expense of being a combat leader first and foremost. The Navy and Marine Corps team continues to build and train officers who can decisively operate in any situation over the entire spectrum

of warfare, using all levels of technology, from hand-to-hand combat to complex long-distance, standoff weaponry.

However, the past 50 years have seen a complete shift in emphasis from preparing for Major Theater Wars to involvement in numerous Small-Scale Contingencies across the globe. DoN officers now routinely operate in what could be called a “Three Block War”: one block may require diplomacy and tact while executing humanitarian operations; the next block may require statesmanlike skills while executing peacekeeping operations; and the third block may require execution of violent, full-scale combat operations. Today’s missions require Navy and Marine officers who can effectively operate in all three environments—separately or in combination—with ease, and that is what the Department of the Navy trains them to do.

Rather than resulting in an inability to respond decisively, as Mr. Moskos suggests, this provides the Navy and Marine Corps with a cadre of leaders who have a broader scope of options from which to appropriately respond. Today’s naval leaders are every bit as operationally focused, combat-tempered and tested as those of the past. They lead from the field, the bridge and the cockpit with a lethality that is unmatched. They also have the education and geo-political savvy to know when not to attack and destroy. These officers have kept pace not only with the rapid growth of technology, but with the even more rapid changes in the geopolitical landscapes they now face. In a very real sense, they are a combination of *all* ideals, past and present.

Secretary ROCHE. I understand your concern and in fact, our current development strategy is designed to ensure our leaders are credible and effective in not only our combatant duties, but our statesman/scholar role and our airman leadership responsibilities as well. We recognize today’s Expeditionary Aerospace Force calls for a more diversified leader and have designed a development strategy based on requirements and competency-attainment that effectively balances the depth of expertise in one’s mission area with the breadth required to produce members better prepared to serve and lead in that environment. We have identified four major categories of leaders, and the skills and attributes required in those positions, that enable our leaders to synthesize and integrate Air Force systems across the full range of aerospace capabilities, resulting in the exact military effects the Nation needs.

As part of the continuing development of our Operations Leader (defined as a transformational leader credible in the competencies necessary to employ and sustain forces and command combat operations to achieve military effects through the air, space, and information mediums . . .) Gen. James P. McCarthy (Ret.) is leading an effort to increase Air Force integration in joint leadership. Within that dialog, we acknowledge the need for developing our political/military skills. Keep in mind, this is not a separate requirement absent the combatant focus, it is additive to the skill set of our well-prepared transformational leader. By building more experienced AF leadership in the joint arena, we enhance the application of aerospace power in all joint operations.

We have also identified what we call universal competencies—attributes we expect to find in all our members. A key component in this construct is a focused training on leading airmen. Today, our squadron, group and wing commanders receive detailed education and training highlighting successful Air Force leader and follower behaviors . . . ones that can be adapted and emulated in ways that enhance and improve a leader’s success in creating strong Air Force units.

I believe our deliberate focus on developing our people and improving their sense of belonging to the institution strengthens the heart of our organization and ensures our success in growing Air Force members able to, first and foremost, fulfill our vital responsibilities to national defense through aerospace capabilities, but also effectively perform in the necessary statesman/scholar role.

FAMILY HOUSING

58. Senator THURMOND. The quality of life for our military personnel and families is high on the committee’s watch list. I have supported the Department’s goal of eliminating inadequate housing by 2008 and had been assured that it was a reasonable and achievable goal. I understand the Office of the Secretary of Defense has now accelerated that goal to 2007. What additional funds have you received to support this goal? If none, what adjustments do you have to make to your program to fund this one-year shift, and what is the impact on the rest of your programs?

Secretary WHITE. The Army was initially funded to eliminate inadequate family housing by 2010. In response to Department of Defense guidance to accelerate that goal to 2007, family housing construction projects originally planned for fiscal years

2008 to 2010, and approximately \$1.1 billion of associated funding, were rescheduled for fiscal years 2005 through 2007.

Secretary ENGLAND. The Navy and Marine Corps will meet the OSD's accelerated goal of eliminating our inadequate family housing by 2007. The Marine Corps will meet this goal by 2005. This effort was achieved by adding funds and increasing privatization:

- The Department of the Navy added \$654 million into family housing construction accounts over the FYDP during the development of the fiscal year 2003 budget.
- The Department of the Navy's fiscal year 2001 family housing master plan eliminates through privatization an additional 10,400 inadequate homes, or a 79 percent increase, over the fiscal year 2000 master plan.

Secretary ROCHE. The Air Force has increased funding in fiscal year 2003 to \$1.5B as the first step in fully funding our Family Housing Master Plan—an increase of over \$130 million over last year's funding level. Our plan outlines base-by-base details to meet a 2010 goal—an improvement by 3 years over our previous plan. We can meet a 2007 revitalization goal at all but 20 bases where the total revitalization requirement drives a need for a project nearly every year until 2010. Accelerating housing revitalization to 2007 at the 20 bases will displace an additional 9,100 families from military family housing over fiscal year 2003 to fiscal year 2007. Typically, there is not sufficient, adequate housing in local communities to temporarily support the displaced families. The result is some families either live in substandard housing, commute longer distances to reach the base, or pay more for rental housing.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

ALTERATIONS IN LAST YEAR'S BUDGET

59. Senator MCCAIN. Secretary England, in a January 28, 2002 article "Responding to Lott, DOD Starts Funding LHD-9 and One More DDG-51" by Chris Castelli in the publication *Inside the Navy*, states:

"At the urging of Senate Minority Leader Trent Lott (R-Mississippi), the Pentagon has made last minute adjustments to the Navy's shipbuilding plan in the Bush administration's fiscal year 2003 budget. The Pentagon put \$74 million more toward a third DDG-51 destroyer and allocated \$10 million in advance procurement for a ninth amphibious ship that was not previously in the Navy's budget."

Is this true, yes or no?

Secretary ENGLAND. Yes, \$74 million was added in advance procurement funding for a third DDG-51 destroyer in fiscal year 2004, and \$10 million was added in advance procurement funding for a LHD-9 to be procured in fiscal year 2008.

AMPHIBIOUS ASSAULT SHIP FUNDING

60. Senator MCCAIN. Secretary England, isn't there an effort going on by your department to look at an Analysis of Alternatives (AoA) to replace the current general purpose amphibious assault ship (LHA) with an LHA(R) and doesn't this action by officials in the Office of the Secretary of Defense Comptroller's office predetermine the AOA which is due later this year? Likewise, what happened to planned research and development funding for LHA(R)?

Secretary ENGLAND. The LHA Replacement (LHA(R)) AoA is scheduled to complete in Summer 2002. The AoA is evaluating several alternatives including a repeat LHD 8, a modified LHD 8, and entirely new ship designs that are not based on the current LHD. The results of the LHA(R) AoA are not predetermined and the preferred alternative may or may not be based on the LHD 8.

During the review of the Navy's Fiscal Year 2003 Budget request, OSD concluded that the requested funding was insufficient to support any LHA design other than a repeat LHD-8. At the same time, the funding requested was determined by OSD to be ahead of need to execute a repeat LHD-8. Thus, OSD removed LHA(R) R&D funding in fiscal year 2003 (\$13 million) and fiscal year 2004 (\$21 million).

While it is true that the budget finances the lowest cost alternative, a LHD-8 repeat, it is premature to determine the outcome of the LHA(R) AoA. The LHA(R) program initiation is planned for fiscal year 2003. At that time, the DON will determine the extent of any additional research and development funding requirements and appropriately program and budget for them.

61. Senator MCCAIN. Secretary England, you know that I recently traveled to Afghanistan with other members of this committee. While there, I heard from several Navy and Marine Corps officers that the number one concern for replacing the LHA is safety because of a stability problem or high center of gravity issue, especially with deployed aircraft. Their concern was that even with some minor fixes with fuel compensation systems, the problem will be exacerbated when the Service deploys larger aircraft, such as the Osprey (MV-22) and Joint Strike Fighter (JSF) which are replacements for the CH-46 and AV-8B respectively. I am told that the MV-22 is twice the weight of the CH-46 and that the JSF is believed to be about twice the weight of the AV-8B.

Does the multi-purpose amphibious assault ship (LHD) class have similar stability problems as the LHA class, and would you agree that the problem could be exacerbated with the planned future aircraft and vehicles envisioned for the Marine Corps?

Secretary ENGLAND. The Navy's five LHAs need to be replaced as soon as possible, as they are rapidly reaching the end of an already extended service life. The LHA(R) AoA was initiated to ensure that both Marine Corps and Navy 21st century requirements are addressed, including the issues you raise regarding the impact of heavier aircraft/vehicles and overall amphibious force vehicle storage area.

The seven ships of the LHD class have improved stability characteristics over the LHA class. LHDs do not experience the same weight and center of gravity issues as the LHA.

LHDs have the growth allowance available from a stability standpoint to accommodate MV-22 and JSF. With aggressive weight control measures and the fuel oil compensation ship alteration, LHDs can integrate MV-22 and JSF. However, LHDs have less vehicle storage space (square footage) than LHAs. Vehicle storage space is an example of a requirement that is being addressed by the LHA(R) AoA.

62. Senator MCCAIN. Secretary England, what growth percentages are currently planned for the LHD class of ships?

Secretary ENGLAND. The CNO-specified minimum Service Life Allowance for the LHD class at delivery from the shipyard is 1/2 foot for vertical center of gravity reserve and 1000 long tons (about 2.5 percent) of displacement service life reserve. The requirement is documented in the LHD Class Top Level Requirements document.

63. Senator MCCAIN. Secretary England, is the LHD a good replacement for the LHA class of ships, considering that the ship does not meet the requirement in planned future vehicles and aircraft for the Marine Corps or our special operations community and considering the amphibious lift requirement of 2.5/3.0 Marine Expeditionary Brigade (MEB)? Because of the well deck inside the LHD, isn't the LHD available square footage less than the LHA (LHD is about 5,000 square feet smaller than the LHA)?

Secretary ENGLAND. The ongoing LHA(R) Analysis of Alternatives is addressing whether the LHD is a good replacement for the LHA class. Continuing to build LHDs, as well as ship design modifications to enhance the capability to operate the larger and heavier new generation amphibious systems is currently being examined as an option. The Analysis of Alternatives is also investigating the optimum way to reach the fiscally constrained amphibious lift requirement of 2.5 Marine Expeditionary Brigades. The Analysis of Alternatives is expected to report out later this year and will present its conclusions at that time.

64. Senator MCCAIN. Secretary England, it seems to me that the LHD is not a very transformational program especially considering that it is the exact same hull of the current LHA class that is based on a 1950s design. It seems to me that if the LHA(R) class ship is built to have a lifespan of 50 years with no further research and development invested, then LHD 9 will be a 100-year old design when it is decommissioned in the 2050 timeframe. Would the Navy develop an aircraft carrier (CVN), destroyer (DD), or submarine (SSN) without a robust research and development effort? Where is the research and development funding for a major amphibious ship like LHA(R)? Are you not relegating the amphibious Navy to no transformation?

Secretary ENGLAND. The Navy is currently conducting an Analysis of Alternatives (AoA) for LHA(R). Numerous alternatives are under consideration, including a LHD-8 repeat design. If the results of the AoA support a mod repeat LHD or new ship design, additional RDT&E funds will be required. At that time, it may be necessary to revisit the current plan to use the \$10 million in fiscal year 2003 SCN AP for a LHD-9.

While the LHA(R) hull shape may be close to the original, its combat systems suite, communications gear and information technology set up will be state of the art.

PURCHASING T-5 TANKERS

65. Senator MCCAIN. Secretary England, on February 8, RADM Church, USN, delivered to Congress the Department of the Navy's "Fiscal Year 2003 Budget Overview." On page 18 of the Navy's budget brief is a slide called "Promote Better Business Practices, Managing the Department in a Business-like Manner." I noticed a bullet that states "T-5 Tanker Buyout."

Will you please tell the committee why the Navy has decided in its fiscal year 2003 budget to buy the T-5 Tankers rather than to continue to lease them as was the plan several years ago?

Secretary ENGLAND. The T-5 Tankers were leased in the early eighties rather than purchased because of the budgetary circumstances that existed at the time. When the ships were leased, the Navy negotiated for favorable purchase options that, conditions permitting, could be exercised at the appropriate time. Those conditions exist and that time is now. We have a continuing need for these vessels beyond their lease terms, which end in 2005 and 2006. If we let our options expire, we will end up chartering (leasing) higher cost replacement tankers.

66. Senator MCCAIN. Secretary England, so let me understand you—"it is cheaper to buy the tankers and MPS (maritime pre-positioning ships) outright than it is to continue to pay the lease"—is that correct? I think I agree with the Secretary of the Navy and OMB Director Mitch Daniels who blames free-wheeling for outlandish cost overruns in government programs in past.

Secretary ENGLAND. Yes. Exercising our lease options to purchase will provide significant cost savings. It is cheaper to purchase these ships than to continue leasing, however, purchase requires a large expenditure in the year that the ships are purchased. Due to the nature of the Navy's T-5 purchase options, we get the greatest overall savings if we buy the ships and end their leases 2 years before the conclusion of the present 20 year terms—when that is coupled with a continued use of the ships. The same is true for the MPS, but their lease terms are 25 years and we estimate that their optimum buyout point will be in fiscal year 2007. The key is to purchase the ships when they are most affordable during the lease cycle in order realize the optimal future stream of savings .

FUNDING THE U.S. NAVAL ACADEMY

67. Senator MCCAIN. Secretary England, I have been a member of the U.S. Naval Academy Board of Visitors since 1989. I have served on several committees within the structure of the Board of Visitors, including committees on Academics, Athletics, Finance and Property, and I currently serve on the Committee on Midshipmen. It has come to my attention that during the markup of the Department of Defense Appropriations Act for Fiscal Year 2002, the Senate Appropriations Committee cut \$5.5 million from the President's budget request for training vessels at the U.S. Naval Academy. Having served on key Board of Visitors Committees, I am appalled at the tremendously damaging budget cut by the Senate Appropriators and I am concerned that such a cut not only delays, but also threatens replacement of these critical at-sea training programs for the midshipman in seamanship, navigation, and leadership. As a long-time member of the Board of Visitors, we have been thoroughly briefed by the Superintendent and Academic Dean on the Professional Development studies at the Naval Academy, as well as the requirement for at-sea training on the sailing boats, yard patrol craft (YPs), and U.S. Navy warships. For obvious reasons, I have more than a passing interest in the Naval Academy. However, every member of Congress also has a large stake in the Service Academies and the safety of the young men and women we appoint each year to become midshipmen and cadet candidates—I know of no other military program where there is such a direct and personal tie with Members of Congress. Furthermore, I was privileged to serve on the 1993 Armitage Committee, which reviewed Honor at the Naval Academy. One of the critical recommendations stated that the Secretary of the Navy and the Chief of Naval Operations should "*personally*" take a greater stake in the Academy.

Would you please let me know what your views are with respect to this \$5.5 million cut by the Senate Appropriations Committee?

Secretary ENGLAND. The Chief of Naval Operations and I were both disappointed and concerned when we learned of the \$5.5 million cut by the Senate Appropriations Committee. These funds represent the initial step of a 3-year replacement program for craft that are critical to Professional Core Competencies taught at the Naval Academy, including seamanship, navigation, damage control, ship handling, relative motion, nautical rules of the road and the law of the sea.

The downsizing of our Navy fleet from nearly 600 ships to nearly 300 ships significantly impacted the at-sea training program at the Naval Academy. With half the number of warships of just 15 years ago, we now have only half the number of days available for midshipmen at-sea training in the fleet. To address this critical training shortfall, the Naval Academy has augmented fleet summer cruises with open-ocean training in both sail training craft and diesel driven Yard Patrol (YP) craft. The open-ocean sail training has proven to be the most effective platform to allow midshipmen to transform classroom knowledge into actual experience in the skills essential to every naval officer. This platform has also proven to be the best leadership laboratory of the entire 4-year Annapolis experience.

The current generation of sail training craft, which were funded by Congress 16 years ago, is more critical at the Naval Academy today than in the past 50 years. These craft are reaching the end of their useful life, and they must be replaced. Critical at-sea training is at risk.

68. Senator MCCAIN. Secretary England, what will you do to ensure that these funds are fully restored in fiscal year 2002 so that it does not delay or put the replacement of these boats in jeopardy?

Secretary ENGLAND. I have directed Navy staff to determine the best course of action to address member concerns and get replacement sail training craft funded. Beginning replacement in fiscal year 2003 will have minimal impact on the at-sea training program. A delay past fiscal year 2003 could impact the ability of the Naval Academy to continue this vital program without interruption.

69. Senator MCCAIN. Secretary England, will you commit to me that you and the CNO will get "personally" involved in restoring these critical funds per the spirit of the Armitage Committee recommendation?

Secretary ENGLAND. In light of competing priorities for resources, the President's budget represents the best balance of resources to requirements. The CNO and I recognize the importance of the open-ocean sail training program at the Naval Academy to provide future naval officers with critical skills in seamanship, navigation, damage control, ship handling, relative motion, nautical rules of the road and the law of the sea.

737 AIRCRAFT

70. Senator MCCAIN. Secretary Roche, are you beginning to negotiate the lease of the 100 767 tankers, as well as the four 737 VIP aircraft that were added by the Senate Appropriations Committee and enacted in the fiscal year 2002 Department of Defense Appropriations bill last December?

Secretary ROCHE. The Air Force has had preliminary discussions with Boeing on the air refueling tanker and on the 737 aircraft. We are following two paths. We are currently evaluating the responses to the RFIs (EADs and Boeing) and will decide from that evaluation whether to proceed with a sole source contract or open it up to competition. For the tanker, we will continue discussions with Boeing, but will not begin negotiations until we have completed the coordination of our Operational Requirements Document through the Joint Staff. For the 737 lease, the Air Force is looking to compete this effort. We will begin surveying the market to determine availability of aircraft that will meet our operational requirements. For both programs, the AF will report to the four congressional defense committees before we enter into any lease.

COMPETITION

71. Senator MCCAIN. Secretary Roche, do you believe in competition?

Secretary ROCHE. The Competition in Contracting Act requires that the Government promote full and open competition in soliciting offers and awarding Government contracts in all but a limited number of exceptions. The Air Force fully supports this statute. In fact, there is a Competition Advocate at each of our procuring activities and at the Secretary of the Air Force level to promote competition and to challenge barriers to competition.

TERMS OF LEASE ARRANGEMENTS

72. Senator MCCAIN. Secretary Roche, if you believe in competition, then why are you not negotiating the terms of any leasing arrangement with other potential competitor/lessees?

Secretary ROCHE. We are currently evaluating responses to the requests for information (RFIs) and will decide from that evaluation whether to proceed with a sole source competition or open it up to competition.

TANKER LEASE

73. Senator MCCAIN. Secretary Roche, if it is because the Defense Appropriations bill states that Boeing 767 tankers are to be leased, I do not believe that the law restricts you from discussing the details of the lease to include requesting similar bids in such a leasing agreement from Airbus, the airlines, or any other possible competitors. Is that your understanding as well?

Secretary ROCHE. The law does not prohibit the Air Force from requesting similar bids from Airbus, the airlines or any other competitor. Only Boeing 767 and 737 aircraft may be leased under section 8159 of the Defense Appropriations Act.

TANKERS IN FISCAL YEAR 2003 BUDGET

74. Senator MCCAIN. Secretary Roche, I read in the *Air Force Times* article of January 21, 2002, that you said that Plan A is to buy the Boeing 767 tankers and that Plan B is to lease the tankers. If that is correct than how come you have not included a single tanker in the fiscal year 2003 Air Force budget request recently submitted to Congress?

Secretary ROCHE. The objectives for Plan A and Plan B are the same—address the severe challenge of tanker recapitalization. The fiscal year 2002 USAF budget began funding the process to replace the KC-135s with a follow-on tanker we call KC-X. The events of the past year have accelerated the age and corrosion issues of our KC-135 fleet to a degree that warrants exploring acquisition alternatives. Opportunities may now exist to avoid replacing the entire aircraft fleet simultaneously. That is why our fiscal year 2003 budget includes seed money to begin the acquisition effort for new aerial refuelers in the out years of the FYDP.

767 TANKERS IN FISCAL YEAR 2003 BUDGET

75. Senator MCCAIN. Secretary Roche, in a letter dated December 7, 2001, from you to Senator Patty Murray, you wrote: “The most important and critical factor is that this replacement program starts as soon as possible. To this end we will work with the ASD (AT&L) and the OSD Comptroller to amend the fiscal year 2003 budget currently being vetted through the Department.” Again let me pose the same question: if Plan A is to buy the Boeing 767 tankers, then why haven’t you included a single tanker in the fiscal year 2003 Air Force budget request recently submitted to Congress?

Secretary ROCHE. Our Tanker “Plan A” is to begin acquiring new air refueling tankers in the out years of the FYDP. The fiscal year 2002 USAF budget began funding the process to replace the KC-135s with a follow-on tanker we call KC-X. The events of the past year have accelerated the age and corrosion issues of our KC-135 fleet to a degree that warrants exploring acquisition alternatives. Opportunities may now exist to avoid replacing the entire aircraft fleet simultaneously. That is why our fiscal year 2003 budget includes seed money to begin the acquisition effort for new aerial refuelers in the out years of the FYDP.

TANKER MODERNIZATION PLAN

76. Senator MCCAIN. Secretary Roche, what events caused you to circumvent the normal disciplines of the budget process by not ventilating a tanker modernization plan in the Office of the Secretary of Defense, at the Office of Management and Budget (OMB), or through the authorizing committees and approach the Appropriations Committee about leasing Boeing 767 tankers? We all know that leasing Boeing 767 tankers was not in the fiscal year 2002 Air Force budget, the Air Force long range 6-year procurement plan, and the Air Force’s “Unfunded Priority List.”

Secretary ROCHE. Sir, you are right. Leasing tankers was not in the Unfunded Priority list the AF recently submitted. The USAF budget already had funds in fiscal year 2002 to begin the process that would start replacing KC-135s with a follow-

on tanker we call KC-X. We are pursuing this plan because the tanker age and corrosion situation has become increasingly worrisome to the USAF. The KC-135 tankers are 40-year-old-plus aircraft that are wearing out. The KC-136E models, our oldest and least capable, are spending over 400 days in depot being rebuilt every 5 years, and they require significant communications upgrades to allow them access to airspace worldwide. The remaining 545 KC-136 aircraft were purchased between 1957 and 1965. They will all age out at approximately the same time. It has become increasingly expensive for the Air Force to operate and maintain these aircraft. In May 2001, we sent letters to the chairmen and ranking members of all the defense committees requesting approval for accelerating our effort.

This fall, while we were well into the process of submitting the President's Budget, we had a significant series of three events occur that focused USAF attention on reevaluating our tanker recapitalization, and thus potentially avoid having to replace the entire 545 aircraft fleet simultaneously. The first event came after the attacks on September 11; we started to fly our tanker aircraft at approximately twice their annual rate to support Operations Noble Eagle and Enduring Freedom. Simultaneously, the second event occurred, and that was the softening of the commercial aircraft market, and announcements from the US aviation industry that they were starting to shut production lines, and lay off US aviation workers. Lastly, the Boeing Company had expended their own capital and research & development to commercially offer Air Refueling Tankers, for delivery in 2005, based on their 767-200ER platform. The Japanese and Italian Governments have both recently concluded a competition and selected this aircraft as their new air refueling tanker. The combination of these three events made us closely examine the possibility of jumpstarting the replacement of the oldest tankers in our fleet.

Given the apparently weak market demand for wide-body aircraft, we thought there existed a chance for a smart business opportunity to replace the KC-135Es with the commercially developed 767 tanker aircraft while maintaining a strong bargaining position for the USAF. Boeing provided the Air Force a briefing proposing a lease of 100 aircraft for 10 years with the option to buy at the end of the lease for the final payment. Leasing appeared to be a viable option since the aircraft were: (1) commercially derived; (2) commercially developed; and (3) quickly available in larger numbers through a lease to augment the aging fleet of tankers. In addition, the Air Force expects savings to result from operating and maintaining modern commercial aircraft rather than 40-year old KC-135 aircraft.

The USAF was then asked by members of the House and Senate to provide informational briefings on this proposal. The briefing provided to members of Congress, including members of the SAC, SASC, HAC, and HASC, who requested it from the AF. It was also provided to members of the OSD staff, CBO, and OMB. CBO and OMB had concerns with scoring Boeing's lease proposal. They recommended an "operating lease" compliant with the existing provisions of OMB Circular A-11. CBO's and OMB's recommendations are reflected in section 8159 which permits the USAF to attempt to negotiate a lease arrangement, for up to 100 aircraft, for up to 10 years, for not more than 90 percent net present value of the fair market value of the aircraft. The lease type specified ultimately returns the aircraft to private industry.

The AF cannot enter into any lease deal without the permission of the four defense committees, and no funds can be expended. This, Sir, is the genesis of this lease possibility. It was generated out of our perceived need to accelerate existing replacement plans and to assure that we can meet our mission in the future.

UNFUNDED PRIORITY LIST

77. Senator MCCAIN. Secretary Roche so let me understand you that it was the amount of tanker missions flown in support of 16,000 Operation Enduring Freedom sorties since October. Is that correct? I have examined your "Unfunded Priority List" totaling 60 programs at a total cost of nearly \$10 billion which was prepared by Air Force Chief General Jumper, 1½ months after September 11 and 3 weeks after the air war started. [Refer to the UPL dated October 22, 2001]

Secretary ROCHE. As of the middle of February 2002, the Air Force had flown over 14,500 sorties in support of Operation Enduring Freedom. Of the 14,500 sorties, approximately 6,000 were tanker sorties. The fiscal year 2002 Air Force Unfunded Priority List, prepared on 6 July 2001, was provided again on 22 October 2001 at the request of Congressman Duncan Hunter.

KC-135 TANKER FLEET

78. Senator MCCAIN. Secretary Roche, by the chronology briefed by Defense Secretary Rumsfeld, Joint Chiefs of Staff Chairman General Myers and Commander in Chief of U.S. Central Command General Franks, the air war did not start until October 7, 2001. Can you try to explain to me why Major General Paul W. "Bill" Essex, Assistant Secretary for Air Force Acquisition, briefed Senator Murray's staff on October 3, 2001, 4 days before the air war started, on the need to replace the KC-135 tanker fleet with Boeing 767 tankers?

Secretary ROCHE. By 1 Oct 01, the USAF had already flown a significant number of missions in support of Operation Noble Eagle and in preparation for Operation Enduring Freedom. Starting on 11 September, the Air Caps provided over the USA's major cities by Operation Noble Eagle were made possible by the KC-135 air refuelers that kept the fighters in the air doing their job protecting us. The missions supporting Enduring Freedom required the AF to establish extensive Air-Bridges composed of pre-positioned KC-135s and KC-10s. Without the Air-Bridges, our strike aircraft could not have accomplished the missions CENTCOM had in store for them. All of these actions were occurring well before the first strikes were made in Afghanistan. All of these actions were beginning to stress our oldest and least capable tankers.

BOEING 767 TANKER LEASING

79. Senator MCCAIN. Secretary Roche, according to your recent statements to the Defense Writers Group, you say that you may need additional legislation to conclude the Boeing 767 tanker leasing deal. What do you mean by this?

Secretary ROCHE. The legislation on the tanker lease requires the Air Force to obtain separate authorization and appropriations if there are modifications required beyond the aircraft configurations currently offered. The JROC will be reviewing the Air Force's recommended Operational Requirements Document, and there may be changes that require us to seek that separate authorization and appropriation to assure military capability.

LEGISLATIVE WAIVER

80. Senator MCCAIN. Secretary Roche, according to a January 7, 2002 article in *Defense News*, I understand that Boeing's Seattle plant work force is not licensed to work on military aircraft, as required by the U.S. International Trafficking in Arms Regulations (ITAR), which governs most arms exports. At least one State Department official has advised that since some workers at the Seattle plant are not citizens of the United States and if such a foreign national is working there on ITAR-controlled equipment, it does require a license. Would you also request a legislative waiver to build or modify the 767 tankers at the Seattle plant?

Secretary ROCHE. No, we would not request a legislative waiver for ITAR issues. It is our understanding that the Boeing Company would build the aircraft at their Everett, WA facility, and install the ITAR-controlled equipment at an ITAR-approved facility elsewhere. This is the same process used to produce the commercially derived VC-25, C-32, and C-40 aircraft.

TANKER STUDY

81. Senator MCCAIN. Secretary Roche, Air Force Brigadier General Ted Bowlds, program executive officer for airlift, tankers, and trainers, is reported by *Defense Week Daily* on February 1, 2002 as saying: "The Air Force does not have the luxury of doing a study to determine whether another Boeing aircraft, such as the 777 or an Airbus airplane would suit its needs better than the Boeing 767." Is General Bowlds predetermining the outcome of the fiscal year 2001 congressionally-mandated tanker study that is ongoing and whose results are due later this year?

Secretary ROCHE. The Air Force had planned to begin an Air Refueling Tanker Analysis of Alternatives (AOA) for replacing the KC-135 fleet. In May 2001, we sent letters to the Chairman and ranking members of all the Defense Committees requesting permission to accelerate the previously planned 24 month-long AOA into fiscal year 2001. This request was not approved. This AOA would have served as the basis of our "Plan A"—a traditional acquisition program. In the fiscal year 2002 Appropriations Bill, Congress asked the Air Force to begin discussions with Boeing on the viability of a 767 tanker replacement. Our approach is to issue a Request for Information to conduct a market survey to help us identify the state of tech-

nology and to determine if we are able to make a sound business case. If we can make a business case and negotiate a satisfactory lease deal compliant with the law, we will come back to the four Congressional defense committees for permission to proceed. This would allow replacement tankers to begin delivery in 2005. If we cannot negotiate a satisfactory lease deal we will revert back to Plan A, a traditional acquisition program. This would delay the introduction of a replacement tanker by at least 3 years.

82. Senator MCCAIN. Secretary Roche, is he also predetermining the Leasing Review Panel that Department of Defense Comptroller Zakheim and Assistant Secretary of Defense Aldridge are establishing to examine multiyear leases for major weapon systems, aircraft, and ships?

Secretary ROCHE. I am certain that General Bowlds would not predetermine the outcome of any study or the DOD Lease Review Panel. We have been actively engaged with the Leasing Review Panel since December 2001.

QUESTIONS SUBMITTED BY SENATOR BOB SMITH

SPECIAL OPERATIONS TANKING CAPABILITY

83. Senator SMITH. Secretary Roche, the Special Operations community has made a heroic account of themselves in the war in Afghanistan. The innovation, daring, and bravery of these troops played a major role in our successes in the conflict. We must give these people on the tip of the spear our utmost support. Lt. Gen. Paul Hester, commander of Air Force Special Operations Command said recently that there has been an acute shortage of tanking capability for our special operation forces. He said that only about 35 percent of tanking requests are being met. What is being done in the fiscal year 2003 budget to correct this, given it is very much conceivable that the war on terrorism will continue to place demands on these troops?

Secretary ROCHE. SOF unique requirements are funded by USSOCOM using MFP-11 dollars. In the USSOCOM fiscal year 2003 APOM, an AFSOC initiative to outfit 24 MC-130H Talon II aircraft as tankers was funded through MFP-11. This initiative will increase AFSOC's C-130 refueling capable fleet from 41 aircraft to 65 aircraft. The tanker requests referenced in this statement are for refueling both USA and USAF SOF helicopters. We understand the referenced tanker shortage is calculated using Active-Duty Forces only, however, when USMC and Reserve Forces are used for augmentation, support increases to 67 percent.

COMMANDER MICHAEL SCOTT SPEICHER

84. Senator SMITH. Secretary England, as you recall, last year we discussed the case of Commander (soon to be Captain) Michael Scott Speicher, and I appreciate the personal interest you have taken in resolving this tragic case. As you will agree, we owe it to him and to his family to establish his fate. I would like to get your personal assurance that you will continue to dedicate the necessary resources and attention to this matter.

Secretary ENGLAND. Yes, I agree. We owe it to both Commander Speicher and his family to unequivocally resolve his fate. Let me assure you, Senator, that I am personally committed and dedicated to doing just that. The Intelligence Community has kept me aware of developments in this case as we continue to pursue diplomatic, intelligence and operational efforts to obtain the fullest possible accounting of Commander Speicher.

QUESTIONS SUBMITTED BY SENATOR RICK SANTORUM

TERMINATED PROGRAMS AND SYSTEMS

85. Senator SANTORUM. Secretary White, the Army has terminated 18 programs and/or systems as part of the fiscal year 2003 request. Among the terminations are: TOW Fire-and-Forget, M113 recapitalization, Armored Combat Earthmover, Wolverine, Hydra Rocket, Improved Recovery Vehicle, and Bradley Fire Support Team. Is the Army or the Office of the Secretary of Defense (OSD) expecting Congress to "buy back" these terminations? Put another way, should Congress expect to see these programs/systems on the Army's unfunded requirements list? While 18 programs/systems have been terminated, have the requirements that supported these programs gone away?

Secretary WHITE. To ensure that we maintain a capability that guarantees warfighting readiness in support of the National Military Strategy, we have had to make hard choices regarding modernization of our Legacy Force. Last year, the Army terminated 18 of its programs that are not planned for the Objective Force. Eleven of those programs will be terminated in fiscal year 2003, while the remaining seven will be terminated between fiscal year 2004 and 2007. The funding associated with these 18 systems has been reprogrammed to support higher priorities. The Army will not buy back any of the terminated systems through the unfunded requirements process. Rather, we will fund research, development, and acquisition for the next generation solution for the requirements to support the Objective Force design.

NUNN-McCURDY LAW

86. Senator SANTORUM. Secretary Roche, one of the items to receive press this year has been OSD's desire to enforce "realistic costing." Year after year, the military services have underestimated the cost of weapons development and buying programs to make them more attractive to the Pentagon and Congress.

When unit cost growth of a program is 25 percent or more, the Nunn-McCurdy law requires the Secretary of Defense to certify to Congress that the program is essential to national security, that no less costly alternatives exist to provide equal or greater capability, that new cost estimates are reasonable, and that management can control cost. Such a certification is to be provided within 30 days. If that does not happen, the Department must stop funding for the program.

Recent documentation from Defense Acquisition Chief Pete Aldridge indicates that the unit cost growth for the F-22 Raptor is 28.5 percent. Does the Department of the Air Force believe that OSD must provide certification of the merits of the F-22 despite its breach of the Nunn-McCurdy law?

Secretary ROCHE. Yes. OSD provided the certifications required by the Nunn-McCurdy law to the Congressional Defense Committees on 13 September 2001.

". . . As a result of the significant adjustments to the F-22 program, the procurement unit cost for the program has increased by 28.5 percent. Since the revised cost estimate for production exceeds the current Congressional cost cap, I request Congress remove the current production cost cap for the F-22 program. The revised plan maintains the F-22 Initial Operational Capability in December 2005.

In addition to requiring notification of a breach in unit cost reporting, section 2433 of Title 10, United States Code, requires a certification to Congress before funds may be obligated for a major contract under a program that has experienced a unit cost increase that exceeds 25 percent. In accordance with 10 U.S.C. Section 2433, I certify:

- a. That the F-22 Program is essential to national security.
- b. There are no alternatives to the F-22 program which will provide equal or greater military capability at less cost.
- c. The new estimates of the procurement unit cost are reasonable.
- d. The management structure for the F-22 program is adequate to manage and control the procurement unit cost."

F-22 PROCUREMENT

87. Senator SANTORUM. Secretary Roche, the current Air Force procurement goal is 339 F-22s, well short of the initial 750 F-22s the service intended to purchase. Estimates are that the Air Force will need to procure 381 F-22 Raptors to fill out 10 squadrons for its aerospace expeditionary forces. Currently, the Air Force estimates that the F-22 program is \$2.0 billion above the congressional cost cap for production, while the Office of the Secretary of Defense's Cost Analysis Improvement Group (CAIG) estimates the program to be \$9.0 billion over the production cost cap. Secretary Aldridge approved the F-22 limited/low-rate initial production (LRIP) under an arrangement that will allow the Air Force to procure as many aircraft as possible given budget constraints. Is the Air Force going to request relief from the congressionally mandated cost cap? If so, why should Congress grant this request when the program is in breach of the Nunn-McCurdy law?

Secretary ROCHE. OSD requested, "Congress remove the current production cost cap for the F-22 program" in a 13 Sep 01 letter to the Defense Committees. OSD also intends to submit a legislative initiative on this subject.

The F-22 cost caps have been an effective tool for managing F-22 program costs; however, at this stage of program maturity the production cost cap could constrain the Department's ability to make optimum force structure decisions resulting from

the QDR and Defense Strategic Review. At this point, over 90 percent of the aircraft development is complete with the remaining EMD work being primarily testing. In addition, the program has entered into low rate initial production (LRIP) with approval for full award of Lot 1 (10 a/c), Lot 2 (13 a/c) and advance buy of Lot 3 (23 a/c). The baseline aircraft design has been finalized and near-term production costs are well understood. Accumulated cost data during development and the initial low rate production lots has served to build confidence in the Air Force's proposed cost reduction initiatives and the ability to continue to reduce future aircraft costs. Retention of the production cost cap at this stage no longer serves the original intent of controlling future costs, but instead serves as a fiscal constraint that simply caps the number of F-22s the Department can procure. This limitation significantly reduces the Departments flexibility when evaluating future force structure requirements and modernization alternatives.

PRODUCTION COST CAP

88. Senator SANTORUM. Secretary Roche, if the Air Force does not receive relief from the production cost cap, how many F-22s does the service estimate that it can purchase?

Secretary ROCHE. This does not include six Production Representative Test Vehicles (PRTVs) procured with RDT&E funds. The maximum production rate in this scenario would be 36 aircraft per year. The current Air Force plan to increase the production rate to 56 aircraft per year would not be economically feasible if funding is constrained to the existing production cost cap.

RESEARCH AND DEVELOPMENT IN TECHNOLOGY

89. Senator SANTORUM. Secretary White and Secretary England, last year Congress was told to wait for the fiscal year 2003 budget submission to judge the merits of the Bush administration's desire to transform the military. However, it seems that instead of radical reforms, additional budgetary authority (topline) has been requested to allow the pursuit of both legacy and new systems.

For the Army, the fiscal year 2003 request seeks \$268 million less for applied research versus the fiscal year 2002 request and \$174 million less in advanced technology development than the fiscal year 2002 request. How is the Army expected to transform when it is experiencing -3 percent real "growth" in its research, development, test and evaluation accounts and less in requested funds for 6.2 and 6.3 funding?

Secretary WHITE. In fiscal year 2003 the Army is actually seeking to increase its advanced technology development program (6.3) by \$19.5 million or 3 percent compared to the fiscal year 2002 request. This reflects the strategy to accelerate Future Combat Systems and Objective Force warrior technology development to field these capabilities by the end of this decade. Consistent with this strategy to rapidly field more mature technology, the less mature, applied research funding declined by \$47 million in the fiscal year 2003 request compared to fiscal year 2002. However, the Army remains committed to achieve transformational capabilities through advancements in science and technology (S&T), as evidenced by the overall 2.3 percent increase in total S&T for fiscal year 2003 compared to the fiscal year 2002 request. Despite heavy resource demands for current readiness, the Army's total research, development, test, and evaluation funding in fiscal year 2003 (\$6.92 billion) achieved 2 percent (\$224 million) real growth compared to fiscal year 2002 (\$6.69 billion).

Secretary ENGLAND. Using the fiscal year 2002 Amended President's Budget request as a basis for comparison, the actual fiscal year 2002-2003 reductions are far smaller:

[In millions of dollars]

	6.2 Applied Research	6.3 Adv. Tech Development
Fiscal year 2002 Amended President's Budget	617	670
Fiscal year 2003 Present's Budget Request	580	617
Difference:	-37	-53

Within existing resources the Navy's S&T budget has been refocused with an emphasis on identifying, developing and demonstrating transformational capabilities.

Examples of ongoing transformational include initiatives in the areas of Electric Power, Revolution in Training, and development of ever more capable Autonomous Vehicles. However, in determining whether we are making progress towards a 3 percent goal, using the prior year appropriated level is not an accurate reflection of the Department's priorities because it includes significant increases for specific efforts that are not in consonance with Department core priorities, often including many items not requested by the Department with respect to necessity or timing. Such increases in the appropriated level create marginal returns against our key priorities and distort the baseline from which we hope to move towards the 3 percent goal as we try to include more transformational S&T technologies.

90. Senator SANTORUM. Secretary White and Secretary England, does the fiscal year 2003 budget request contain enough science and technology and research and development funding to support a robust transformation initiative where we can skip a generation of weaponry? Put another way, is transformation of our military to meet 21st century threats still a goal of this administration? How can the Navy and the Army transform with the level of funding requested for 6.2 and 6.3 research?

Secretary WHITE. Army Transformation to the Objective Force remains our highest priority. The Army is firmly committed to achieve transformational capabilities through advancements in science and technology (S&T) as evidenced by the overall 2.3 percent increase in total S&T for fiscal year 2003 compared to the fiscal year 2002 request. In fiscal year 2003, the Army is seeking to increase its advanced technology development program (6.3) by \$68.4 million or 10 percent compared to the fiscal year 2002 request, reflecting our strategy to accelerate Future Combat Systems and Objective Force warrior technology development to field these capabilities by the end of this decade.

Regarding a concept to skip a generation of weaponry, we should recognize that these investments in S&T are risk programs. They are pressing the limits of knowledge and technology. It would be premature to skip a generation of systems until we know if the technology can be proven and successfully transitioned to production for actual warfighting capability. However, despite heavy resource demands for current readiness and Legacy Force recapitalization, the Army's total research, development, test, and evaluation funding in fiscal year 2003 (\$6.92 billion) achieved 2 percent (\$224 million) real growth compared to fiscal year 2002 (\$6.69 billion).

Secretary ENGLAND. In keeping with the administration's goals, the Navy's existing S&T budget does include funding for dynamic transformational efforts in a wide array of areas including development of Electric Power for Naval Platforms, Littoral Support Craft (Experimental) (LSC(X)), Revolution in Training, and Autonomous Vehicles. These efforts do hold the potential for revolutionary "jump ahead" advances. The Electric Power effort stands to revolutionize the way the Navy builds and operates surface, subsurface, air and ground vehicles. Through the use of innovative hull forms, cutting edge propulsion systems, materials and modular systems, the LSC(X) stands to provide similar revolutionary advances that will feed into existing and future platforms. Revolution in Training stands to radically change the way we teach and train warfighters. Similarly, ongoing work in Autonomous Vehicles stands to have major impacts on a wide array of operations, including manned flight, ASW and mine warfare.

All of these initiatives hold significant promise in terms of improved and expanded warfighting capabilities, coupled with improving operations and maintenance and reducing costs, that will transform the way we fight.

MUNITIONS SHORTFALLS

91. Senator SANTORUM. Secretary White, Secretary England, and Secretary Roche, during his confirmation hearing in August to be Chief of Staff of the Air Force, General John Jumper said that the service has a \$2 billion shortfall in its munitions accounts. The Department of Defense spent about \$6 billion on munitions in fiscal year 2001, compared to \$16 billion in 1991. Recently, Colonel James Naughton, Deputy Chief of Staff for Ammunition at the Army Materiel Command, said that there is not enough money to remanufacture obsolete ammunition stockpiles. While the budget increases funding for the procurement of "smart munitions," the portion of the industrial base that manufactures bullets and projectiles, propellants, fuses, and pyrotechnics is not thriving. In addition, many of the subcomponents in the ammunition sector are military-unique items, with limited or no commercial market. An industry association, the Munitions Industrial Base Task Force, believes that our munitions accounts are underfunded by \$400 million. What actions can the services

take to strengthen the entire ammunition industrial base, not just the precision or preferred munitions base?

Secretary WHITE. The Army shares your concern about the health of the munitions industrial base. This concern is one of the major reasons the Army has established the Program Executive Office (PEO) for Ammunition. The new PEO is responsible for life-cycle acquisition management of conventional ammunition, which includes integrating budgets, acquisition strategies, research and development, and life-cycle management across all ammunition families. Included in this mission will be the responsibility of ensuring the continued viability of the munitions industrial base. The Army has included two ammunition remanufacturing programs, one for 105mm artillery and one for 155mm artillery, in its fiscal year 2003 submission. These programs will help parts of the artillery base. In addition, increases to programs to support requirements needed in responding to the post September 11 environment will help the small arms ammunition base. In the long run, however, the only way to fully revitalize the ammunition industrial base is to add additional funding for currently unresourced war reserve requirements for other than smart munitions.

However, we know that the benefit of precision munitions is a greatly reduced requirement for large stockpiles of non-precision munitions. For example, the Hydra 70 Rocket was originally designed as an area suppression weapon and is not very accurate. Up to 60 rockets are required to take out a specific target. Collateral damage and fratricide potential are significant detractors in the use of the Hydra 70. In comparison, we estimate the Advanced Precision Kill Weapon System (APKWS), a Hydra 70 Rocket with a laser guidance package attached, will require one to two rockets per specific target. Collateral damage and fratricide issues are greatly reduced. Unfortunately, we do not project availability of the APKWS until fiscal year 2006. In this case, we need to carefully manage the transition of current Hydra 70 production to the proper size to support future APKWS requirements.

The bottom line is we need to continually assess the state of our munitions programs from those in the technology base to those already produced and in our stockpiles. While it is clear additional resources are needed for munitions, specifics depend on risk assessments we are currently conducting.

The Army uses hardware procurements and competition to provide the private sector and the organic base the resources needed to maintain the industrial base. The Army needs an industrial base that is sized for our high-priority requirements. A long-term stable ammunition program funded at higher levels enables PEO Ammunition to develop an acquisition strategy that will incentivize contractors to modernize for what the Army needs and dispose of the capacity that is not needed. The Army can execute its fiscal year 2003 unfunded requirement within the existing industrial capacity. The Army has done what it can within the available resources, but this effort does fall below the total requirements. Further, the Armaments Retooling and Manufacturing Support program enables the commercialization efforts of the operating contractors in this competitive market.

Secretary ENGLAND. The Department of the Navy (DON) supports the strategies developed by the United States Army, which acts as the Single Manager for Conventional Ammunition (SMCA). The Secretary of the Army was designated the single manager because the Army controls the majority of the industrial base. One of the more important functions of the SMCA is management of the Defense ammunition industrial base. To that end, Assistant Secretary of the Navy for Research, Development and Acquisition has recently coordinated a memorandum that reminds and emphasizes the intent and importance of Section 806 of the Fiscal Year 1999 Defense Authorization Act for Fiscal Year 1999. The Act tasks the SMCA to examine the industrial base and make procurement decisions, which help to underpin the vitality of the ammunition industrial base. The DON is encouraged by the SMCA's implementation of multiyear procurements and long-term requirements contracts.

The DON will continue to investigate management architectures and SYSCOM relationships that satisfy warfighter needs, stabilize requirements and inventories, and yet still allow the industrial base flexibility enough to respond to inevitable wartime surge demands. The Navy has also commissioned studies by Department of Commerce to examine the health of those portions of the industrial base where there is concern about the strength of the enterprise (e.g., high performance explosives).

The ammunition industrial base has suffered in the past, and the DON is working closely with our partners on the Munitions Industrial Base Task Force to help ensure that this important element of our industrial capacity is preserved.

Secretary ROCHE. The Air Force shares your concern about the health of the ammunition industrial base. Since the end of the Cold War, the Air Force has shifted its emphasis more towards precision-guided munitions, reducing the need for non-

precision munitions. However, there are niches in the ammunition industrial base that warrant continual attention. In addition to funds already provided for the munitions and ammunition industrial base since September 11, a number of acquisition excellence strategies, such as multiyear procurement, contractor incentives, and lean enterprise practices, could be incorporated to support and strengthen the entire ammunition industrial base.

Successful application of these strategies could enhance corporate financial health and stockholder value by increasing a contractor's ability to capture corporate profits and realize sufficient returns on investment. This, in turn, could lead to expanded growth for both contractors and their supply chain plus a greater potential for attracting investors, recruiting fresh talent, and retaining valuable expertise. In addition, the Government could realize improved schedule performance, reduced cycle times, and reduced acquisition costs throughout the industrial enterprise as a result of these strategies.

Since the Army is the Department of Defense's Single Manager for Ammunition, responsible for consolidating Army, Navy, and Air Force ammunition procurements, we believe they would be in the best position to implement these strategies. Similar strategies were successfully incorporated in the Air Force's recent procurement of precision-guided munitions (e.g., Joint Direct Attack Munitions), and the Air Force would support the Army's efforts to implement these strategies.

92. Senator SANTORUM. Secretary England, it appears that the Marine Corps has a shortfall in fire support. The DD-21, which was slated to provide off-shore fire support, was restructured last year. The Land-Attack Standard Missile, fitted with advanced navigation system and guided by a global positioning system (GPS), which was to provide the required range and accuracy needed to support Marine Corps power projection from the shore, has been canceled with this budget. The lightweight 155 field artillery system has slipped, impacting modernization of the on-shore field artillery.

How do you plan to address this apparent shortfall in Marine Corps fire support requirements?

Secretary ENGLAND. The combined arms concept of employing Naval Surface Fire Support (NSFS), Land Based Fires, and Close Air Support (CAS) together produce synergistic effects throughout the depth of the battlespace. Combined arms synergy is essential to produce the desired effects on enemy targets. In the near-term, Marine Air-Ground Task Forces (MAGTF) will depend on combined effects of fire support systems on land, at sea, and in the air. To address our shortages in attack resources, surface delivered extended range projectiles and cruise missiles, land based artillery and mortar systems, augmented by existing TACAIR capabilities, will be employed together to gain complementary effects.

Our near-term NSFS initiatives include improving sea-based 5" guns, developing an extended range guided munition, introduction of the Tactical Tomahawk cruise missile, and integration of C4I systems to support NSFS. The current 5" 54 gun, used to fire conventional ammunition to 13nm, has been improved to accommodate higher energies associated with extended range munitions. The Extended Range Guided Munition (ERGM) has an objective range requirement of 63nm from the improved gun. The improved gun Initial Operational Capability (IOC) is scheduled for 2003 with conventional munitions, and 2005 with extended range munitions. ERGM will IOC in 2005. The Marine Corps' requirement to engage targets to 222nm can be partially met with the introduction of Tactical Tomahawk (TACTOM) in 2004. TACTOM's loiter and enroute re-targeting capabilities provide support over extensive maneuver areas. Naval Fires Network (NFN) and Naval Fires Control System (NFCS) are two near term C4I systems that provide the capability to support Carrier Strike, Surface Strike, Expeditionary, and Fire Support missions in support of Joint, Allied, and Coalition forces. NFN is being rapidly deployed now in support of operation Enduring Freedom. NFCS is scheduled to IOC in 2004.

The Lightweight 155 Howitzer is one of three new land based fire support systems. We will introduce the High Mobility Artillery Rocket System (HIMARS) and an Expeditionary Fire Support System (EFSS) to provide improved land based fire support. The Lightweight 155, along with Towed Artillery Digitization (TAD), will provide increased mobility, improved accuracy and responsiveness, and greater durability over current field artillery system. HIMARS promises to be rapidly deployable and provide both precision and area munitions under all weather conditions, extending our ground-based fire support umbrella to 60 kilometers. HIMARS will provide a robust capability for counterfire and battlespace shaping. EFSS will be a lightweight fire support system that can be transported inside the MV-22, providing a significantly enhanced fire support capability for a vertically lifted maneuver force.

The MAGTF relies heavily on CAS to offset limited artillery and NSFS. The V/STOL capability of the remanufactured AV-8B Harrier allows forward basing to facilitate timely CAS to Marine ground forces. Improvements include enhanced night warfighting capabilities, improved engine, and multimode radar. Further, the multi-mission capable F/A-18C Hornet provides powerful and flexible offensive air support that can meet air to ground mission requirements. The F/A-18D provides the MAGTF with a platform capable of tactical air control and reconnaissance while retaining the offensive warfighting capabilities of the F/A-18C.

The Navy's far-term approach is to develop a more robust set of NSFS weapon systems for installation in DD(X). These weapon systems include the Advanced Gun System (AGS), with its associated Long Range Land Attack Projectile (LRLAP) (objective range of 100 nm), and the Advanced Land Attack Missile (ALAM) (objective range of 300 nm).

An integrated system of aviation, ground and sea-based fire support systems is required to support expeditionary "combined arms" operations. These current and planned programs will provide complementary capabilities that meet the Naval services' requirements for long-range, responsive, all weather fire support.

QUESTIONS SUBMITTED BY SENATOR TIM HUTCHINSON

C-130J PROGRAM

93. Senator HUTCHINSON. Secretary Roche, I want to compliment you on the tremendous job you did on getting the C-130J program on track. Prior to last year, this was a program riddled with problems ranging from an erratic procurement strategy to problematic fielding schedules. It was your leadership, along with other senior uniformed members of the Air Force, that finally brought some order to this program that is so important to the Air Force's mission.

In particular, the Air Force has made a significant step in recommending funding in this year's budget submission for a multiyear procurement of C-130Js. As you go forward with this procurement strategy, I would only want to remind you of the importance of ensuring that our pilots receive the high quality training they require. I was heartened that the budget submission also includes significant investment to establish the C-130J formal training unit at Little Rock Air Force Base. As the Air Force updates its C-130J fielding plan, are you committed to ensuring that an adequate number of aircraft are designated for training purposes?

Secretary ROCHE. The Air Force is committed to making sure the right numbers of aircraft are available to meet C-130J training requirements. A solid training program is paramount to integration of the C-130J into the Total Force and we are building a beddown plan that reflects the need for trained crews being available as aircraft deliver. The specific number of aircraft required to perform this training mission is still under study. Little Rock AFB is, and will continue to be, the C-130 center of excellence, and is the planned location for future C-130J training.

PROTECTING SOLDIERS FROM CHEMICAL AND BIOLOGICAL WEAPONS

94. Senator HUTCHINSON. Secretary White, when U.S. military forces were conducting clearing operations in the Tora Bora region (caves) of Afghanistan previously occupied by al Qaida, there was concern that our forces could be exposed—either accidentally or intentionally—to chemical or biological agents. What methods did the soldiers and marines use to defend themselves against exposure? What role did the anthrax vaccine play in their defense?

Secretary WHITE. Generally speaking, the troops in Afghanistan are equipped with protective masks and other gear to defend against exposure to chemical or biological agents. The U.S. Central Command can provide specific information on which units were involved, how they were equipped, and what tactics they used to avoid exposure.

On June 5, 2001, the Deputy Secretary of Defense amended the scope of the Anthrax Vaccine Immunization Program's (AVIP) implementation to include only designated special mission units, manufacturing, and Department of Defense research personnel and Congressionally mandated anthrax vaccine research. At present, the anthrax vaccine is only provided to personnel meeting these criteria until the AVIP resumes full implementation. Since the information is currently classified, I am not able to provide in an open forum which units in Afghanistan received the anthrax vaccine.

QUESTIONS SUBMITTED BY SENATOR JEFF SESSIONS

UTILITY OF OLDER SHIPS

95. Senator SESSIONS. Secretary England, I visited Japan in January 2002 and received briefs on the U.S.S. *Kitty Hawk* and one of her escorts, U.S.S. *O'Brien*, shortly after they returned to Japan from Operation Enduring Freedom. Both of these ships performed superbly, and General Franks testified before this committee last week that the key capabilities a carrier battle group brings to the battle are its firepower and staying power. *Kitty Hawk's* use as an Afloat Forward Staging Base was a superb example of transformation, and *O'Brien* fired Tomahawks and conducted Maritime Intercept Operations searching for al Qaida operatives in support of Operation Enduring Freedom. In fact, the *Kitty Hawk* battle group is scheduled to deploy again in support of Operation Enduring Freedom later this spring with her full air wing.

Would you explain your view on the General Franks' statement regarding the key capabilities the *Kitty Hawk* battle group provided during Operation Enduring Freedom, and your assessment of their future utility for missions against asymmetric threats?

Secretary ENGLAND. *Kitty Hawk*, on short notice, transitioned to the AFSB mission, and was highly effective in that mission. While on station in the North Arabian Sea, the *Kitty Hawk* AFSB provided significant support to our Special Operations Forces (SOF):

- (1) Significantly cut the flying distances to the FARP (Forward Area Refueling Position) in Pakistan and the targets in Afghanistan.
- (2) Large flight deck facilitated/expedited launch and recovery, maximizing range and on-station time of helicopters.
- (3) Robust, organic C⁴I infrastructure available for mission planning, situational awareness, and intelligence collection and distribution.
- (4) Increased operational security. Hostile elements could not observe and report on AFSB operations as they could have done had the SOF been located ashore. Since foreign nationals were not needed to provide contractor services on board ship, the assault force was certain mission planning rehearsals and preparations were unobserved. This level of security was vital to maintaining the important element of surprise.
- (5) Secure environment; force protection concerns were greatly reduced.
- (6) Outstanding medical capabilities greatly reduced the distance (time) needed to transport wounded to trauma care and offered superb routine medical care.
- (7) Extensive maintenance infrastructure, useful for intense helicopter maintenance requirements.
- (8) Significant ammunition and fuel stowage capability.
- (9) Excellent habitability features for SOF operators. Some specific examples:
 - Nutritious, sufficient food: forces did not have to acclimate to an unfamiliar cuisine.
 - No contaminated water issues.
 - Beds vs. cots, air-conditioning vs. no air conditioning, plus extensive physical fitness facilities.

Given the inherent mission flexibility of Navy ships, any of our carriers or "big deck" (LHAs/LHDs) amphibious ships, as well as smaller amphibious ships and surface combatants in smaller scenarios, could successfully perform this function depending on the specific mission—Sea-based combat strike capability is expected to continue, at a minimum, if not increase, as we prosecute terrorists and their networks. The Chief of Naval Operations has directed a study of the feasibility of acquiring a platform dedicated to providing, among other things, an operational capability similar to that provided by *Kitty Hawk*. Independent teams from Naval Sea Systems Command (NAVSEA) and the Military Sealift Command (MSC) have explored naval and commercial platform options to assess their abilities to meet this requirement. NAVSEA's and MSC's combined analysis and their recommendations are expected to be briefed in the near future.

The AFSB mission in support of our Special Operations Forces certainly is important, as access to bases ashore become less certain. *Kitty Hawk* did her mission, and did it superbly. Embarked SOF aboard ships have the advantages of sovereignty, flexibility, operational security, and force protection. It is a potent and proven tactic. However, if we continue, the Nation will ultimately need a dedicated platform to maintain force integrity and offensive punch.

The question also recognized the importance of *Kitty Hawk's* escorts to the war effort, and I want to expand on their pivotal contributions. In the past two decades, Navy ships and operational concepts have evolved to incorporate new capabilities.

Tomahawk is distributed throughout the force, increasing the number of strike platforms from 14 in 1982 to over 140 today. While the strike capabilities of our Navy forces certainly are important, *Kitty Hawk's* two surface escorts also performed other vital Global War on Terrorism missions, such as Maritime Interception Operations (MIO). Specifically, there are two types of MIOs: standard interception operations in which suspect ships are boarded and inspected for contraband or illegal cargo, and Leadership Interception Operations (LIO)—a focused MIO—specifically directed against terrorist leadership, in this case the al Qaida and Taliban regime, attempting to escape by sea.

96. Senator SESSIONS. Secretary England, it would also be helpful to hear your comments on lessons learned as we assess the future utility of some of the Navy's aging ships. I would like to point out that this is an issue that Senator Kennedy and I are focusing on and will have a letter to you and the CNO asking you to look into four focus areas for getting the most out of the ships we do have.

Secretary ENGLAND. The primary lesson learned is that significant investment in modernization is required to keep ships serviceable and retain them to the end of their full service life. In a fiscally constrained environment, Navy must balance between transforming and building the future Navy to meet emergent warfighting requirements, and operating the current force to meet existing missions, while remaining within the President's budget.

Force Structure:

New ship procurement decisions dominate force structure recapitalization, yet the retention or decommissioning of ships has the greatest near-term impact on force structure size and composition. The key element in decisions to extend or contract the service life of a ship class is affordability versus capability.

Service Life Considerations:

The service life of our warships has a significant impact on force structure. Extending service life by delaying decommissionings can maintain or increase force structure and, correspondingly, accelerating decommissioning can reduce force structure. The decision to extend or accelerate decommissioning of a ship class is based on a cost/benefit analysis focusing on the affordability of the platform and what warfighting capabilities it brings to the Joint Commander's tool box. In some cases, such as *Ticonderoga* (CG 47) class cruisers and *Perry* (FFG 7) class frigates, it is considered prudent to invest in conversion and modernization of ships to extend their service life. In other cases, such as *Spruance* (DD 963) Class destroyers, it is more economical to decommission the ships.

Historical Service Life vs. Estimated Service Life:

Sophisticated combat systems must keep pace with advancing threat technology. As the combat systems and the hull, mechanical and electrical (HM&E) systems of a platform age both must be maintained and upgraded, but the combat systems upgrades tend to be more extensive and expensive. Additionally, as ships age, the cost of operating and maintaining the ships may increase as a function of the overall material condition of the vessel. For example, if a ship has deferred a number of maintenance actions over the course of its operating life, and has had a high operational tempo, the cumulative effects on the ship can lead to higher operating and maintenance costs. This must be considered in investment decisions. In making service life decisions, warfighting capability gained from an upgrade is balanced against the cost of the upgrade and the operations and maintenance cost of the ship. Unless modernized, a surface combatant's Historical Service Life (HSL) is shorter than the Estimated Service Life (ESL) established via current Navy policy and design specification requirements provided to shipbuilders. For destroyers, HSL is 20 years compared to an ESL of 35 years. In the case of frigates, HSL is 20–22 years compared to an ESL of 30 years.

Cruiser Conversion:

The Navy has made the commitment to extend the service of our primary air defense platforms through the conversion program for CG 47 Class cruisers. The program will upgrade the AEGIS combat systems and install warfighting improvements including Area Air Defense Commander (AADC) capability, upgrades to the AEGIS Baseline to accept Sea Based Ballistic Missile Defense capability (pending Missile Defense Agency (MDA) approval and funding of development), land attack, and force protection. Additionally, service life extension features include Smart Ship upgrades, the all electric alteration, weight and moment adjustments, and other distributive systems improvements. Modernizing these ships will make them more ca-

pable to project theater-wide offense and defense while providing up to an additional 20 years of service life beyond the HSL of 17 years.

Frigate HM&E and Self Defense Upgrades:

In the fiscal year 2003 budget submission, FFG 7 Class frigates will receive HM&E upgrades to reduce their operating costs and extend their service life. Additionally, the combat systems will be upgraded with selected ship self defense technology. These ships with their relatively small crew size and low operating costs provide affordable warfighting capability for the investment required.

Amphibious Assault Ship Sustainment:

The requirement for amphibious ships is driven by two factors, the Amphibious Ready Group (ARG) deployment cycle and Marine Corps lift requirements. Today's 12 ARGs are the minimum required to meet presence requirements and each ARG consists of an LHA/LHD, LPD, and LSD. Overall lift is currently below the 2.5 Marine Expeditionary Brigade (MEB) lift programmatic goal and the full requirement of 3.0 MEB lift. *Austin* (LPD 4) Class ships will be required to serve an average of 41.5 years, well beyond their original ESL of 30 years, in order to meet amphibious requirements until the LPD 17 class ships are delivered to the fleet. We are funding the LPD 4 Class Extended Sustainment program, which is designed to improve the dependability of HM&E systems and living conditions for the Sailors and embarked Marines. Additionally, it is expected that LHAs with their mid-life upgrade will be required to serve a median 42 years, significantly beyond their ESL of 35 years, before being replaced by the LHA(R) ships currently being studied.

Destroyer Decommissionings:

DD 963 Class destroyers are expensive to maintain because of their large crew size and age while providing only limited warfighting capability. These ships received an earlier modernization with the introduction of the Vertical Launch System (VLS), which extended the combat system relevant life beyond the historical 20 years. However, while the ships still provide some warfighting capability with two 5" 54 cal. guns and an Antisubmarine Warfare (ASW) suite, the higher manning requirements and operational costs do not justify additional funds for further modification or extended service life. New BURKE (DDG 51) Class destroyers being introduced to the fleet provide substantially more combat capability and an ample number of VLS tubes to support current Tomahawk inventory. It is not cost-effective to keep the DD 963 Class in the inventory. The currently structured decommissioning schedule will save the Navy about \$1.25 billion over the Future Years Defense Program (FYDP) that can be applied to transformational efforts such as electric drive, advanced networks and stealth technology bringing new warfighting capabilities to the fleet.

ADEQUACY OF FORCE STRUCTURE

97. Senator SESSIONS. Secretary White, Secretary England, and Secretary Roche, the Quadrennial Defense Review (QDR) described the force structure required to carry out the defense policy goals of: 1) assuring allies and friends; 2) dissuading future military competition; 3) deterring threats and coercion against U.S. interests; and 4) if deterrence fails, decisively defeating any adversary. The QDR further stated that as the "transformation effort matures . . . DOD will explore additional opportunities to restructure and reorganize the Armed Forces." Does your service's budget request support the QDR force structure? If not, what transformation efforts will enable you to go below the QDR force levels?

Secretary WHITE. The QDR-directed force structure did not change the current Army end strength of 1,035,000 with 480,000 in the active Component (417,000 Force Structure Allowance (FSA) and 63,000 transients, trainees, holdees, and students), 350,000 in the Army National Guard (384,000 FSA); and 205,000 in the Army Reserve (212,000 FSA). The FSA provides for 18 combat divisions in the Army today—10 Active and 8 National Guard. Our budget submission provides for this force and fully supports the levels outlined in the QDR Report.

The fiscal year 2003 budget adequately funds all of the Army's known Interim and Objective Force Transformation requirements. First, the budget and its associated Future Years Defense Program (FYDP) funds the procurement of six Interim Brigade Combat Teams and its equipment. Next, the Army is funding over \$8.5 billion in the FYDP for science and technology, more than 97 percent of which is focused on Objective Force technologies. In order to fund these requirements, the Army has accepted risk by underfunding the modernization requirements of the current Legacy Force. Over the past 3 years, we have terminated 29 programs to gar-

ner over \$8.2 billion in savings. As the Army moves forward with Transformation, it will have to make more tough funding decisions, and where possible, seek additional funding from Office of the Secretary of Defense and Congress.

Secretary ENGLAND. The Quadrennial Defense Review Report listed the current force structure of the Navy and Marine Corps as a baseline from which the Department will develop a transformed force. The fiscal year 2003 Budget Request supports maintaining this force structure with the following exceptions:

Active Surface Combatants fall below the baseline level of 108 across the FYDP:

	Fiscal Years				
	2003	2004	2005	2006	2007
Active Surface Combatants	101	99	96	99	103

Attack Submarines fall below the baseline level of 55 from fiscal year 2003 to fiscal year 2006:

	Fiscal Years				
	2003	2004	2005	2006	2007
Attack Submarines	54	54	54	54	55

Navy’s fiscal year 2003 budget request focuses on funding requirements in personnel and operational accounts to support our current readiness to conduct a full spectrum of joint military activities. Top priority on funding current readiness was a matter of choice justified by the ongoing war effort. Even so, high on the list of unaffordable requirements is an attack submarine refueling overhaul that would increase the inventory to 55 from fiscal year 2004 out, and additional DDG-51 procurement that would bolster the surface combatant force structure.

We have also decided to divest ourselves of older, less capable ships by retiring them in order to free resources that can be used to fund transformational capabilities on the remaining ships and submarines of the fleet. The impact on force structure requirements of the improved capabilities brought by, for example, programs funded in the fiscal year 2003 President’s Budget such as Cooperative Engagement Capability (CEC) and *Trident* SSGN conversion is still being studied. CEC provides a revolutionary new capability, allowing surface and air platforms to share and fuse sensor information. This will allow Aegis ships to engage contacts beyond the sight of onboard sensors resulting in a dramatic enhancement in the total force capability to track in a jamming environment. The *Trident* SSGN program converts four *Ohio* class SSBNs to SSGNs. Available for operational use starting in 2007, these SSGNs provide unique Special Forces capabilities, including hosting the Advanced SEAL Delivery System (ASDS), and large-scale strike capabilities in one clandestine, survivable platform. SSGNs will also serve as a transformation “bridge” for submarine encapsulation of joint payloads and will provide the volume for experimentation and development of offboard sensors and vehicles.

Secretary ROCHE. In the last decade, DOD has undergone three major reviews beginning with the Bottom Up Review. During these reviews, Air Force reduced its force structure to a little more than half of what it was in aircraft, people and units. But, the Nation’s leaders asked the Air Force to do more, much more, nearly four times more than our assessments predicted. The Air Force responded with the Expeditionary Aerospace Force (EAF) concept remaking itself and becoming more flexible and stable in the process. The EAF has at its core an entirely new way of doing business using 10 separate Aerospace Expeditionary Forces (AEFs) in a rotational concept. The past decade demonstrated that air and space power’s inherent characteristics of speed, range, and flexibility made it the force of demand in the new security environment. The Air Force continues its transformation journey to meet the requirements of the new defense strategy.

This strategy also provided a new approach in assessing force structure and shifted the force sizing paradigm. As part of the change, Secretary Rumsfeld asked the services to create and implement a capabilities based plan and as part of that plan, decide how to recapitalize themselves. These plans are extremely important as we make decisions about organization, concepts and system procurement. Cost per unit was often used as a measure of merit in making such decisions. But a more accurate measure of merit that captures the real value or capability of a particular system is cost per target engaged or, better yet, cost per effect desired. We are building a recapitalization plan which will be a balanced sustainable portfolio of platforms and ages. But we are not thinking just in terms of platforms. We are thinking in terms

of overall capability provided by each platform, not simply what it was originally designed for. As an example we are looking at our tanker fleet, now as a smart tanker fleet by incorporating C²ISR capabilities on the platforms with refueling capabilities. Another example would be the development UAVs in the C²ISR/Hunter Killer mode, thus allowing us to radically shorten the kill chain. We think these are examples of incorporating the transformational character of air and space power to radically redefine our Nation's strategic and operational alternatives for military success in this dangerous world.

OVERDUE ATTACK SUBMARINE REPORT

98. Senator SESSIONS. Secretary England, Sections 123 and 124 of the fiscal year 2001 Authorization bill require the Secretary of Defense to submit two reports on attack submarines. The first report is a plan to maintain at least 55 attack submarines and the second is on production rates for *Virginia*-class submarines. Both reports are overdue by more than a year and are key for our deliberations regarding the Navy's new construction request.

Has the Navy completed their portion of these reports and do you know when they will be submitted to the congressional defense committees?

Secretary ENGLAND. The Secretary of the Navy is continuing to work with the Office of the Secretary of Defense (OSD) to complete these reports for submission in support of the Congressional review of the PB03 budget. The reports were initially drafted by the Navy during Congress, PB02 deliberations and the Department of Defense' preparation of the PB03 budget. The reports were revised to accurately reflect PB03 decisions. The reports are currently being reviewed by the Department of the Navy and will be forwarded to OSD for final approval and submittal to the congressional defense committees.

DEPLOYABLE JOINT COMMAND AND CONTROL

99. Senator SESSIONS. Secretary England, the QDR stated the pressing need for a Deployable Joint Command and Control center. The Secretary of Defense's testimony before this committee last week indicated that this budget request included \$40 million for a program for new land- and sea-based joint command and control centers."

What is the Navy's share of that \$40 million fund and what is your vision on the future of Navy command and control ships?

Secretary ENGLAND. The \$40 million in question (actually \$39.8 million as submitted in the President's Budget) represents RDT&E funding specifically added to the Navy's TOA to initiate the effort known as the Deployable Joint Command and Control (DJC²) system. DJC² will be a joint program with the Department of the Navy as the Executive Agent, and is presently in the definition stage. The Joint Requirements Oversight Council approved the DJC² Mission Needs Statement in February 2002. DJC² is envisioned to provide Joint Force Commanders with a deployable joint Command and Control (C²) system to fully command, control and direct CINC and Joint Task Force (JTF) operations. DJC² will provide this capability for the envisioned Standing JTF headquarters staffs (about 250 personnel) in a set of collapsible shelters or transportable vans. The communications infrastructure, capability and support functions are to be provided separately by the respective service component(s). DJC² is envisioned to provide the land- and sea-based joint C² functionality that can be easily relocated as tactical situations require, and provide this functionality when component commanders transition ashore from afloat. DJC² functionality is intended to be present in the Joint Command and Control [JCC(X)] Mission System core.

Navy command ships currently provide worldwide, forward deployed, and robust joint C⁴I capability without the limitations inherent with fixed shore sites. This capability is consistent with the QDR and its emphasis on forward deployed, robust command and control. The Navy's new JCC(X) program will provide up to four ships to replace today's command ship capability which will reach their ship service life by the end of the decade. The JCC(X) ship with its integrated Mission System, provides the C⁴I, collaborative workspaces, information infrastructure, communications capability as well as habitability spaces to support the Joint Forces Commander, complementary Component Commanders, coalition as well as providing for the numbered fleet commander and staffs. The Navy leadership is currently assessing alternative platform approaches to meet the JCC(X) Mission Needs Statement.

The JCC(X) and DJC² programs are separate, yet complementary efforts. While they both must be interoperable and support the CJTF HQ function, the JCC(X)

Mission System also supports the operational and tactical functions associated with Naval Forces afloat and the Numbered Fleet Commander and staff. DJC² plans to have its first variant available to support PACOM operations by 2005, while JCC(X) initial ship delivery will not be until 2011. JCC(X) will leverage on the DJC² development and support its functionality within the JCC(X) Mission System to provide the very necessary capability for the CJTF and the Component Commands and Staffs around the world, regardless of on land, at sea, or in the air.

AVIATION FLIGHT SIMULATORS

100. Senator SESSIONS. Secretary White, in your opening statement you said that the Army must “fully modernize training ranges, combat training centers, and training aids, devices, simulators, and simulations to provide adequate and challenging training.” I have been thoroughly impressed with the performance of Army aviation during Operation Enduring Freedom and can offer well-deserved praise to the professionals at the home of Army aviation in Fort Rucker, Alabama. One item I observed during a recent visit to Fort Rucker was an urgent requirement for advanced simulators and advanced simulator technology. Do you feel that the requirement for more advanced simulators is adequately addressed in this budget?

Secretary WHITE. In short, no. Under the Army’s Transformation guidance, Fort Rucker redesigned flight school to produce a more combat-ready aviator for the field. The analysis of simulation requirements indicates an immediate need for an estimated 24 TH-67 High Fidelity Flight Simulators for initial entry students and 24 reconfigurable Advanced Aviation Institutional Training Simulators (AAITS) for advanced aircraft training. AAITS will also support virtual and constructive training for officer professional development courses as well as collective training for Active, National Guard, and Army Reserve aviation task forces preparing for operational deployments. Funding for this requirement is not addressed in the current budget.

The high cost of these technologically advanced devices, combined with their immediate need, creates procurement obstacles under the Federal Acquisition Regulation. Statutory changes to procurement laws are required to execute the preferred strategy of a Privately Funded Initiative or Public Private Partnership. The most advantageous business solutions to the government and the taxpayer leverage commercial, up-front capital investment offset by long-term contract agreements greater than 5 years.

DOMESTIC SPACE LAUNCH POLICY

101. Senator SESSIONS. Secretary Roche, the Air Force was designated by the Secretary of Defense as the executive agent for space in 2001. In your opening statement, you said that this means that the Air Force is responsible for Department of Defense-wide “planning, programming, and acquisition of space systems.” One of the fundamental goals of the national space policy is assuring reliable and affordable access to space through U.S. space transportation capabilities. The policy directs that U.S. government payloads be launched on space launch vehicles manufactured in the United States unless exempted by the President or his designated representative. One of the programs you identified in your opening statement that is designed to meet the future launch demands of national security, civil, and commercial payloads is the Evolved Expendable Launch Vehicle (EELV). The Atlas V program that is being proposed for the EELV utilizes a Russian-designed and Russian-built RD-180 engine for propulsion.

It is my understanding that the EELV engineering and manufacturing contract was awarded in October 1998 and that the Department agreed to allow a Russian engine to be used in the development only if a U.S. manufacturing capability was developed within 4 years of the contract being awarded. That 4 years is up in October of this year. Can you tell me what progress has been made with developing a U.S. production capability?

Secretary ROCHE. The license agreement necessary to begin the transfer of the manufacturing data from the Russian company (NPO Energomash) to the U.S. company (United Technologies, Pratt & Whitney) took 18 months to get through the U.S. Government approval cycle. The license agreement is currently awaiting approval by the Government of Russia. We anticipate approval in late March, after which the data will begin to flow. The revised U.S. co-production schedule will provide the capability to produce U.S. built engines by 2008. AF has requested an extension from the DOD. We are managing the risk of relying on Russian built engines by stockpiling enough engines to launch all U.S. Government Atlas V missions on contract.

ATLAS V LAUNCH

102. Senator SESSIONS. Secretary Roche, I also understand that the first Atlas V launch is scheduled for fiscal year 2004 with a classified payload. Is it still U.S. policy to assure our access to space through space launch vehicles manufactured in the United States?

Secretary ROCHE. The first Atlas V will fly this summer with a commercial payload. The first U.S. Government payload on an Atlas V, Wideband Gapfiller Satellite #2, will fly in November 2004 (fiscal year 2005). A May 1995 DOD policy directive requires national security payloads to be launched on space launch vehicles manufactured in the United States. The same policy allows the use of engines manufactured in nations of the Former Soviet Union if we have sufficient quality and quantity of stocks to preclude a launch stand-down during transition to U.S. sources. The Atlas V RD-180 main engine is built in Khimky, Russia. Therefore, the Air Force requires Lockheed Martin to stockpile engines as an interim risk mitigation measure during the conversion to U.S. production.

DEPARTMENT OF THE ARMY REORGANIZATION

103. Senator SESSIONS. Secretary White, I am greatly concerned about one aspect of the Department's reorganization: the Army Review Boards Agency and the Army Board for Correction of Military Records. Over the last 5 years I have relied on the Department's assistance many times. This includes the work and assistance of the men and women assigned to the Office of Congressional Liaison, the Army staff for program information, field commanders, and specifically the Army Review Boards Agency (ARBA) and the Army Board for Correction of Military Records. The ARBA has, on multiple occasions, assisted my constituents to the point that I am stunned the Department would consider action resulting in the elimination of 31 spaces. Such action I think is not only in violation of the 1999 National Defense Authorization Act (NDAA), but sets you up for Congressional criticism when you fail, as you will, to meet Congressional suspenses. Will you reconsider planned action and take heed of the language that the committee expects you to "provide the manpower, equipment and fiscal resources necessary to ensure that the boards are able to meet the timeliness standards?"

Secretary WHITE. I agree with you that the agencies you mentioned do a tremendous job for our soldiers and families. However, I would like to clarify I have not yet directed a reduction of the manpower in ARBA. I did request that the Assistant Secretary of the Army (Manpower and Reserve Affairs) analyze a reduction from 132 people to 100 to determine if ARBA can maintain the congressionally-mandated standards for responding to requests for review of military records at decreased manpower levels. This analysis should include investment costs in technological equipment and other available means for ensuring compliance with the 1999 NDAA and congressionally-mandated suspenses. Reductions of this nature are required in activities of the Army to meet the congressionally-mandated Headquarters management account reduction of 15 percent, also mandated in the 1999 NDAA. I will not approve any reductions that would cause the Army to break the 300-day processing threshold.

QUESTIONS SUBMITTED BY SENATOR SUSAN COLLINS

NAVY INTELLIGENCE IN THE FUTURE

104. Senator COLLINS. Secretary England, you state the importance of operations in the intelligence domain and cite an example of Navy P-3 aircraft guiding Special Operations Forces and Marine units on the ground in your testimony.

What manned Navy Intelligence, Surveillance and Reconnaissance (ISR) capabilities do you plan for the future? With the increased OPTEMPO of the P-3 rapidly diminishing its service life, do you see any advancement in the procurement of its replacement?

Secretary ENGLAND. The Multi-Mission Maritime Aircraft (MMA) is planned to be the permanent solution addressing the Intelligence, Surveillance and Reconnaissance (ISR), Antisubmarine Warfare (ASW), and Anti-Surface Warfare (ASUW) missions while sustaining the Maritime Patrol and Reconnaissance (MPE) inventory through the middle of the 21st century. MMA achieved a successful acquisition Milestone 0 (MS 0) March 22, 2000 and subsequently entered the Concept Exploration phase in July 2000. In January 2002 the MMA Acquisition Strategy Plan and Analysis of Alternatives received approval from USD AT&L, which allowed the

MMA program to proceed into the Concept, Advanced Development Phase. Attaining these milestones continues MMA on a schedule to meet a 2012–2014 IOC.

The MMA Initial Operational Capability (IOC) has been accelerated from the original IOC of 2015 to the current 2012–2014 timeframe. Beginning in fiscal year 1999, a Service Life Assessment Program (SLAP) was undertaken, which will provide the analytical and empirical information required to accurately determine P-3/EP-3 fatigue life. Special Structural Inspections (SSIs), based on SLAP results, will be conducted on applicable airframes once they reach 100 percent fatigue life expended (FLE). Aircraft under this inspection and repair plan should be able to attain 130 percent FLE, thereby sustaining the operational MPR force until MMA is fully operational. The Global War on Terrorism will have an impact of P-3 and EP-3 fatigue life. We are monitoring this situation closely and factoring any impact into our decisions regarding the required timeline for replacing these aircraft.

FORCE STRUCTURE REDUCTION

105. Senator COLLINS. Secretary England, the fiscal year 2003 proposed budget will reduce our force structure by 2 amphibious warfare ships, 1 combat logistics ship, 1 mine warfare ship, and 42 active aircraft. What impact do you anticipate that this force structure reduction will have on the Operations TEMPO (OPSTEMPO) and the Personnel TEMPO (PERSTEMPO) of our fleet?

Secretary ENGLAND. The proposed fiscal year 2003 budget will reduce the force structure by two amphibious warfare ships, one combat logistics ship, one mine warfare ship, and 42 active aircraft. This reduction in the number of ships and aircraft will have minor impact on Personnel TEMPO (PERSTEMPO) and Operations TEMPO (OPSTEMPO) for the remaining force. Planned and on-going operations are the primary drivers for PERSTEMPO and OPSTEMPO changes. The global war on terrorism is currently the primary worldwide operation causing increases in the PERSTEMPO and OPSTEMPO of Naval forces.

106. Senator COLLINS. Secretary England, further, what impact will these reductions have, specifically on our lift capability?

Secretary ENGLAND. The current active amphibious fleet exceeds the 2.5 MEB AE lift threshold in all areas except that of vehicle square—currently at 2.07 MEB AE. Vehicle square will be reduced to 2.01 MEB AE with the planned reductions in force structure.

107. Senator COLLINS. Secretary England, a former CNO has testified before this committee that the Marine Expeditionary Brigade (MEB) lift capability would not fall below 2.5 MEBs.

Will the proposed reductions in force structure take that MEB lift capability below 2.5?

Secretary ENGLAND. The current active amphibious fleet exceeds the 2.5 MEB AE lift threshold in all areas except that of vehicle square—currently at 2.07 MEB AE. Vehicle square will be reduced to 2.01 MEB AE with the planned reductions in force structure.

INVESTMENTS IN BATTLING TERRORISM

108. Senator COLLINS. Secretary White, given the high utilization of special forces in Operation Enduring Freedom, and based on the lessons that we have learned thus far in fighting this global war on terrorism, do you see the need to accelerate investments in monitoring and detection of chemical and biological agents, the protective gear for our service men and women?

Secretary WHITE. U.S. forces, including special forces operating in support of Enduring Freedom, are equipped with the finest chemical/biological (CB) defense equipment available. Research and development is ongoing within the President's budget to address outstanding need for lighter weight, hand-held, and stand-off detectors capable of providing real-time indications of the presence of CB agents, as well as specific type and concentration levels.

Early lessons learned from the war on terrorism indicate that special forces in particular require detection equipment with greater sensitivity and better interferent rejection than available in current systems. Investment in improved chemical defense equipment remains critical; however, investments in vaccines, biological agent detectors, and systems that combine biological and chemical detection require greater emphasis. The President's budget also funds research and development of new protective masks and garments. These are more durable and

logistically supportable across today's global battlefield and more suited to modern threats and threat environments. CB defense command, control, and communication equipment and technologies to safely decontaminate buildings, large areas, and sensitive equipment are being pursued. The Defense Department's ability to accelerate work and/or procurement in any of these mission areas could be dependent on a number of factors, such as availability of technology, adequate funding, or industrial base/manufacturing capability.

INVESTMENTS IN BATTLING TERRORISM

109. Senator COLLINS. Secretary White, what other areas of investments do you see as necessary to operate in the asymmetric environment?

Secretary WHITE. The Army continues to identify specific emerging requirements for homeland defense and the global war on terrorism, to include operations in asymmetric environments. Our analysis has taken on increasing importance and immediacy. It is already clear that we must continue to fund elements for enhanced force protection such as Weapons of Mass Destruction-Civil Support Teams for crisis response, equipment for installation physical security, as well as other anti-terrorism, physical security, and counter-terrorism programs. We need continued investment in improved information assurance and critical infrastructure protection programs. These programs also invest in securing the homeland, improve situational awareness, improve command and control, and increase our worldwide posture against terrorism.

MULTIYEAR PROCUREMENT

110. Senator COLLINS. Secretary White, in your advance questions, you address the issue of delays in the acquisition process and the impact of those delays on stability in acquisition programs. As you may know, this committee took the lead last year to authorize a follow-on DDG-51 shipbuilding multiyear procurement for the period fiscal year 2002 through fiscal year 2005 at the sustained rate of three ships per year. Could you comment on the benefits of utilizing multiyear procurement in mature programs, such as DDG-51, and the importance once a multiyear process has been initiated to sustain it for further requirements in order to continue to gain maximum cost efficiencies and other industrial base benefits that result from program stability?

Secretary WHITE. The Army has used multiyear procurements for several of our mature programs, such as the UH-60 Black Hawk and the AH-64 Longbow Apache helicopter programs. Multiyear contracting is important to the Army because it leverages our available procurement funds and provides the government significant cost savings over the best prices available by contracting in annual increments. Multiyear related cost avoidance provides funds that will be used to bolster other critical modernization efforts.

The multiyear process stabilizes the contractor workforce and provides increased incentives to contractors to improve productivity through investment in capital, facilities, equipment, and advanced technology. In addition, it provides a broader competitive base with opportunity for participation by firms not otherwise willing or able to compete for lesser quantities, particularly in cases involving high startup costs. Typically, suppliers will provide price discounts to lock in business. Given a 5-year contract, suppliers can develop innovative processes and justify capital investments necessary to reduce costs.

Multiyear contracts provide a stable environment in which the industrial base can grow stronger. As a result, the major and critical subcontractors are able to build components at, or near, commercial prices. Through multiyear contracting, it becomes affordable to qualify dual sources for critical lower-tier suppliers, increasing competition and reducing risk. The long-term commitment permits better planning for capital investments, and more efficient production of economic lot quantities. This helps the many small suppliers by allowing them to make cost-effective decisions on a longer-term basis.

QUESTIONS SUBMITTED BY SENATOR JIM BUNNING

ARMY TRANSFORMATION

111. Senator BUNNING. Secretary White, the Army has forcefully argued for the need for transformation. You are in the process of doing that now. How can you begin to make resource requests and procurement decisions about transformation

programs in the absence of an updated national security strategy and national military strategy that formally outlines the missions and tasks that your services will be responsible to resource?

Secretary WHITE. There is general consensus on the dangerous and complex nature of the evolving international security environment, and by implication, the types of missions the Nation will assign to its Armed Forces. This consensus is grounded on and confirmed by a variety of detailed analyses of the threats and challenges likely to require the decisive application of full-spectrum landpower, as part of a joint, interagency and multinational team.

The 2001 Joint Strategy Review, the 2001 Quadrennial Defense Review (QDR) and ongoing deliberations for the development of the new National Military Strategy all point to a complex strategic environment populated by a diverse set of hostile actors. These actors range from rogue states to violent transnational terrorists and criminal organizations—groups whose interests, values, capabilities, and methods will perpetually threaten the Nation's interests, as well as those of our friends and allies.

Further, the QDR is explicit in outlining the urgency for Transformation, including six critical operational goals. The QDR report supports the fielding of Interim Brigade Combat Teams and accelerating development of the Objective Force. DOD's commitment to Transformation necessitates prioritizing funding for both Objective Force research and development and Interim Force procurement—an essential step in our Transformation strategy. One need only look at the ongoing operations in the war on terrorism to understand the increasing and persistent demand for robust, decisive land forces.

While no planning document will encompass all the demands of an unpredictable and evolving environment, all underscore the requirement to transform to more responsive, deployable, agile, versatile, lethal, survivable, and sustainable land forces capable of dominating the full-spectrum of threats and challenges from peace to war.

ARMY TRANSFORMATION

112. Senator BUNNING. Secretary White, you are asking for a lot of money this year. What are you asking for that will help us do a better job fighting the war against terrorism?

Secretary WHITE. The budget we submitted is a balance of programs that will enable the Army to fight and win across the spectrum of conflict without undue risk at any point. In that context, the totality of the budget enables us to do a better job of fighting and winning this and future wars. But more to your point, we have placed a renewed emphasis on improving situational awareness, force protection, command and control, worldwide posture, and our ability for crisis response, which are reflected in this budget. An early result of our post-September 11 resource evaluations was to immediately adjust these Army programs in the budget.

113. Senator BUNNING. Secretary White, how much of your total budget request is that?

Secretary WHITE. We and the other Services are actively engaged with the Department of Defense in defining requirements for anti-terrorism that include force protection at home and abroad, as well as measures that directly support the warfight. The Department is compiling a separate budget exhibit to document the requirements, and it should be submitted shortly. Our portion of the fiscal year 2003 budget that directly supports the war on terrorism will be included in that exhibit. Our preliminary estimate for funding the war totals less than \$2 billion in preparation costs, plus the cost of deployment and mobilization operations.

114. Senator BUNNING. Secretary White, most of the talk about Army Transformation has focused on replacing heavy equipment such as tanks and infantry fighting vehicles. What role will lighter units such as the airborne and air assault divisions have in the Army's Transformation plan?

Secretary WHITE. The first phase of Transformation has been an interim step to fill a capabilities gap between our light and heavy forces. This is proceeding well, and the first interim capable task forces will be available to the Army within the next year. In addition to filling the capabilities gap, this interim transformation is designed to capture the lessons learned on processes to enable the Army to transform to the Objective Force. The Army is on an aggressive science and technology development schedule designed to bring this capability into the force as early as possible.

The U.S. Army Training and Doctrine Command is currently refining the conceptual basis for the Objective Force. In examining requirements for Airborne and Air Assault capability, we have validated that the need for forced entry capability and battlefield tactical mobility, in order to defeat enemy anti-access forces, will remain as core requirements. The exact composition of the force that will execute those missions is still under both doctrinal examination and subject to the results our science and technology program. The Army will keep Congress informed at the critical stages of doctrinal and force structure development as we transform to the Objective Force.

115. Senator BUNNING. Secretary White, how do you view your new role in the mission with homeland security?

Secretary WHITE. The Department's role in homeland security consists of three missions: homeland defense combat operations, such as the air sovereignty mission being flown by our fighter aircraft; emergency and temporary support to civilian authorities, such as augmentation of airport or border security; and emergency preparedness-preparation to respond in the event of a catastrophic event such as a terrorist use of a weapon of mass destruction.

116. Senator BUNNING. Secretary White, has this role disrupted your duties as Secretary of the Army?

Secretary WHITE. Due to the excellent support of my Special Assistant and his team in the Department of Defense's Homeland Security Office, my Army staff, and numerous OSD offices I have managed to balance effectively my expanded responsibilities. However, I look forward to seeing "homeland security" normalized under a permanent office in the Office of the Secretary of Defense.

117. Senator BUNNING. Secretary White, what do you see as your role once a homeland security command is formally established?

Secretary WHITE. I am the interim DOD Executive Agent for Homeland Security. On March 8, 2002, the Secretary of Defense signed a memorandum directing the Deputy Secretary of Defense to lead a transition effort to establish a staff, at the appropriate level within the Office of the Secretary of Defense that, when established, will assume homeland defense and civil support responsibilities. It is likely that the new OSD staff will be responsible for providing policy and oversight for the new Northern command. The future role of the Secretary of the Army in homeland defense and civil support has not yet been determined.

DESTRUCTION OF CHEMICAL WEAPONS

118. Senator BUNNING. Secretary White, given the increased threat of terrorism, is the Army doing anything to speed up the destruction of chemical weapons?

Secretary WHITE. The Army is constantly evaluating various alternatives to safely accelerate the disposal schedule. Recently, the Army revised its approach at Aberdeen Proving Ground, Maryland, in a manner that promises to eliminate that bulk stockpile up to 3 years earlier than previously planned and is currently studying the feasibility of a similar effort at Newport, Indiana.

As other alternatives are developed and approved for other sites, they will be implemented.

119. Senator BUNNING. Secretary White, the 2002 Defense Appropriations bill requires a report from the Army on how it plans to speed up destruction of chemical weapons. That report is due to Congress next month. Last month the Army announced that, at least at Aberdeen, it was speeding up its destruction of mustard gas. The chemical weapons destruction program is years behind schedule and billions of dollars over budget. When are we going to get these dangerous weapons disposed of?

Secretary WHITE. The Army is also studying the feasibility of accelerating disposal of the bulk VX nerve agent stockpile at Newport, Indiana. You may be assured that the Army is working with its contractors, responsible government agencies, and all stakeholders to identify, approve, and implement technically sound, safe, and environmentally compliant solutions to accelerating stockpile destruction.

The currently approved schedule reflects completion of disposal operations at six chemical stockpile sites between 2007 and 2011. Schedules for the Pueblo, Colorado and Blue Grass, Kentucky sites will be provided once the technology decisions for these sites are made. As additional measures are developed and approved, the disposal schedule will be revised accordingly.

SHIPBUILDING

120. Senator BUNNING. Secretary England, we have all seen the utility of forward deployed naval forces during the conflict in Afghanistan. We also know how thinly stretched all of our military forces were, even before September 11. It requires building eight to ten ships per year to maintain our fleet at its current size. We have not been doing that, so our fleet has been steadily shrinking. In this year's budget, we are only building five ships. Same with next year. According to the current budget plan, we are supposed to build seven ships in 2005 and 2006, and then, finally jump to ten ships in 2007. You are asking for a lot of money, but not increasing the number of ships we are buying.

Why not?

Secretary ENGLAND. The request for five ships in fiscal year 2003 and 34 ships across the FYDP provides the best balance between the Department's competing requirements and available resources. Priority is given to stabilizing the force (to include people) and with that done, our attention may then be focused on building the number of ships we need to sustain the battle force. While the Department recognizes that the build rate of five ships in fiscal year 2003 and approximately 7 ships per year across the FYDP is insufficient to sustain the current fleet size over the long term, we are making substantial investments now in programs such as CVN(X), DD(X) family of ships, and SSBN conversions to cruise missile carrying submarines (SSGN) providing enhanced combat capabilities to the transformed Naval Forces of the future.

121. Senator BUNNING. Secretary England, how can we be sure that we will actually get to ten ships in 2007 and it won't slip to another year or even farther out?

Secretary ENGLAND. The most significant way to ensure that we can afford the number of ships we need to sustain the force is to control the costs of our existing programs and ensure that the budget requests for future programs are adequately resourced for the risks presented in a low rate procurement shipbuilding environment. To prevent further increases to the cost of the Navy's future shipbuilding needs and mitigate the impact of the various cost drivers, the Navy is pursuing the following corrective actions:

- Remedy the systemic issues within our control and incentivize industry partners to do the same.
- Ensure that estimating and budgetary processes more closely reflect the cost of risk factors beyond our control.

MARINE CORPS NEEDS

122. Senator BUNNING. Secretary England, given that last year's restructuring of the DD 21 program into the DD(X) program pushed the first scheduled ship back another year, what are your plans to meet the Marine Corps' fire support needs in the near term?

Secretary ENGLAND. The Navy, in coordination with the Department of Defense, restructured the DD 21 program to the DD(X) program on 13 November 2001 as part of a new future surface combatant integrated strategy. This approach will better manage the risk of technology maturation and provide transformational capability to a family of surface combatants including the DD(X), a future cruiser and a littoral combatant. In the newly restructured DD(X) program, ship construction of the first ship remains on track for a fiscal year 2005 start and fiscal year 2011 delivery.

Our near term initiatives to meet Naval Surface Fire Support (NSFS) requirements include improving existing 5" guns, developing an Extended Range Guided Munition (ERGM), introduction of the Tactical Tomahawk (TACTOM) cruise missile, and integration of C⁴I systems to support NSFS. The current 5" 54 gun, used to fire conventional ammunition to 13nm, has been improved to accommodate higher energies associated with the Extended Range Guided Munition (ERGM). The improved gun will achieve Initial Operational Capability (IOC) in fiscal year 2003 for conventional munitions and fiscal year 2005 for the ERGM. The Extended Range Guided Munition will achieve IOC in fiscal year 2005 and has an objective range requirement of 63nm. Surface Fire Support to ground combat operations takes a significant step forward with introduction of the ERGM with its accuracy and range. The Marine Corps' long-term requirement to engage targets to 222nm can be met in the near term with the introduction of Tactical Tomahawk. TACTOM's loiter and enroute re-targeting capabilities provide support over extensive maneuver areas. Naval Fires Control System (NFCS) is being installed on DDG 81 and following. NFCS reduces NSFS team composition from 13 to 5 and provides command and con-

trol for long-range naval fires. Extended range projectiles and TACTOM, coupled with Navy/USMC existing TACAIR capabilities, provide near term fire support.

VIEQUES

123. Senator BUNNING. Secretary England, yes or no, will you authorize live fire training on Vieques if the CNO and Commandant of the Marine Corps request it?

Secretary ENGLAND. If I was asked by the CNO and Commandant to authorize live fire training in Vieques I would consider the request, but the answer is not a simple yes/no. There are other issues/factors that need to be considered, such as the extent of statutory and regulatory environmental compliance that may be required, required agency notifications, and the impact on security forces. All of these issues must be weighed and addressed in determining how to make the most of available resources in support of training that will ensure the readiness of our forces to deploy and meet the real world challenges.

AC-130 GUNSHIPS

124. Senator BUNNING. Secretary Roche, is it correct that all of our AC-130 gunships are over in Afghanistan right now and there are none left back here for training?

Secretary ROCHE. No, that is not correct. The Air Force has a total inventory of 21 AC-130 gunships: 13 AC-130U belonging to the 4th Special Operations Squadron, and 8 AC-130H belonging to the 16th Special Operations Squadron. Both of these squadrons are assigned to the 16th Special Operations Wing, Hurlburt Field, FL. Of the 21, no more than 9 were deployed at one time to Operation Enduring Freedom. There are 2 AC-130U and 1 AC-130H designated for training.

AC-130 PURCHASES

125. Senator BUNNING. Secretary Roche, do you plan to buy more AC-130 gunships?

Secretary ROCHE. Yes I do. Program Decision Memorandum (PDM) IV provides funds to convert four C-130H2 to the AC-130U configuration, O&M, and personnel. Two of the gunships will be funded from "cost of war" monies. Because the only C-130H2 aircraft available belong to the Air Force Reserve Command and Air National Guard the PDM funds C-130J aircraft to replace the four aircraft taken for conversion. This is a wise decision because developing an AC-130J would take much longer and cost considerably more in RDT&E, and require a new logistics trail that would also have to be developed at considerable expense.

NATO AWACS

126. Senator BUNNING. Secretary Roche, there are currently NATO AWACS aircraft flying over this country to assist in our homeland defense, while ours are prosecuting the war against terrorism. If another war came up right now, would we have enough of these types of aircraft?

Secretary ROCHE. If the United States were confronted with another war or contingency, we would have to reprioritize the existing missions performed by our fleet of AWACS aircraft. Depending on where we are confronted with a conflict, the requirement for airborne surveillance and command and control could be filled by the most appropriate air or ground based system.

AWACS PURCHASES

127. Senator BUNNING. Secretary Roche, if not, do you plan to buy more AWACS aircraft?

Secretary ROCHE. We do not have any plans to procure any additional legacy systems. The current fleet of AWACS aircraft is slated for continued upgrades to its surveillance and battle management capabilities until replaced by a future Multi-Sensor Command and Control Constellation. This will allow us to take advantage of air and space transformational technologies to meet emerging threats and future requirements.

HIGH DEMAND, LOW DENSITY

128. Senator BUNNING. Secretary Roche, what other high demand, low-density items do you plan to address in this year's budget?

Secretary ROCHE. The Air Force has requested almost \$400 million for Special Operations/Combat Search & Rescue Operations, MILCON, and Aircraft modifications for the HH-60, HC-130, and C-130.

LEASE NEGOTIATION

129. Senator BUNNING. Secretary Roche, why were the authorizing committees not consulted when you secured permission from the Appropriations Committees to negotiate a lease for 767 tanker aircraft from Boeing?

Secretary ROCHE. After the events of September 11, both Appropriations Committees asked the AF what programs could be accelerated. Tanker re-capitalization was one such program that we evaluated. Members of the House and Senate asked the USAF to provide informational briefings on this re-capitalization option. The briefings were based on the notional lease proposal from Boeing. SAF/AQ provided it to Members and professional staffers on the SAC, SASC, HAC, and HASC during the months of October through December 2001. SAF/AQ also briefed the OSD staff, CBO, and OMB.

[Whereupon, at 1:00 p.m., the committee adjourned.]

**DEPARTMENT OF DEFENSE AUTHORIZATION
FOR APPROPRIATIONS FOR FISCAL YEAR
2003**

THURSDAY, FEBRUARY 14, 2002

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

RESULTS OF THE NUCLEAR POSTURE REVIEW

The committee met, pursuant to notice, at 9:34 a.m., room SH-216, Hart Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Landrieu, Reed, Akaka, E. Benjamin Nelson, Bingaman, Warner, Inhofe, Allard, and Sessions.

Committee staff members present: David S. Lyles, staff director; Cindy Pearson, assistant chief clerk and security manager; and Gabriella Eisen, nominations clerk.

Majority staff members present: Madelyn R. Creedon, counsel; Richard D. DeBobes, counsel; Richard W. Fieldhouse, professional staff member; and Peter K. Levine, general counsel.

Minority staff members present: Judith A. Ansley, Republican staff director; L. David Cherington, minority counsel; Edward H. Edens IV, professional staff member; Brian R. Green, professional staff member; Mary Alice A. Hayward, professional staff member; and George W. Lauffer, professional staff member.

Staff assistants present: Dara R. Alpert, Daniel K. Goldsmith, and Thomas C. Moore.

Committee members' assistants present: Erik Raven, assistant to Senator Byrd; Frederick M. Downey, assistant to Senator Lieberman; Marshall A. Hevron and Jeffrey S. Wiener, assistants to Senator Landrieu; Davelyn Noelani Kalipi, assistant to Senator Akaka; Peter A. Contostavlos, assistant to Senator Bill Nelson; Eric Pierce, assistant to Senator Ben Nelson; Benjamin L. Cassidy, assistant to Senator Warner; J. Mark Powers and John A. Bonsell, assistants to Senator Inhofe; George M. Bernier III, assistant to Senator Santorum; Robert Alan McCurry, assistant to Senator Roberts; Douglas Flanders, assistant to Senator Allard; James P. Dohoney, Jr., assistant to Senator Hutchinson; Arch Galloway II, assistant to Senator Sessions; Kristine Fauser, assistant to Senator Collins; and Derek Maurer, assistant to Senator Bunning.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody. The committee meets this morning to receive testimony on the results of the congressionally-mandated 2001 Nuclear Posture Review (NPR). We have the Under Secretary of Defense for Policy, Douglas Feith; the Administrator of the National Nuclear Security Administration, General John Gordon, USAF (Ret.); and the Commander in Chief of the United States Strategic Command, Admiral James Ellis, USN. We welcome all three of our witnesses.

After the Cold War, the United States forged a new relationship with Russia, including the first strategic arms control agreement, the 1991 START I Treaty, a treaty that significantly reduced U.S. and Russian nuclear forces. At Helsinki in 1997, President Clinton and Russian President Boris Yeltsin pledged that following the entry into force of START II, with its additional reductions, our two nations would work towards a START III agreement, with a deep reduction in the number of nuclear warheads to between 2,000 and 2,500 by the end of 2007. Presidents Clinton and Yeltsin specifically said that "START III will be the first strategic arms control agreement to include measures relating to the transparency of strategic nuclear warhead inventories and the destruction of strategic nuclear warheads."

President George W. Bush pledged to seize the historic opportunity afforded by our new relationship with Russia. Declaring that Russia is "no longer our enemy," then Governor Bush stated in a May 23, 2000, speech that "it should be possible to reduce the number of American nuclear weapons significantly further than what has already been agreed to under START II."

Secretary of Defense Donald Rumsfeld said in a speech at the National Defense University just 2 weeks ago that "through our Nuclear Posture Review, we adopted a new approach to strategic deterrence that increases our security while," in his words, "reducing the numbers of strategic nuclear weapons."

But the recommendations of the Nuclear Posture Review may not, in fact, reduce the actual number of nuclear warheads in the U.S. arsenal because instead of destroying warheads, as Presidents Clinton and Yeltsin envisioned under a START III agreement, the Nuclear Posture Review proposes to shift some or all of the warheads removed from missiles, bombers, and submarines to a responsive force, in other words, a back-up force. Instead of being irreversibly destroyed, those warheads could be redeployed in a matter of weeks or months.

The Nuclear Posture Review proposes simply to move those warheads from one location to another. This approach will make it unlikely that Russia will destroy its nuclear warheads. If we store our nuclear weapons, Russia is likely to follow suit. If there are more warheads retained by Russia, the threat of proliferation of nuclear weapons will increase. That was the danger cited in last year's bipartisan task force led by former U.S. Senate Majority Leader Howard Baker and former White House Counsel Lloyd Cutler. Their task force concluded the following: "The most urgent unmet national security threat to the United States is the danger that weapons of mass destruction or weapons-usable material in Russia

could be stolen and sold to terrorists or hostile nation-states and used against American troops abroad or citizens at home.”

By failing to destroy nuclear warheads, the Nuclear Posture Review would increase the threat of proliferation at the very time when the al Qaeda terrorist network is known to be pursuing nuclear weapons. In addition to compounding the proliferation threat, this new approach to nuclear weapons appears to compound the military threat to our Nation. One of the significant achievements of START II was that it would have eliminated Russia’s land-based multiwarhead (MIRVed) missiles. By essentially abandoning efforts to bring START II into force, the administration leaves open the possibility that Russia may retain these missiles that it was prepared just recently to destroy.

Secretary Rumsfeld says that the new approach “increases our security.” My fear is that the opposite may be true, and that over time, America would be less secure with this approach.

Senator Allard.

Senator ALLARD. Thank you, Mr. Chairman. The ranking Republican member, Senator Warner, will be here later, so he has asked me to fill in for him until he arrives. I looked over his statement, and instead of simply putting it into the record, I would like to go ahead and read it on his behalf. I will put my statement in the record, Mr. Chairman.

I want to thank all of you for being here this morning. I think this is a very important hearing. We do want to hear from you, and on behalf of Senator Warner, I want to offer his welcome to the distinguished witnesses that we have here today.

The Nuclear Posture Review on which we will receive testimony today relates to the most destructive weapons ever devised by mankind. I applaud the chairman for focusing the committee’s attention on this important issue.

I think the NPR represents a breakthrough in how we think of our strategic forces and how we respond to strategic challenges, and we all look forward to hearing our witnesses describe the new strategy in more detail.

The Nuclear Posture Review, which was required by this committee in the Fiscal Year 2001 National Defense Authorization Act and forwarded by the Department of Defense to Congress early last month, is an extraordinarily timely document. The last such review was completed in 1994, in the early years of a previous administration. At that time, the world was a vastly different place. The mutual hostility between the Soviet Union and the United States that had characterized the Cold War and had shaped our thinking about nuclear forces as strategic deterrents had faded, but not vanished. We were still trying to understand the implications of the fall of the Soviet Union and the emergence of new threats.

Today, our relationship with Russia has dramatically improved. Presidents Bush and Putin continue to work on a new strategic framework based on common responsibilities and common interests. But new challenges continue to emerge. More nations now have nuclear weapons, still more seek nuclear, biological, and chemical capabilities, and the means to deliver these powerful weapons. More nations now possess ballistic missiles, and still more seek such capabilities. Proliferation of these weapons of mass

destruction and associated delivery systems is one of the greatest threats to our national security and indeed to global security.

The Nuclear Posture Review provides an innovative way to address these new security challenges by proposing dramatic reductions in deployed nuclear weapons combined with a new triad, which includes defensive systems and a robust infrastructure. The NPR provides our Nation a much more complete set of tools to deal with the wide range of threats and contingencies we will face in the future. Indeed, new defenses, precision conventional munition capabilities, and improved intelligence will help improve our picture of threats beyond those considered strategic. These improved capabilities, combined with our improved relationship with Russia, will allow us to move forward with dramatic reductions in nuclear weapons.

I believe that this document represents a fundamental, some might even say radical, departure from how we thought about strategic forces in the past and how we should respond to strategic challenges in the future. As was noted earlier, this Nuclear Posture Review relates to the most powerful weapons on the face of the Earth. We in Congress are obligated to carefully study the issues raised in this review. This hearing is the beginning of a debate and a forum in which we can gain a clearer understanding of the policy and programmatic implications embodied in the Nuclear Posture Review.

In May of last year, President Bush laid out his vision of the future. Cold War deterrence is no longer enough to maintain peace. To protect our citizens, allies, and friends, we must seek security based on more than the grim premise that we can destroy those who seek to destroy us. This is an important opportunity to rethink the unthinkable and find new ways to keep the peace.

Clearly, Cold War deterrence is no longer enough in this new, less certain world. As we debate our nuclear posture and nuclear security needs in the months and years ahead, we must be forward-thinking. This review is a welcome step in the right direction, and we all look forward to hearing your testimony. Thank you, Mr. Chairman.

[The prepared statement of Senator Allard follows:]

PREPARED STATEMENT BY SENATOR WAYNE ALLARD

Mr. Chairman and Senator Warner, thank you for holding this important hearing on the Nuclear Posture Review.

I truly believe that this document is a step forward to show that the United States is committed to reducing our nuclear arsenal. I do not believe there will be any debate about whether we should reduce our nuclear arsenal, but whether this is the right approach to doing that. I believe it is.

I agree with many here today that this is far different from the classic arms-control approach. However, we are in a different arms-control environment.

While negotiating START III, the Clinton administration and Russia agreed on a framework in 1997 that stated that the two countries would work towards the irreversibility of weapons reductions. However, there were no definitive decisions regarding dismantlement, plus START III was never finished. Today, we have new leadership in Russia and in the United States. Our relationship also no longer reflects 50 years of conflict, but more than a decade of efforts aimed at cooperation.

Presidents Bush and Putin have pledged themselves toward a new cooperative framework. This new framework can help to strengthen U.S.-Russian relations even further. It will show that the United States and Russia can make national security decisions based on trust, not on the mistrust that treaties can imply.

I also believe that this new framework can show the world that the United States is moving away from a specified threat environment to a new capabilities-based approach that allows the United States flexibility to address new threats and contingencies as they arise. This new framework also moves the United States away from an offensive triad based on mutually-assured destruction to a more stable triad based on offensive and defensive capabilities.

To conclude, I want to thank the witnesses for joining us here today. I look forward to hearing their comments and appreciate their willingness to take questions.

Chairman LEVIN. Thank you. Do any of our colleagues have opening statements?

Senator Reed.

Senator REED. Thank you very much, Mr. Chairman. I want to welcome the witnesses. We all recognize that there are new strategic realities, and the question is whether this Nuclear Posture Review adequately reflects those realities. This will be the beginning of several discussions about the Nuclear Posture Review and our policy going forward. Another way to express this is to question whether or not we are simply rearranging the furniture with this Nuclear Posture Review, or have we taken a new look and come up with a strategy which fits this new reality.

The test of the Nuclear Posture Review is not simply what's contained within the pages of the report, but whether those pages translate into the budget, not just this year, but going forward through the next several years, and whether it complements the diplomatic initiatives which the President has announced, which would mean significant reductions in nuclear warheads. This is something that seems to be on the minds of the Russians as well. We had 8,000 warheads going into the Nuclear Posture Review, and we still have 8,000 warheads after it. They are just in different categories.

So I think as we go forward, we have to again question whether or not this is really a new look at a new strategic situation, whether this report will affect budgets in a meaningful way, and not just the high profile items, but the mundane items like the status of our laboratories, the status of our efforts to ensure the safety and security of the stockpile, and also to complement the expressed desire by President Bush and by others to reduce significantly our reliance upon nuclear weapons. That dialogue will go over many days. I thank the Chairman.

Chairman LEVIN. Thank you very much.

Senator Akaka has an opening statement. We will then hear from Senator Sessions followed by Senator Ben Nelson.

Senator AKAKA. Thank you very much, Mr. Chairman. I want to add my welcome to the witnesses this morning. The future of our nuclear forces is one of the most important subjects before this committee. There are two critical points that need to be emphasized and then re-emphasized about the administration's Nuclear Posture Review. First, no substantial reductions in nuclear weapons are being proposed in this review.

Second, it is not clear why we insist on maintaining such large stockpiles of available weapons given the threat against which our military is prepared to defend us.

To begin with the number of nuclear weapons, the administration sets up two categories of nuclear warheads. The first category is for 1,700 to 2,200 nuclear warheads that will be operationally de-

ployed by 2012. By operationally deployed, does the administration mean warheads actually mounted on platforms? I hope that can be clarified today.

The administration sets up a second category of warheads that is part of a responsive capability. These weapons, as Secretary Crouch stated in his press briefing on January 9, 2002, would be maintained with their critical components. It appears as if the only difference between operationally-deployed warheads and responsive warheads is that the responsive warheads would not be mounted on platforms. This is a distinction without much of a difference. The number of warheads in this responsive capability might number in the thousands according to present estimates, with the total number between 3,500 and 4,000 warheads.

What would our Nuclear Posture Review have looked like before this if arms control agreements had entered into force? START II would have brought the number of warheads down to 3,500 by 2003.

Why do we need a substantial number of nuclear warheads when we are reducing our force structure to cope with only one major war at a time and restructuring our forces to deal with the new threat of global terrorism and homeland defense? The administration argues that we need to go back to the nuclear weapons reductions envisioned in the first Bush administration, and early in the Clinton administration, because we need to deal with multiple contingencies and new threats. It is unclear which new threat requires maintaining such a large stockpile of nuclear weapons.

For example, the Russians, who for so long were the justification for us maintaining a large retaliatory capability, are no longer our enemy, and they are reducing more substantially than we their nuclear weapons. The Chinese are building up their warhead inventory, but will still be far below the thousands that we have. I hope, Mr. Chairman, the administration will clarify these issues in today's hearing.

Our Nation's resources are being strained as we work to improve homeland security, fight the war against terrorism, and maintain programs which ensure our country's continued economic prosperity. The burden is on the administration to justify maintaining a large and costly nuclear weapons arsenal, an arsenal which is not commensurate with the threats our military faces and the mission they are designed to perform. Thank you very much, Mr. Chairman.

Chairman LEVIN. Senator Sessions, then Senator Ben Nelson.

Senator SESSIONS. Thank you, Mr. Chairman. It is an interesting and important issue that we are dealing with here today. The United States remains the world's preeminent military power, and I hope that we will be able to maintain that. All of us would like to see reductions in our nuclear weaponry, and it will be accomplished under the President's plan. But I think we have to realize that we are not testing nuclear weapons now. We have no manufacturing capability in this country to make new nuclear weapons, whereas other countries in the world do. To freeze ourselves into a situation in which we could, by such low numbers, encourage other nations to believe they can reach parity with us in nuclear weaponry would be a mistake. I think we ought not to agree to lim-

its that would provide a goal for competitors around the world who believe they could reach it and therefore be at parity with the United States, militarily.

I am concerned that if we totally destroy these weapons instead of just decommissioning them, we could end up in a situation without a manufacturing capability; a situation in which we could not properly defend ourselves and would not have a clear superiority that deters war. We have that, we are able to maintain that, and why we would give it away unilaterally I do not know. So my questions will deal with the subject of whether or not we are sure that we are not going too fast and if we are sure that we have a long-term vision to maintain superiority for the United States. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Sessions.

Senator Nelson.

Senator BEN NELSON. Thank you, Mr. Chairman, and thank you all for being here today. General Gordon and Secretary Feith, we appreciate and are anxious to follow your statements, and it is good to welcome Admiral Ellis, fresh from Nebraska, back to our Nation's capital. I appreciated your kind treatment of my staff when they were there visiting STRATCOM headquarters and our office visit a week ago. I appreciate very much the opportunity to exchange ideas with you here today.

I have two comments I would like to make. One is about the new direction that we are concerned about, about whether or not the NPR is a step in the right direction. My colleague, Senator Sessions, questions whether we should go to the next step of destruction of the weapons. Others feel that perhaps what we are doing is a step in the right direction, but maybe not a giant step because of the capacity to reactivate those weapons we are withdrawing from the active stockpile.

The concern I have about decommissioning and recommissioning, is that as I understand it the Russians have the capacity to recommission maybe three times faster than we do, and so the question is really whether we are achieving parity by that interim step, if it is an interim step. The second important concern I have is the nuclear club, other countries, those that are about to make nuclear weapons, those who have already done so, and the security of the stockpiles not in the United States, but in the former Soviet Union, and whether those can be secure enough, or whether that represents targets for other individuals.

I appreciate and look forward to your written comments as well as the oral testimony that I can hear today.

Chairman LEVIN. Senator Inhofe.

Senator INHOFE. I have observed a head-in-the-sand mentality for quite a long period of time now about where the threats are in the world, and as we proceed today, I am primarily talking about Russia and the United States, and yet my concern has always been not so much Russia, but these countries that are trading technologies and systems with countries like China, Russia, and North Korea. The threat is there, and I hope that during your opening statements you might address the fact that as recently as August 1998 when we asked General Shelton, as I did in a letter, to give us in writing when he felt that North Korea could be a threat to

the United States in terms of their ability to reach us with a long-range ballistic missile. His response was dated August 24, 1998, and it said that our best intelligence says that we have adequate time, that is 3 years or so, to prepare for the time when they would have a system. Seven days later they fired a multistage rocket from North Korea.

It is disturbing to me when we have evidence that is not even classified suggesting that China, Russia, and North Korea are trading systems and technology with countries like Iran, Iraq, Syria, and Libya, and yet we seem to think we are safe in going back to the old Cold War mentality that has the U.S.S.R. versus us.

My concern is what is out there now, where these threats are, and with a little more accuracy than we can reveal in this meeting, just what we have in our nuclear stockpile and what they have. It is disturbing to me. I remember so well, I am sure you remember at the end of the Gulf War, Saddam Hussein said if we had just waited 10 years to go into Kuwait, we would not have come because Hussein would have had a missile that could reach the United States. Here it is 10 years later. Just keep that in mind as part of your thinking on this subject. Thank you, Mr. Chairman.

Chairman LEVIN. Senator Warner has just joined us.

Senator WARNER. Mr. Chairman, I had another matter to attend to. I thank my colleague here, Senator Allard, the former Chairman and now ranking member of the Strategic Subcommittee, for reading my statement. I listened very carefully to Mr. Nelson's observation about the difference in time between our ability to reconstitute our inventory in a significant way as compared with Russia. I am sure Admiral Ellis will give you a little clearer insight and another statistic as to the timing of that. I had a very extensive consultation with my old friend and colleague, Admiral Ellis, last night, and that was one of the subjects we covered. Thank you, Mr. Chairman. I welcome our witnesses this morning. General Gordon, we continue to get the best reports about your performance.

Chairman LEVIN. Thank you.

Secretary Feith.

STATEMENT OF HON. DOUGLAS J. FEITH, UNDER SECRETARY OF DEFENSE FOR POLICY

Secretary FEITH. Thank you, Mr. Chairman. Members of the committee, good morning. I would appreciate it if I could put my written statement in the record and start with a few brief remarks.

Chairman LEVIN. It will be made part of the record.

Secretary FEITH. The Nuclear Posture Review is an ambitious document. It aims to transform U.S. nuclear forces and our thinking about strategic forces policy. No thorough transformation of that kind has occurred since the end of the Cold War. As was noted, the last Nuclear Posture Review was completed in 1994, when the full significance of the demise of the Soviet Union couldn't be appreciated. In any event, the 1994 Nuclear Posture Review was done for the purpose of analyzing what our nuclear force posture would look like under START II.

When he took office, President George W. Bush wanted to ensure that in planning for the future of U.S. nuclear forces and policy, the Defense Department did a number of things. First, that we rec-

ognized the radical changes in the world that resulted from the West's victory in the Cold War—chief among them is the new relationship between the United States and Russia, and the potential for better relations between us in the future.

Second, that we abandon the morally and strategically unappealing theory of mutually-assured destruction, which we all know appropriately as MAD.

Third, that we give the United States missile defense options so that we have more tools in our strategic kit than simply the threat of offensive retaliation. If, for example, a nuclear weapon were launched accidentally against the United States, we would want to have a nonoffensive response option.

Fourth, that we take advantage of the opportunities to make drastic reductions in U.S. offensive nuclear force levels.

Fifth, that we give proper attention to the key strategic reality of our era, and I would say arguably the key reality of any era, which is uncertainty. I think this goes to the point that Senator Inhofe was making about the surprise of the 1998 launch by North Korea of the Taepo Dong missile. In performing the Nuclear Posture Review, the Defense Department operated with due respect for the unpredictability of the future and the role of error in human affairs. Accordingly, we assigned high priority to flexibility and adaptability.

The NPR contains serious new thinking. It was not produced on autopilot. It is a rich mix of creative ideas on how the United States can make the world safer and more secure, shape the strategic environment in Europe, in Asia, and globally, and ensure that the United States has the means to keep ourselves, our allies, our friends, and interests safe from the emerging or altogether new threats that may materialize in many coming decades. I am proud of the work that my colleagues have done on the NPR. I am pleased that the Senate Armed Services Committee is holding this hearing to spotlight this work and the strategic questions related to it.

Now, as all students of strategic policy know, the key image of our force posture in the past was a triad of land-, air-, and sea-based nuclear weapons. The organizing mental picture of our Nuclear Posture Review is what we call a new strategic triad. The new strategic triad envisions a nuclear posture that moves beyond mutually-assured destruction and reduces long-term U.S. dependence on nuclear weapons and purposeful vulnerability as the guarantor of our security. The new triad removes roadblocks to developing a cooperative strategic framework with Russia. If there is a headline for the Nuclear Posture Review, it is that the days of MAD are over, and unlamented. Instead, we plan to develop a new suite of capabilities that will first, assure our allies of our commitment to global peace and the steadfastness of that commitment; second, dissuade potential adversaries from contemplating military competition with the civilized world; third, deter aggressors; and fourth, defeat aggression when and where we have to while defending the United States, our friends, and allies. Offensive nuclear weapons remain a component of our new triad but they cannot themselves achieve all four of our national security goals. We have to develop new capabilities, new legs of the new triad.

First, we plan to develop a non-nuclear strategic strike capability to give future presidents more options for responding to aggression than simply pushing the button. The success we have enjoyed with precision guided munitions over the last decade will give us a head start in developing these capabilities.

Second, we plan to develop and deploy missile defenses. Our investment in homeland security and the ability to defeat unconventional attacks is an important element of this. Fortunately, we already possess such defensive capabilities and are improving them every day, but missile defense is another issue. To this date, ballistic missiles remain the only means of attacking the United States, our friends, and our allies against which we have no effective defense. Deploying such defenses is essential to the defensive leg of our new triad and will help reduce a serious vulnerability.

Third, we plan to develop a responsive infrastructure. For too long, the United States has let atrophy its ability to develop new military capabilities that respond to changes in the world. It is difficult to change the Cold War force structure that we inherited, and why is this? Because we lack the physical plant and trained personnel necessary to develop and produce replacements that are more flexible or otherwise better suited to today's world. We want to invest in defense infrastructure, to transform our military for the 21st century.

Finally, we plan to integrate the legs of the triad through improved command and control, what we call exquisite intelligence and adaptive planning. During the Cold War, the United States poured immense resources and much time into planning for war with the Soviet Union. So revisions in the plans could take months, a year, or longer.

Instead of the ponderous and detailed product we prepared during the Cold War, we intend to develop the capability and flexibility to quickly identify the strengths and weaknesses of multiple enemies that might emerge suddenly. Thus, with the exception of nuclear strike, all of the concepts of the new triad are, in fact, new. Strategic defense, responsive infrastructure, non-nuclear strike, global command and control, exquisite intelligence, and adaptive planning are all capabilities to transform our strategic forces. For this reason, the review marks the beginning of a process, not the end.

We will start with forces we currently have on hand and improve them as we develop a range of new capabilities. Because the Cold War is over, we no longer need to size our deployed nuclear forces against the threat posed by Russia and therefore we won't. For the first time in our history, U.S. nuclear forces will not be deployed for the purpose of waging a thermonuclear war against Moscow. The President decided that the United States would take the initiative and begin reducing its operationally deployed strategic nuclear forces over the next decade.

Based on the NPR's analysis, the President announced his decision to begin removing around two-thirds of U.S. nuclear weapons from operational deployment. We will begin making cuts now that some commentators argued we should do only in the future, after extensive formal negotiations with the Russians.

Finally, Mr. Chairman, some have referred to the reductions we are making in the Nuclear Posture Review as an accounting sleight of hand. But, I think there is great importance in the distinction between warheads deployed on delivery vehicles ready for launch within minutes or hours and warheads that are not available for use immediately or in the near term.

Arms control agreements in the past, such as SALT I, SALT II, the IMF Treaty, START I, and START II, all of which were widely praised for reducing nuclear force levels, and all of them dealt not with the destruction of warheads, but rather delivery vehicles. So the notion that the failure to destroy warheads means that one does not have the right to say one is reducing nuclear force levels is a brand-new notion that was never applied over the decades of the Cold War when arms control agreements were praised, notwithstanding their complete failure to address the question of destruction of warheads.

On the issue of irreversibility of force reductions, I think it is important that we recognize that as a practical matter, there is no such thing as irreversibility. I mean, chasing it would be chasing a will of the wisp.

Any reductions, even if they entail the destruction of warheads, are reversible. A state that destroys warheads could manufacture new warheads. There is no such thing as irreversibility. The issue of reversibility is a matter of time and money, and in that regard, it is worth pointing out that the United States and Russia stand on completely different footings with regard to their ability to manufacture new nuclear weapons. Russia has a large infrastructure. They have a warm production base capable of producing large numbers of new nuclear weapons annually.

The United States has not produced a new nuclear weapon in a decade. It will take nearly a decade and a large investment of money before we would be in a position to produce a new nuclear warhead. So the issue of storing our weapons, of whether we choose to build up a large infrastructure that would put us in a position to create new nuclear weapons if circumstances in the world changed and warranted it, versus taking weapons and rendering them unavailable for use in the near term by putting them in storage, is an issue that I believe needs to be examined in light of this important difference between the capability that the United States has in its ability to produce new nuclear weapons and the capabilities of other nations.

In short, it is highly significant for the United States to reduce its offensive nuclear forces by rendering large numbers, two-thirds of our weapons, unavailable for use immediately or in the near term. I trust this committee will see the big picture. We are closing the history books on the Cold War balance of terror. We are reducing our dependence on nuclear weapons and replacing mutually-assured destruction with a strategic triad more suited to the security requirements of this century. We are cutting our deployed nuclear forces by roughly two-thirds and developing a new qualitative approach to arms control based on transparency and confidence building measures.

We are indeed transforming our strategic posture, and the Nuclear Posture Review tells us where we need to go. We hope that

Congress will join us in boldly stepping forward into the post-Cold War strategic environment by fully funding the programs envisioned in the Nuclear Posture Review. Thank you, Mr. Chairman. [The prepared statement of Secretary Feith follows:]

PREPARED STATEMENT BY HON. DOUGLAS J. FEITH

INTRODUCTION

The National Defense Authorization Act for Fiscal Year 2001 required the Secretary of Defense, in consultation with the Secretary of Energy, to conduct a comprehensive review of U.S. nuclear forces and to develop a long-range plan for the sustainment and modernization of United States strategic nuclear forces. The Nuclear Posture Review (NPR) constitutes the Department of Defense's response to this requirement.

We submitted the NPR to Congress on January 8, 2002. It is the first comprehensive review of nuclear forces since 1994, when the first Nuclear Posture Review was completed. The primary purpose of the 1994 review was to determine the strategic nuclear force structure to be deployed under the second Strategic Arms Reduction Treaty (START II).

The current review of the U.S. nuclear posture differs from the 1994 review. The 1994 review assumed that the central strategic U.S. concern was managing a potentially hostile relationship between the two largest nuclear powers. The current review recognizes that the United States and Russia have a new relationship, and that the proliferation of nuclear weapons and ballistic missiles has created new challenges for deterrence. It defines the capabilities required of nuclear forces in the new strategic environment and in relation to other U.S. defense capabilities. Most especially, it recognizes that Russia, unlike the Soviet Union, is not an enemy. There is ground for mutual cooperation, and the United States is seeking to move beyond the outdated Cold War nuclear confrontation to develop a new strategic framework with Russia.

A NEW ERA

The basic features of the Cold War shaped our approach to security, including the role and size of our nuclear forces and deterrence policies. Our current nuclear triad of ICBMs, bombers, and ballistic missile submarines, and the ways we have pursued deterrence and arms control negotiations, reflect the conditions of Cold War. The new features of the international system, particularly the types of threats we face, are dramatically different. Consequently, President Bush charged the Department of Defense with transforming our approach to defense, including nuclear weapons and missile defenses, to meet the new challenges of the post-Cold War era. During the Cold War we faced a single, ideologically hostile nuclear superpower. We prepared for a relatively limited number of very threatening conflicts with the Soviet Union. Much of the world was part of two competing alliances and the stakes involved in this competition amounted to survival for both sides. We must never lose sight of just how dangerous the situation was.

There was, however, considerable continuity and predictability in this competition of two global alliance systems. For decades, U.S. nuclear forces were organized and sized primarily to deter the Soviet Union, and there were few sharp turns in U.S.-Soviet relations. Based on the continuities of the international system at the time, the successful functioning of nuclear deterrence came to be viewed as predictable, ensured by a sturdy "balance of terror." Many argued that defenses which might lessen that terror by offering protection against Soviet nuclear attack would instead undermine the predictable "stability" of the balance of terror.

The Cold War system of two competing blocs has been replaced by a new system, one with a broad spectrum of potential opponents and threatening contingencies. The continuities of the past U.S.-Soviet relationship have been replaced by the unpredictability of potential opponents who are motivated by goals and values we often do not share nor well understand, and who move in directions we may not anticipate. We no longer confront the severe but relatively predictable threats of the Cold War; instead we have entered an era of uncertainty and surprise. As the attacks of September 11th demonstrated, we must now expect the unexpected. What we can predict today is that we will face unanticipated challenges, a range of opponents—some familiar, some not—with varying goals and military capabilities, and a spectrum of potential contingencies involving very different stakes for the United States and its foes. These conditions do not permit confident predictions about the specific threats against which we must prepare or the "stability" of deterrence.

Of particular concern in this era of uncertainty is the emergence of hostile, regional powers armed with missiles and nuclear, biological, or chemical weapons of mass destruction. When the United States failed to deter or promptly defeat a challenge in the past, two great oceans generally provided protection to American civil life. Nuclear, biological, and chemical weapons technologies, however, increasingly are in the hands of brutal leaders who have few institutional or moral constraints and are motivated by an extreme hatred of the United States and the personal freedoms and liberties we hold dear. This emerging feature of the international landscape has rendered the failure to deter or promptly defeat a threat much more dangerous for all Americans. We can no longer take comfort in the belief that the conflict will be “over there,” or that opponents will be deterred in predictable ways. As was illustrated by September 11, we now confront enemies who are eager to inflict mass destruction on innocent civilians here and abroad, without regard for the possible cost.

TRANSFORMING DEFENSE

What are the implications of these changes in the international system for how we think about security? Most basically, we must transform our forces and planning to meet the dramatically different conditions of the new security environment. Rather than focusing on a single peer opponent, and preparing for a few threatening contingencies, we now need the flexibility to tailor military capabilities to a wide spectrum of contingencies, to address the unexpected, and to prepare for the uncertainties of deterrence. We can no longer approach our military requirements by conveniently defining one or a few countries as the specified “threat,” and then sizing our military capabilities against that defined threat. U.S. planning can no longer be so “threat-based” because, in an era of uncertainty, the precise source of “the threat” is unpredictable.

Our defense preparations must now focus on, and be responsive to, a wide spectrum of potential opponents, contingencies, and threatening capabilities, some of which will be surprising. A capabilities-based approach to defense planning will look more at the broad range of capabilities and contingencies that the United States may confront in the future, as opposed to planning against a fixed set of opponents identified as the threat.

Nuclear weapons will continue to be essential, particularly for assuring allies and friends of U.S. security commitments, dissuading arms competition, deterring hostile leaders who are willing to accept great risk and cost to further their evil ends, and for holding at risk highly threatening targets that cannot be addressed by other means.

Instead of our past, primary reliance on nuclear forces for deterrence, we will need a broad array of nuclear, non-nuclear, and defensive capabilities for an era of uncertainty and surprise. The United States will transform its strategic planning from an approach that has been based almost exclusively on offensive nuclear weapons, to one that also includes a range of non-nuclear and defensive capabilities. In particular, because deterrence will function less predictably in the future, the United States will need options to defend itself, its allies, and friends against attacks that cannot be deterred.

A NEW TRIAD FOR A NEW ERA

The current nuclear triad is a legacy of the Cold War. It is exclusively nuclear and offensive. As part of the defense transformation, we will move to a new triad. The new triad comprises a more diverse set of nuclear and non-nuclear, offensive and defensive capabilities. These capabilities encompass nuclear forces and non-nuclear strike means (including information warfare), passive and active defenses (notably missile defense), and the defense-industrial infrastructure needed to build and sustain the offensive and defensive elements of the new triad. Command, control, and intelligence systems are also critical to deterrence. They form an integral part of the new triad.

This new triad will provide the United States with the broad range of capabilities suitable for an era of uncertainty and a wide variety of potential opponents and contingencies. In some cases, where nuclear weapons may have been necessary for deterrence and defense in the past, the use of advanced non-nuclear strike capabilities or defensive systems may now be sufficient militarily, involve less risk for the U.S. and our allies, and be more credible to foes. In some cases, nuclear weapons may remain necessary to deter or defeat a particularly severe threat. The new triad will provide the spectrum of offensive and defensive military capabilities, and the flexibility in planning necessary to address the new range of contingencies, including the unexpected and the undeterrable.

The new triad differs in a number of important ways from the current triad. In addition to the difference in its overall composition, the strategic nuclear forces of the new triad are divided into two new categories: the operationally deployed force and the responsive force.

The operationally deployed force includes bomber and missile warheads that are available immediately or within a matter of days. These forces will be available to address immediate or unexpected contingencies. Thus, our stated nuclear forces will correspond to our actual nuclear deployments, which did not occur during the Cold War. By using such “truth in advertising,” we will no longer count “phantom warheads” that could be deployed, but are not. To address potential contingencies and more severe dangers that could emerge over a longer period of time, the responsive force augments the operationally deployed force, largely through the loading of additional warheads on bombers and ballistic missiles. Such a process would take weeks to years. The capability for force reconstitution provided by the responsive force allows significant reduction in the current number of operationally deployed nuclear warheads. This reduction can be achieved prudently and without the need for drawn out and difficult negotiations.

In addition, the new triad expressly serves multiple defense policy goals. Deterrence of nuclear or large-scale conventional aggression was viewed as the main objective of the Cold War triad. The deterrence of aggression, although still an essential aim, is just one of four defense policy goals for the new triad. The capabilities of the new triad, like other U.S. military forces, not only must deter coercion or attack, but also must assure allies and friends of U.S. security commitments, dissuade adversaries from competing militarily with the United States, and, if deterrence fails, decisively defeat an enemy while defending against its attacks on the United States, our friends, and our allies. Linking nuclear forces to multiple defense policy goals, and not simply to deterrence, recognizes that these forces, and the other parts of the new triad, perform key missions in peacetime as well as in crisis or conflict. How well the new triad serves these multiple goals—thereby enabling us to cope effectively with the uncertainty and unpredictability of the security environment—is the standard for judging its value.

The new triad offers several advantages in this regard. Its more varied portfolio of capabilities, for example, makes it a more flexible military instrument. This greater flexibility offers the President more options for deterring or defeating aggression. Within the new triad, nuclear forces will be integrated with, rather than treated in isolation from, other military capabilities. This creates opportunities for substituting non-nuclear strike capabilities for nuclear forces and defensive systems for offensive means. This does not blur the line between nuclear and non-nuclear weapons, but it will reduce the pressures to resort to nuclear weapons by giving U.S. Presidents non-nuclear options to ensure U.S. security.

The new triad reflects a capabilities-based approach to nuclear force planning and the type of defense transformation required in a new era. It deserves wide support. It gives the United States greater strategic flexibility needed in an era characterized by surprise. It provides the basis for shifting some of the strategic requirements for dissuading, deterring, and defeating aggression from nuclear forces to non-nuclear strike capabilities, defensive systems, and a responsive infrastructure. As we reduce our nuclear forces to bring them into line with the security environment, the new triad will mitigate the risks inherent in an increasingly fluid and dynamic security environment. Getting to the new triad will require us to sustain a smaller strategic nuclear force, reinvigorate our defense infrastructure, and develop new non-nuclear strike, command and control, intelligence, and planning capabilities so that we possess the ability to respond to the kinds of surprises the new security environment holds. By taking these steps, we will reduce our dependence on nuclear weapons and build a new triad that serves a broader range of American national security goals.

STRATEGIC NUCLEAR FORCES IN THE NEW TRIAD

The positive shift in the U.S. relationship with Russia is of great significance in considering today’s nuclear force requirements. Russia is not the Soviet Union, nor is it an enemy. We no longer have to focus our energies on preparing for a massive Soviet nuclear first strike. Rather, we now seek a new strategic framework with Russia to replace the Cold War’s balance of terror.

President Bush has announced his decision to reduce our operationally deployed strategic nuclear force to between 1,700 and 2,200 warheads over the next decade, a level informed by the analysis of the NPR. While roughly one-third the number of our currently operationally deployed warheads, this range is adequate to support our new defense policy goals, including the deterrence of immediate contingencies.

It also preserves the flexibility and capability for reconstitution necessary to adapt to any adverse changes in the new security environment.

These reductions, and other adjustments in our offensive and defensive capabilities, will be achieved outside the Cold War's adversarial and endless negotiating process that was centered on the balance of nuclear terror. Today, that competitive and legalistic process would be counterproductive. It would impede or derail the significant reductions both sides now want; it would lock both sides into fixed nuclear arsenals that could be excessive or inadequate in the future; and, by perpetuating the Cold War strategic relationship, it would inhibit movement to a far better strategic framework for relations.

I would like to highlight five key findings of the NPR. Each needs to be well understood:

1. A New Relationship With Russia: Away From MAD. The planned reductions to between 1,700 and 2,200 operationally deployed nuclear warheads are possible and prudent given the new relationship with Russia. We can reduce the number of operationally deployed warheads to this level because, in the NPR, we excluded from our calculation of nuclear requirements for immediate contingencies the previous, long-standing requirements centered on the Soviet Union and, more recently, Russia. This is a dramatic departure from the Cold War approach to nuclear force sizing, which focused first and foremost on sustaining our side of the balance of terror and mutually-assured destruction (MAD). In the NPR, we moved away from this MAD policy framework.

This, of course, is not to imply that we will not retain significant nuclear capabilities, or that we can ignore developments in Russia's (or any other nation's) nuclear arsenal. Nuclear capabilities will continue to be essential to our security, and that of our friends and allies.

Nevertheless, we no longer consider a MAD relationship with Russia the appropriate basis for calculating our nuclear requirements. MAD is a strategic relationship appropriate to enemies, to deep-seated hostility, and distrust. Russia is not our enemy, and we look forward to a new strategic framework for our relations.

2. Reductions Plus Security. The President's plan for nuclear reductions permits us to cut the number of operationally deployed nuclear weapons by about 65 percent, to levels far below current levels, without taking great risks with America's safety. The new relationship with Russia makes such cuts possible, and the President's plan prudently preserves our option to respond to the possible emergence of new threats. Some commentators say we should continue to reduce our forces without preserving our capacity to adapt to changing circumstances, but doing so would require an ability to predict the future with enough accuracy to ensure we will not be surprised or face new threats.

Because the future almost certainly will, in fact, bring new dangers, we do not believe it is prudent to set in stone the level and type of U.S. nuclear capabilities. We have embarked on a program to deploy a new triad that may allow increasingly us to rely on non-nuclear capabilities, and under the President's plan we have the option to adjust our nuclear forces down even further than now planned if appropriate. If severe new threats emerge, however, we must also retain the capacity to respond as necessary. The President's plan is a reasonable way to both reduce nuclear forces and prudently preserve our capability to adjust to the shifting requirements of a dynamic security environment. In the NPR we have recognized that force requirements are driven fundamentally by the realities of a changing threat environment, and we have adopted, in the capabilities-based approach, the common-sense standard that we must retain the flexibility necessary to adjust to and shape that environment.

3. New Emphasis on Non-nuclear and Defensive Capabilities. The President's plan, for the first time, emphasizes the potential for substituting non-nuclear and defensive capabilities for nuclear capabilities. In many likely cases involving an attack against us, our allies, or friends, it will be far better to have non-nuclear and defensive responses available. For example, during the Cold War, one of the President's only options to limit damage to the United States was to strike the enemy's offensive weapons, raising the stakes in any confrontation. Defenses will offer the ability to limit damage to the United States without requiring America to "fire the first shot." In the case of an accidental launch of nuclear-armed missiles, defenses will give us the opportunity to destroy such weapons before they inflict any damage on the United States, its friends, or allies.

The NPR, for the first time, explicitly calls for the integration of non-nuclear and defensive capabilities as part of our strategic triad. This is another reason we can move forward with deep nuclear reductions while being careful to preserve our security. The new non-nuclear and defensive capabilities that are emphasized in the

NPR may also provide the basis for further nuclear reductions in the future, depending on their effectiveness.

4. A New Diverse Portfolio of Military Capabilities for a New World. The NPR's call for a new triad begins the transformation of our strategic capabilities to suit a world that is very different from that of the Cold War. In the past we focused on the Soviet Union and a few severely threatening contingencies. We prepared our military to address this relatively narrow Cold War threat.

Today the sources of the threats that face us are much more diverse and even unpredictable, as the September 11 attacks showed. The spread of missiles and weapons of mass destruction makes the current spectrum of potential opponents significant. Whereas in the past, only the Soviet Union posed a serious threat to American cities, in the foreseeable future, several countries—and perhaps some non-state actors—will present such a risk. Our defensive capabilities must take these new post-Cold War realities into account.

The President's plan will transform our military to provide us with a new portfolio of capabilities to meet these new threats, even while reducing our reliance on nuclear weapons. This portfolio will enable us not only to tailor our force options to the range of potential contingencies and types of opponents, it will help us to shape the threat environment in the most benign directions possible.

5. The Rejection of Adversarial Negotiations. The rejection of the Cold War's adversarial-style of arms control negotiations represents a key change introduced in the NPR. The NPR moves us beyond the essentially hostile and competitive negotiations of the Cold War because such negotiations no longer reflect the reality of U.S.-Russian relations. We do not negotiate with Britain or France with regard to the permitted features of our respective nuclear capabilities. Although our relations with Russia are not yet comparable to our relations with our allies, they are not based on Cold War hostilities.

Were we to have put nuclear reductions on hold until we could have hammered out a Cold War-style arms control agreement with Russia, we would not be making the reductions we plan to make over the next decade. We would be under pressure to hold on to the weapons we no longer require as bargaining chips because that is the logic of adversarial arms control. Russia would be pressed by the same logic.

We see no reason to try to dictate the size and composition of Russia's strategic nuclear forces by legal means. Russian forces, like our forces, will decline about two-thirds over the next decade. In truth, if the Russian government considers the security environment threatening enough to require an adjustment in its nuclear capabilities, it would pursue that adjustment irrespective of its obligations under a Cold War-style treaty. In fact, the Russian government did just that in 1995 with regard to the Conventional Forces in Europe (CFE) Treaty. Because the security situation had changed, Russia did not meet its obligations to reduce its conventional forces to the proscribed levels. The Russian Defense Minister at the time stated that Moscow would not fulfill legal obligations that "bind us hand and foot."

A highly dynamic security environment such as we now confront ultimately cannot be tamed by rigid, legal constructs, however sincerely entered into. It would be highly imprudent now to rigidly fix our capacity to respond to and shape such an environment by extending the negotiating practices of the Cold War into the future. We seek a new strategic framework in our relationship with Russia, not a perpetuation of the old.

REDUCING THE NUMBER OF NUCLEAR WARHEADS

Some now argue that the nuclear weapons removed from our strategic forces must be destroyed or the announced reductions would be "a subterfuge." The NPR, of course, calls for the destruction of some, but not all, of the U.S. warheads removed from the operationally deployed force. We must retain these weapons to give the United States a responsive capability to adjust the number of operationally deployed nuclear weapons should the international security environment change and warrant such action. Presidents from both parties have long recognized the need for such a capability. For example, the previous administration adopted a "lead and hedge" policy with regard to reductions below the levels required by the START II Treaty in the 1994 NPR. The last administration planned to retain the U.S. ability to regenerate capabilities reduced by the START II Treaty as a "hedge" against the possibility that Russia might reverse its course toward democracy. The previous administration continued that policy through its last day in office.

The current Nuclear Posture Review makes a similarly prudent decision to maintain the ability to restore capabilities we now plan to reduce. The difference, however, is that the NPR's responsive force is not being sized according to the dictates of a possible resurgence in the threat from Russia. Instead, our new responsive ca-

pability is being defined according to how it contributes to the four goals of dissuading potential adversaries, assuring allies, deterring aggression, and defeating enemies.

At this time, the appropriate size of our responsive force has not been determined. However, the analysis that helped determine the size of the operationally deployed force and the decision to pursue non-nuclear capabilities in the new triad suggests that our responsive capability will not need to be as large as the "hedge" force maintained by the previous administration. Moreover, our responsibility to ensure U.S. security virtually dictated the maintenance of a significant number of stored warheads. First, both the United States and the Soviet Union recognized during the Cold War that the number and nature of their operationally deployed nuclear forces ready to go at a moment's notice were the key determinants of their respective capabilities. That is why both sides pursued arms control agreements that sought to affect the nature and number of deployed nuclear delivery vehicles and why existing arms control treaties never addressed the issue of warhead dismantlement. In that context, implementing the NPR will significantly reduce the number of U.S. deployed warheads and change the nature of our nuclear arsenal by downloading the delivery vehicles. In short, the NPR addresses the most important aspects of the U.S. nuclear arsenal. Given the era of uncertainty we now face, maintaining a responsive force is only prudent and consistent with the capabilities-based approach to our defense planning.

Finally, the pace with which we reduce the nuclear stockpile will be determined in part by the state of our infrastructure and the very real limits of our physical plant and workforce, which has deteriorated significantly. For example, the United States today is the only nuclear weapon state that cannot remanufacture replacements or produce new nuclear weapons. Consequently, we are dependent on stored weapons to maintain the reliability, safety, and credibility of our stockpile and to guard against the possibility of a technical or catastrophic failure in an entire class of nuclear weapons. Other nuclear states are not bound by this limitation of their infrastructure. Repairing the U.S. nuclear infrastructure and building the responsive infrastructure component of our new triad may well permit us to reduce the size of the nuclear stockpile needed to support the responsive force.

In sum, the NPR develops an approach to reductions that provides an accounting of reductions that reflects "truth in advertising," protects conventional capabilities from efforts to limit nuclear arms, and preserves the flexibility necessary in an era of uncertainty and WMD proliferation. This is the only prudent path to deep reductions given the realities of the threat environment we face.

PROGRAMS

Developing and fielding the capabilities for the new triad will require a dedicated effort over the next decade. Program development activities must be paced and completed in a manner such that the integration of capabilities results in the synergistic payoff envisioned for the new triad. The Department has identified an initial slate of program activities that we propose to fund beginning in fiscal year 2003.

DOD Infrastructure. Funding for the sustainment of strategic systems will be increased. This effort will support surveillance and testing of weapon systems slated for life extension programs such as the Air-Launched Cruise Missile (ALCM) and the Advanced Cruise Missile (ACM). We propose to conduct additional test flights for solid rocket motors and to increase our efforts for unique technologies for strategic systems, such as missile electronics and navigation. In addition, the Department will fund the development and qualification of radiation-hardened parts for strategic systems.

Offensive Strike. Funding has been programmed for two specific advanced conventional weapon applications and one concept development program to explore options for advanced strike systems. The two advanced conventional strike applications include a fast-response, precision-impact, conventional penetrator for hard and deeply buried targets and the modification of a strategic ballistic missile system to enable the deployment of a non-nuclear payload.

Missile Defense. The Department will conduct an aggressive R&D program for ballistic missile defense and we are evaluating a spectrum of technologies and deployment options.

Strike Support. Advancements in offensive and defensive capabilities alone will be inadequate without enhancements in sensors and technology to provide detailed information on adversary plans, force deployments, and vulnerabilities. Such systems are critical in developing the advanced command and control, intelligence, and adaptive planning capabilities required to integrate all three legs of our new triad. Therefore, the Department has proposed additional funding for the development of

advanced sensors and imagery for improved intelligence and assessment and for modernization of communications and targeting capabilities in support of evolving strike concepts.

CONCLUSION

A half a century ago, in the midst of the Cold War, Prime Minister Winston Churchill noted in the House of Commons the "sublime irony" that in the nuclear age, "safety will be the sturdy child of terror and survival the twin brother of annihilation." The Cold War is long over and new approaches to defense are overdue. As President Bush has stated, "We are no longer divided into armed camps, locked in a careful balance of terror. Our times call for new thinking." The new triad, outlined in the Nuclear Posture Review, responds to the President's charge.

Chairman LEVIN. Thank you, Secretary Feith.
General Gordon.

STATEMENT OF GEN. JOHN A. GORDON, USAF (RET.), ADMINISTRATOR, NATIONAL NUCLEAR SECURITY ADMINISTRATION

General GORDON. Thank you, Mr. Chairman. I have a longer prepared statement that I would offer for the record.

Chairman LEVIN. It will remain part of the record.

General GORDON. National Nuclear Security Administration (NNSA) participated in the Nuclear Posture Review, and while the nuclear requirements are largely within the providence of the Department of Defense and the White House, we were able to participate fully throughout the study to ensure that the choices, plans, and requirements that were developed were well within the realm of the possible from the technical and production standpoints of the NNSA. So I would like to make a few points.

The first key conclusion out of the NPR is the concept of a new triad that focuses on and supports the importance of a robust and responsive R&D and industrial base, of which the nuclear weapon enterprise is a key element. It is not only in-being forces, but the demonstrable capabilities of the defense, science, technical, and manufacturing infrastructure that began the nuclear weapon enterprise that provide us with a means to respond to new and unexpected emerging threats in a timely manner and dissuade a potential future competitor from seeking a nuclear advantage.

A second fundamental conclusion, at least from NNSA's perspective, is that for the foreseeable future, nuclear weapons will remain, if not a critical, but at least a key element of U.S. strategy. A basic point, but it tells us that the NNSA must continue to ensure the safety and reliability of the stockpile, and our Stockpile Stewardship Program (SSP) is designed to do just that and to do it in the absence of nuclear testing. From basic surveillance of weapons to refurbishment of the systems, to studying the chemistry and the metallurgy of long-term materials aging, to understanding weapons physics in a new and very different way, in much more detail, and developing the tools for really long-term stewardship, the NNSA is focused on its mission.

An important point is that the NPR essentially revalidated the basic structure of the warhead refurbishment program that had earlier jointly been developed with DOD and the NNSA under the Nuclear Weapons Council structure. The precise weapons that fall into each category are the W80, W76, and B61, which will be central to the stockpile, and we know they will require life extension and refurbishment. The NNSA's requirements remain, and we need

to press ahead, to restore past production capabilities, modernize others, and be able to begin these refurbishments on schedule.

This, in turn, then raises a key point. The results of the NPR do not in the near term reduce the NNSA's costs. Our near term costs are driven by the need to restore and revitalize the infrastructure, and they are driven not by the number of warheads in the stockpile and by the number to be refurbished.

Cost savings from refurbishing a smaller number of warheads will not be realized until perhaps 2010. So this then puts me in a bit of a difficult position, I think, in trying to explain what or what is not intuitively obvious as to why the weapons' cost is not going down, why costs are not going down, but the point is at the core of the enterprise, and the stockpile needs to be refurbished regardless of the numbers of weapons we deem necessary to retain. Even at that level, the enterprise will be stretched, and we will see something approaching maximum capacity when these systems are all in the process line.

So under current planning scenarios, we will be at or near capacity, limiting our ability to dismantle significant numbers of weapons over the next 10 years or so. Under current plans, weapons identified for dismantlement would use low-level capacity at the plants, but it would be difficult to undertake major scheduled dismantlements without slipping some of the schedules or adding new capacity.

Mr. Chairman, I would point to some of the less obvious but very important results of the NPR, at least to me. The conduct of this review has done much to review the cooperation and coordination among the Department of Energy, NNSA, and the Department of Defense on these issues. The Nuclear Weapons Council is working effectively and efficiently. Policy levels are working together. The DOD has offered strong support for needed programs and from my perspective, that is a most welcome development.

Mr. Chairman, I might take a moment to make a few comments on NNSA as an organization, about how it fits into this. First, we are particularly grateful for the support of the Senate for a budget that actually begins to make our requirements achievable. The fiscal year 2003 budget request also makes another important step, and we look forward to sustained support from the administration and from Congress for our ambitious programs. I am confident that we will be able soon to submit a 5-year plan with meaningful consent.

Second, I want to report that I am fundamentally satisfied with the progress we are making on stewardship. With improved surveillance tools, we are finding problems and we know how to fix them, but none of them, none of these problems that we found and other fixes we proposed suggest a need any time soon. The National Ignition Facility (NIF) seems to be on track and the pit program is coming into line. We see the infrastructure and improvements.

Third, I see real improvements with the labs and the plants and morale is up, retention is up, recruitment is up. Mr. Chairman, I wouldn't go so far as to suggest all is perfect. It is hardly that. We run programs with considerable inherent risk as we push the limits of technology. We struggle with complex and large programs, and

NNSA, a large organization, has a ways to go. With the recent confirmation of Dr. Everett Beckner to the position of Deputy Administrator for Defense Programs, we will have a leadership team in place. The vectors are good.

Mr. Chairman, two more points if I may. While movement of our work is focused almost exclusively on maintaining today's stockpile and developing the tools to certify our weapons far into the future, without testing, I have directed and the NPR has endorsed three specific initiatives for our weapons programs.

First, we need to begin thinking seriously about a modern pit production facility (MPF) and I want to begin in earnest the very early work on the alternatives that would be available to us. I do not foresee a need for such a facility for at least 15 years, but I want to accelerate and make more rigorous our planning processes toward that.

Second, while I see no near-term need for nuclear tests, my judgment is that our current test readiness posture is a bit too relaxed and perhaps 30 to 36 months for a fully diagnosed all up test. I believe we should be on a more ready footing, not because I see the need for the test but out of simple prudence.

Third, we are doing almost nothing now, almost no rigorous thinking about the future nuclear concepts. We are not challenging our designers or adequately training new designers. So I have asked the labs to put together a small group at each location that allows new designers to work with old hands to think about and explore what might be possible. I hasten to say that this work is not done with a specific military requirement in mind, but rather a way to help ensure long-term design competence, and we do this with an appreciation of the restrictions on pursuing new weapons.

Finally, Mr. Chairman, you asked in your letter of invitation to this hearing that I address the questions raised in a couple of recent DOE Inspector General reports related to stockpile surveillance. In its report on surveillance testing, the IG noticed a continuing backlog in certain tests that could result in a lack of critical information needed to make valid assessments of weaponry on which we rely. It contributes to the backlog of testing, to delays in completing the studies to minimize hazards and ensure safe operations and difficulties in coordinating tests with the Department of Defense. These reports pointed out a deteriorating structure that had contributed to delays in surveillance and other programs.

The second report called to attention the lengthy period of time required to complete the significant findings investigations (SFIs). The reports were correct in identifying significant backlogs of surveillance testing and a likely process for solving problems. But even before the report, we applied funds in 2000, 2001, and 2002 to address these problems. The inspection backlogs were limited last year and others will be done this year. To address delays in completing SFIs, we are taking the actions to assure that the most critical ones are resolved promptly and with high confidence. We are developing a comprehensive SFI database to track the progress and institute accountability. I'm not satisfied with our past handling of this issue, and I have directed Dr. Beckner, our new Deputy Administrator for Defense Programs, to take this on as a top priority.

Mr. Chairman, today our nuclear weapons stockpile is safe, it is secure, it is reliable. We are working hard to assess the implications of the NPR for NNSA and to work closely with Department of Defense partners in its implementation and more importantly the flexibility to sustain our nuclear weapons stockpile to adopt current weapons to new missions, potentially to field new weapons depends on healthy plan for stockpile stewardship, peer review and base certification as well as a robust infrastructure for nuclear weapons. As numbers of nuclear forces are reducing, it becomes even more important to retain high confidence in the reliability of the remaining forces. We must also have the capacity to respond to changes in the strategic environment, if need be.

Achieving these goals will require a strong commitment to the recapitalization of our nuclear weapons infrastructure, now a smaller infrastructure to be sure, but one that is sufficiently modern and capable to fully support the NPR and more broadly, our defense strategy. Mr. Chairman, thank you.

[The prepared statement of General Gordon follows:]

PREPARED STATEMENT BY GEN. JOHN A. GORDON, USAF (RET.)

INTRODUCTION

Mr. Chairman and members of the committee, thank you for the opportunity to meet with you today on the Nuclear Posture Review and the National Nuclear Security Administration's (NNSA) role in working with the Department of Defense to implement it.

The NPR reviews future national security needs, and the nuclear weapons stockpile and infrastructure required to support it. The review was carried out by DOD in close consultation and cooperation with the NNSA. Secretary of Energy Spencer Abraham and I fully endorse Secretary Rumsfeld's December 2001 Report to Congress on the NPR.

The central question that I want to address today is: What are the implications of the NPR for nuclear weapons programs? More broadly, what does NNSA need to do to implement the findings and recommendations of the NPR? Let me first give the "short answer," which I will then develop more fully.

First, the NPR reaffirms that nuclear weapons, for the foreseeable future, will remain a key element of U.S. national security strategy. As a result, NNSA must continue to assure the safety and reliability of the U.S. nuclear stockpile. Our stockpile stewardship program is designed to do just that, and to do so in the absence of nuclear testing.

Second, the NPR reaffirms the stockpile refurbishment plan agreed previously between DOD and NNSA, which calls for three warhead refurbishment programs—the W80, the W76 and the B61—to begin later this decade. As a result, NNSA must press ahead with its efforts to reverse the deterioration of its nuclear weapons infrastructure, restore lost production capabilities, and modernize others in order to be ready to begin those refurbishments on schedule.

This raises a key point—the NPR will not reduce NNSA's costs or workload anytime soon. Regardless of the eventual size of the future stockpile, we will need to meet the agreed timelines, established with DOD well before the NPR, to begin refurbishments later in this decade on the three warhead types. In this regard, near-term costs are driven not by the total number of warheads to be refurbished, but by the need to restore production capabilities in time to carry out the first refurbishment of each type. Possible cost savings from having to refurbish fewer warheads for a smaller stockpile would not be realized until well into the next decade.

Third, several NNSA initiatives have been endorsed by the NPR including efforts to:

- Enhance nuclear test readiness;
- Reestablish nuclear warhead advanced concepts teams at the national labs and headquarters; and
- Accelerate preliminary design work on a modern pit facility (MPF).

Given our multi-year plan to reintroduce program stability to the enterprise, we believe we are on track to complete acquisition of the tools and capabilities needed

to assure future stockpile safety and reliability, achieve the needed restoration and modernization of the production complex, and implement the NPR initiatives.

ROLE OF THE NUCLEAR WEAPONS ENTERPRISE IN ACHIEVING DEFENSE POLICY GOALS

Let me elaborate more on these matters starting from first principles. Four key defense policy goals were articulated in the Quadrennial Defense Review and later reaffirmed in the NPR. Briefly, the goals are to:

- assure allies and friends by demonstrating the United States' steadiness of purpose and capability to fulfill its military commitments;
- dissuade adversaries from undertaking military programs or operations that could threaten U.S. interests or those of allies and friends;
- deter threats and counter coercion against the United States, its forces, and allies; and
- defeat any adversary decisively and defend against attack if deterrence fails.

In seeking to meet these goals, the NPR has established as its centerpiece the "new triad" of flexible response capabilities consisting of the following elements:

- non-nuclear and nuclear strike capabilities including systems for command and control;
- active and passive defenses including ballistic missile defenses; and
- R&D and industrial infrastructure needed to develop, build, and maintain nuclear offensive forces and defensive systems.

Perhaps more so than in any previous defense review this concept of a new triad reflects a broad recognition of the importance of a robust and responsive defense R&D and industrial base in achieving our overall defense strategy.

The ability of our modern defense industrial base to bring advanced defense technology rapidly into the field is well respected internationally among both friends and foes. The breadth and scope of the U.S. strategic modernization program of the early 1980s, including the potential of a Strategic Defense Initiative (SDI) then in the very early stages of R&D, was key to causing President Gorbachev in the late 1980s to seek an end to strategic competition with the West and an end to the Cold War. The U.S. defense R&D and industrial base, including the nuclear weapons complex of the national laboratories, production plants, and test sites that supported development of sophisticated warheads with build rates exceeding 1,000 weapons per year, permitted that modernization program to take place and was a major factor in reassuring allies (who depend on the U.S. nuclear umbrella), in dissuading, that is, convincing the Soviet Union that arms competition with the United States was futile and in deterring aggression.

Many modern military capabilities evolved from the legacy of the Manhattan Project, characterized by the massive application of science and technology to the problem of developing and producing the atomic bomb and leading to later efforts across a range of military systems. It was not only nuclear and conventional forces that provided deterrence during the Cold War, but the latent potential—reflected in our defense scientific, technical, and manufacturing base—to design and develop ever more advanced and capable military systems, and the ability to produce them in great quantities if need be.

Now that the Cold War is over, how can the nuclear weapons enterprise act both to reassure allies, and to dissuade or deter future adversaries? An enterprise focused on sustainment and sized to meet the needs of a smaller nuclear deterrent can provide capabilities to respond to future strategic challenges. A future competitor seeking to gain some nuclear advantage would be forced to conclude that its buildup could not occur more quickly than the U.S. could respond. Alternatively, an ability to innovate and produce small builds of special purpose weapons, characteristic of a smaller but still vital nuclear infrastructure, would act to convince an adversary that it could not expect to negate U.S. nuclear weapons capabilities. The development and subsequent modification of the B61-7 bomb—converting a few of them into the B61-11 earth penetrator weapons—is a case in point.

Thus it is not only in-being forces, but the demonstrable capabilities of the defense scientific, technical and manufacturing infrastructure, of which a responsive nuclear weapons infrastructure is a key part, including its ability to sustain and adapt, that provides the United States with the means to respond to new, unexpected, or emerging threats in a timely manner. This has served to reassure allies and friends, dissuade adversaries from strategic competition with the United States, and underpin credible deterrence in a changing security environment.

SUPPORTING THE NPR—CAPABILITIES FOR A RESPONSIVE NUCLEAR WEAPONS
ENTERPRISE

How far along are we in creating a “responsive nuclear weapons enterprise?” The answer is: “We’re making progress, but we have a ways to go.”

Over the past decade, our focus has been to develop means to assess and ensure the safety and reliability of the aging stockpile absent underground nuclear testing. We have also sought to reduce the size of the production infrastructure, consistent with post-Cold War force levels, with the goal of modernizing that smaller infrastructure to assure that the Nation has the capabilities it will need in the future.¹ The results of these efforts have been mixed. To date we have been able to certify stockpile safety and reliability without underground nuclear testing, but the capability to do so in the future as the stockpile continues to age remains uncertain. No advanced warhead concept development is underway. Past under investment in the enterprise—in particular, the production complex—has increased risks and will limit future options. Currently, we cannot build and certify plutonium “pits” and certain secondary components, much less complete warheads (although we are working hard to re-establish these capabilities). Many facilities are in poor condition—some are unusable—and we have a rapidly aging workforce. Restoring lost nuclear weapons capabilities, and modernizing others, will require substantial investment over the next several years both to recapitalize laboratory and production infrastructure, and to strengthen our most important asset, our people.

The nuclear weapons enterprise that we seek must: (1) continue to assure stockpile safety, reliability, and performance; and (2) respond rapidly and decisively to stockpile “surprise” or to changes in the international security environment. Let me address each in turn.

Assure stockpile safety, reliability, and performance

Since 1995, there has been a Presidential requirement for an annual assessment of the safety and reliability of the nuclear stockpile and a determination of whether a nuclear test is required to resolve any safety or reliability problem. This is an extensive technical effort supported by data from non-nuclear experiments, computer simulations, the nuclear test database, aggressive and ever-improving surveillance, extensive peer review by other lab design teams, and independent assessments by others.

To strengthen weapons assessment and certification, we are seeking fundamental improvement of our understanding of the physics of nuclear explosions, including the effects of aging or remanufacture on weapons’ system performance. This requires development of new simulation capabilities that use large, high-speed computers and new experimental facilities in areas such as hydrodynamics testing, materials science, and high-energy density physics. Campaign goals for reducing uncertainties in our understanding of weapons’ behavior have been established, and schedules and milestones have been set to meet these goals as soon as practicable. Because of the implications for stockpile certification, and the need to meet warhead refurbishment milestones, it is important to keep these campaigns on schedule.

Elements of our program to meet annual certification requirements are well along and include:

- Aggressive surveillance to predict and find problems so that warheads can be refurbished well before aging degrades safety and reliability;
- Conduct planned warhead refurbishments on agreed schedules;
- Seek to anticipate stockpile problems and fix them, if possible, before they arise; and
- Maintain the required numbers of warheads in ready state.

Respond rapidly and decisively to stockpile “surprise” or to changes in the international security environment

The NPR highlighted the importance of a robust and responsive defense R&D and industrial base as a key element of the new triad. Here we refer to the ability of the enterprise to anticipate innovations by an adversary and to counter them before our deterrent is degraded, and its resilience to unanticipated events or emerging threats—all the while continuing to carry out the day-to-day activities in support of the enduring stockpile. Unanticipated events could include the catastrophic failure of a deployed warhead type. Emerging threats could call for new warhead devel-

¹ Among other things, over the past decade we have closed three facilities—Rocky Flats (pit production and reservoirs), the Mound Plant (non-nuclear components), and the Pinellas Plant (neutron generators), and reduced floor space by over 50 percent in the manufacturing facilities at Y-12.

opment, or support to DOD in uploading the responsive force. In any case, there are a number of capabilities and activities that will help us to hedge an uncertain future including our ability to:

- Ensure sufficient reserve or surge capacity for both the R&D and production;
- Secure sufficient assets/capabilities (e.g., transportation, tritium, etc.) to support the responsive force;
- Retain appropriate numbers and types of weapons at appropriate states of readiness, to ensure a variety of replacement options;
- Revitalize nuclear weapons advanced concepts efforts at the labs and headquarters;
- Develop and assess strategies for transitioning the stockpile toward weapons that are intrinsically easier to maintain and certify, conceivably without nuclear testing; and
- Enhance readiness to resume underground nuclear testing, if required.

A key measure of “responsiveness” is how long it would take to carry out certain activities to address stockpile “surprise” or deal with new or emerging threats. Specific goals are being established for the following four activities:

Fix stockpile problems: The ability to assess a stockpile problem, once one has been identified, and then design, develop, implement, and certify a fix will of course depend on the nature and scope of the problem. For a relatively major problem, we seek to be able to assess the problem and establish an implementation plan—Phases 6.2–6.2A for the “fix” within 1 year, and then to conduct development and production engineering activities leading to initial production—Phases 6.3–6.5—within approximately 3 years.

New warhead design, development, and initial production: New or emerging WMD threats from rogue states make it difficult to predict future deterrence requirements. If the U.S. is to have a flexible deterrent, it must be able to adapt its nuclear forces to changing strategic conditions. Adaptation and modernization of forces, including implementation of new technologies, will enable us to continue to achieve deterrence objectives more efficiently as we move to significantly lower force levels. Our goal is to maintain a sufficient R&D and production capability to be able to design, develop, and begin production on the order of 5 years from a decision to enter full-scale development of a new warhead.² To achieve this goal, we must work with DOD to determine and prioritize potential weapons needs over the long term. In certain cases, it may be appropriate to design, develop, and produce a small number of prototype weapons both to exercise key capabilities and to serve as a “hedge,” to be produced in quantity when deemed necessary.

Quantity production of new warheads: While there are no plans to increase the size of the stockpile, we must have flexibility to respond to various scenarios. Our goal is to maintain sufficient production capacity to be able to produce new warheads in sufficient quantities to meet defense requirements without disrupting ongoing refurbishments. In this connection, refurbishment demands starting later in this decade, and continuing until about 2014, are expected to dominate production capacity. If necessary, we would work with DOD to adjust production priorities.

Support to DOD in uploading the responsive force: We must assure that NNSA’s tasks, such as warhead transportation, tritium support, etc., are not the “long poles in the tent” for uploading the responsive force. That is they must be carried out on a time scale consonant with DOD’s ability to upload these weapons. Sufficient numbers of responsive warheads must be maintained in the active stockpile to ensure that ready warheads are available to meet upload timelines.

HOW DO WE GET TO WHERE WE WANT TO BE?—NATIONAL COMMITMENT AND A MULTI-YEAR PLAN

What do we need to do in order to achieve the capabilities of a modern and flexible nuclear weapons design and production enterprise? In short, we need to revitalize and sustain our production capabilities, our R&D and technology base, and our world-class workforce. Critical to this is a national commitment to safe and reliable nuclear forces, which the NPR has reaffirmed, and implementation of a stable, multi-year fiscal plan. Such a plan would provide the long-term commitment and stability to restore or modernize critical infrastructure and capabilities so that we can meet future workload requirements under a more rigorous regulatory regime.

²During the era in which the current stockpile was designed, developed, tested, and manufactured, the Phase 6.3–6.5 timeframe (design, development, initial production) was roughly 5 years. At that time, continuing new requirements provided a “pipeline” capability so that weapons were regularly entering the stockpile.

It would also allow us to redress the deferred maintenance backlogs, assure world-class science and engineering capabilities and workforce, and carry out the initiatives of the NPR. Let me elaborate further.

Modernize nuclear weapons production capabilities

The production complex which has seen site closures and considerable downsizing since the end of the Cold War, consists of the following “one of a kind” facilities: the Y-12 Plant (uranium and other components); the Pantex Plant (warhead assembly, disassembly, disposal, high explosive components); the Kansas City Plant (non-nuclear components); and the Savannah River Plant (tritium extraction and handling). In addition, production activities for specific components occur at two national labs: Sandia National Laboratories (neutron generators), and Los Alamos National Laboratory (plutonium/beryllium parts, detonators, and tritium targets for neutron generators).

The current production complex is limited in the number of weapons that can be processed at the Pantex Plant, with the work split among units undergoing surveillance, refurbishment, or dismantlement. Planned renovations of existing facilities will expand capacity sufficient to meet the anticipated NPR workload and include a small reserve that would be available to fix unanticipated problems in the stockpile, respond to new warhead production requirements, or handle a potentially increased dismantlement workload (resulting from force reductions) without disrupting planned refurbishments.

Qualified processes for some uranium manufacturing and processing are not currently in place, but plans are underway to expand the capacity and capability of the Y-12 Plant to meet the planned workload for replacing warhead secondaries and other uranium components.

Regardless of the size of the future nuclear weapons stockpile, substantial work must be completed to get the production complex to the point where it is ready to begin refurbishment work on key systems later this decade. Additionally, new construction projects, including that for a modern pit production facility discussed below, are needed to ensure sufficient capacity for planned future-decades stockpile refurbishments.

Modernize the R&D and technology base

Stockpile stewardship requires strong R&D capabilities to predict, discover, and evaluate problems in the current stockpile (especially those associated with component aging or defects), in order to design, develop, and certify new warheads in the absence of testing, and to attract and retain a world-class technical staff. Thus, in addition to modernizing production capabilities, efforts are underway to restore and improve the technical base of the nuclear weapons enterprise and to develop advanced capabilities to meet future requirements. Key needs include:

- Continue to upgrade modeling and simulation capabilities;
- Improve hydrodynamic and sub-critical testing capabilities for warhead assessments;
- Complete high-energy density physics projects to improve understanding of the physics of nuclear explosions;
- Create modern microelectronics capabilities for DOE and DOD components; and
- Deploy modern production processes.

Secure and sustain a world-class work force

Recruitment and retention of an expert workforce is a major challenge. The aging of the technical staff at the national laboratories, the production plants and the Nevada Test Site (NTS) is a concern highlighted by a variety of review groups, including the congressionally-appointed Commission on Nuclear Weapons Expertise (Chiles Commission) and the Foster Panel. In its 1999 report, the Chiles Commission observed that the average age of those supplying critical skills to the weapons program is 48 years—a population considerably older than that for the average U.S. high-tech industry. A major factor in this demography was the low hiring rates in the early-to-mid-1990s as budgets for the weapons program were in decline. Recruiting rates have gone up modestly, but are still much lower than required to support planned programs. More recently, morale problems at the laboratories in the wake of security problems have raised concerns for retention, and recruiting has been more difficult than in the past because of competition from the private sector of the U.S. job market, limited knowledge about the program among the general population, and adverse publicity, among other factors.

But the tide is turning. Morale is improving. Both the laboratories and the plants are working closely with the Federal staff to attract and retain the future workforce.

Maintaining a strong science component of the stockpile stewardship program, coupled with real opportunities for working on advanced warhead concepts, developing a strong intern program to integrate new scientists and engineers into the weapons program, improving ties with universities, fixing the deteriorating manufacturing infrastructure, and developing new R&D facilities such as NIF, DARHT, and MESA where the most advanced research in the world is taking place, are all examples of these efforts. The loss of knowledge resulting from retirement and attrition, and the need to transfer critical knowledge heighten the urgency of this effort.

IMPLICATIONS OF THE NPR FOR KEY NNSA MISSIONS

Next, I describe how specific NNSA missions will be affected by the NPR, and address the “game plan” for implementation of the NPR initiatives.

Stockpile levels and readiness requirements

The NPR stated a goal to reduce the operationally-deployed strategic stockpile to 3,800 nuclear warheads by 2007 and 1,700–2,200 nuclear warheads by 2012. The force would be based on 14 Trident SSBNs (with 2 SSBNs in overhaul at any time), 500 Minuteman III ICBMs, 76 B–52H bombers, and 21 B–2 bombers. There would also be a non-strategic stockpile whose exact quantities and readiness requirements are still to be determined.

Although the NPR did not determine specific stockpile quantities or readiness requirements, it did introduce to the stockpile lexicon the categories “operationally-deployed” and “responsive.” Operationally-deployed warheads are warheads fully ready for use and either mated on or allocated to operational delivery systems; these warheads are part of the active stockpile.³ Responsive warheads are warheads available to be uploaded to delivery systems in the event that world events require a more robust deterrence posture; most or all of these warheads would also be part of the active stockpile.

Remaining warheads not slated for retirement or dismantlement would be retained in the inactive stockpile, available for use in stockpile evaluation support or as one-for-one reliability replacements for warheads in the operationally deployed or responsive forces. Several factors would determine the nature, size, and scope of warheads in this “other” category including: (1) progress in reestablishing lost production capabilities and infrastructure; (2) response times to fix problems in the stockpile, carry out other required refurbishments to sustain the stockpile, and develop and produce new or modified warheads; and (3) the desire to retain a sub-population of non-refurbished warheads to hedge against potential common mode failures. Some warheads in this category would, based on future decisions, be retired and eliminated. NNSA and DOD will work together to clarify the NPR “draw-down” in terms of the numbers and types of warheads, by year, to be maintained in the active and inactive stockpiles at various states of readiness.

Stockpile surveillance

In the past, if a stockpile problem occurred, there was the flexibility, with larger warhead numbers, to maintain deterrence requirements by reallocating warheads to targets. With the force reductions planned under the NPR, these options diminish. As a result, as we go to lower numbers, we need increased levels of confidence in the safety and reliability of remaining deployed forces. This drives the need for an increasingly robust surveillance program to not only strengthen our ability to detect existing stockpile problems but also to predict and respond to stockpile problems (including problems associated with aging) before they occur. Key efforts planned over the next few years will greatly increase our knowledge of component aging. A study to strengthen surveillance efforts has recently been completed. A detailed plan to implement its recommendations will be developed during this fiscal year.

Stockpile refurbishments—meeting our commitments to DOD

The NPR reaffirmed the current stockpile refurbishment plan jointly agreed by NNSA and DOD, including the “block upgrade” concept which provides flexibility to adjust the plan to evolving weapons numbers.⁴ The plan calls for all eight warhead types in the enduring stockpile to be refurbished over the next 25 years. Near-term

³Active weapons are fully maintained with all Limited Life Components (LLCs e.g. tritium bottles) installed. Inactive weapons have the LLCs removed upon expiration.

⁴The “block upgrade” approach breaks up our major planned refurbishments into 5-year “blocks,” with the option to either continue refurbishments with the current design, switch to a different design based on new information provided by surveillance efforts or as a result of new mission requirements, or simply stop refurbishments based on reduced weapons requirements.

efforts focus on four warheads: the W87 (ICBM) the B61-7/11 (gravity bomb), the W80 (ALCM), Advanced Cruise Missile (ACM) and Tomahawk Land Attack Missile (TLAM-N), and the W76 (Trident SLBM).

- **W87 (ICBM):** The W87 is currently being refurbished in order to enhance the structural integrity of the warhead. This includes small modifications to the primary, replacement of some non-nuclear components in the warhead, and refurbishment of some secondary components.
- **B61-7/11 (Bomb):** Some secondary components in the B61-7/11 show signs of aging that could affect warhead reliability, if left unchecked. B61-7/11 refurbishment, scheduled to begin in fiscal year 2006, will include secondary refurbishment and replacement of some foam support, cables, and connectors.
- **W80 (ALCM):** The W80 will need replacement of its neutron generators. This provides an opportunity to improve surety features and introduce a new gas transfer system. W80 refurbishment is scheduled to begin in fiscal year 2006.
- **W76 (SLBM):** W76 refurbishment, scheduled to begin in fiscal year 2007, will include re-qualifying the pit, replacing the primary high-explosive, secondary refurbishment, a new arming, fuzing, and firing (AF&F) system, and a new gas transfer system.

Efforts to sustain and modernize our R&D infrastructure, restore our production capabilities, and recruit and retain a work force “second to none” are absolutely essential for the effective execution of stockpile refurbishment programs. Our ability to meet refurbishment timelines is a critical measure of merit for stockpile stewardship.

Revitalization of nuclear weapons advanced concepts efforts

The NPR recognized the need to revitalize nuclear weapons advanced concepts activity, which could include extending concepts that have been developed and tested but not yet deployed, as well as new concepts. To assess further nuclear weapons modernization options in connection with meeting new or emerging military requirements, NNSA has taken an initiative, endorsed by the NPR, to reestablish small advanced warhead concepts teams at each of the national laboratories and at headquarters in Washington, DC. DOD and NNSA will jointly review potential requirements for new or modified warheads, and identify opportunities for further study.

The vision is for small, focused teams (involving both lab and headquarters personnel), in coordination with DOD and the services, to assess evolving military requirements, investigate options, and ensure our DOD partners understand what is and is not possible. The teams will carry out theoretical and engineering design work on one or more concepts, including options to modify existing designs or develop new ones. In some instances, these activities would proceed beyond the “paper” stage and include a combination of component and subassembly tests and simulations to introduce an appropriate level of rigor to challenge our designers.

Importantly, this effort will provide opportunities to train the next generation of nuclear weapons scientists and engineers. Part of this effort will be to demonstrate capabilities to assess options and associated timelines for new warhead design, development, and production (e.g., to replace a failed warhead or to field a new system to meet new military requirements) and to assist efforts to assess cost and other implications of any adjustments in production readiness needed in response.

Warhead retirements and dismantlements

Although no new retirements or eliminations of warheads were announced in the NPR, DOD and NNSA will jointly address the broad question of the size and character of the active stockpile and inactive stockpile. It will be prudent for NNSA to maintain a reserve capacity in addition to that planned for the near-term refurbishment workload, for warhead eliminations, addressing unforeseen problems in the stockpile, and for possible new production. Under current planning assumptions, NNSA would not define a firm schedule for dismantlements; rather NNSA would “load level” Pantex operations by scheduling dismantlements in a way that does not interfere with ongoing refurbishment or other production efforts.

Warhead transportation needs

NNSA is responsible for the ground transportation of nuclear warheads and nuclear material within the U.S. including transport of warheads between DOD sites. We will need to assess the NPR’s implications for NNSA’s transportation workload. Decisions to retire or dismantle additional warheads as part of the drawdown, or warhead upload requirements, could drive increased transportation needs. The future transportation workload should be manageable given current plans to ramp up

transportation assets and associated personnel. That said, NNSA will work with DOD to assure that longer-term warhead transportation needs deriving from the NPR can be met.

Enhanced test readiness

President Bush supports a continued moratorium on underground nuclear testing; nothing in the NPR changes that. Over time, we believe that the stewardship program will provide the tools to ensure stockpile safety and reliability without nuclear testing. But there are no guarantees. It is only prudent to continue to hedge for the possibility that we may in the future uncover a safety or reliability problem in a warhead critical to the U.S. nuclear deterrent that could not be fixed without nuclear testing.

Based on a 1993 Presidential directive, NNSA currently maintains a capability to conduct an underground nuclear test within 24 to 36 months of a Presidential decision to do so. Test readiness is maintained principally by the participation of nuclear test program personnel in an active program of stockpile stewardship experiments, especially the subcritical experiments carried out underground at the Nevada Test Site (NTS).

During the NPR, two concerns were raised about our test readiness program. First, a 2- to 3-year readiness posture may not be sustainable as more and more experienced test personnel retire. Not all techniques and processes required to carry out underground nuclear tests are exercised with the work carried out at the NTS. As experienced personnel retire, it will become more difficult to train new people in these techniques, further degrading test readiness. This argued for an approach in which key capabilities required to conduct nuclear tests are identified and exercised regularly on projects making use of a variety of nuclear test-related skills.

Second, the current 2- to 3-year posture may be too long. If we believed that a defect uncovered in the stockpile surveillance program, or through new insight gained in R&D efforts, had degraded our confidence in the safety and/or reliability of the W76 warhead—the warhead deployed on Trident submarines and comprising the most substantial part of our strategic deterrent—the ability to conduct a test more quickly might be critically important.

To address these concerns, the NPR endorsed the NNSA proposal to enhance test readiness by reducing the lead-time to prepare for and conduct an underground nuclear test. To support this, NNSA has allocated \$15 million in fiscal year 2003 to begin the transition to an enhanced test readiness posture. Funds will be used among other things to:

- augment key personnel and increase their operational proficiency,
- begin the mentoring of the next generation of testing personnel,
- conduct additional subcritical experiments and test-related exercises,
- replace key underground-test-unique components,
- modernize certain test diagnostic capabilities, and
- decrease the time required to show regulatory and safety compliance.

NNSA will work with DOD over coming months to refine test scenarios and evaluate cost/benefit tradeoffs in order to determine, implement, and sustain the optimum test readiness time.

Accelerate planning for a Modern Pit Facility (MPF)

Our inability to produce and certify plutonium pits is a shortfall in our stockpile stewardship program. Pit production was terminated at Rocky Flats in 1989 and is now being re-established on a limited scale at Los Alamos National Laboratory. Only engineering test units of a single warhead type have been produced to date, however, and no “war reserve” units are expected to enter the stockpile for about 7 years. Current plans envision Los Alamos producing about 20 pits per year with a surge capacity to perhaps 50.

The current pit production strategy is first to carry out an assessment of pit lifetime, through our enhanced surveillance campaign, to yield initial results by fiscal year 2003 with completion by fiscal year 2006. Once that is completed, our policy is to reestablish pit production capability in a time frame and with a capacity sufficient to meet national needs. Implementing that policy means fielding a capability that is:

- available in time to replace pits that exceed minimum projected lifetime;
- sized to support the planned workload, with ready reserve to address “surprise” requirements for force augmentation, and potential new warhead production; and
- modular (i.e., expandable further) if further needs dictate.

One thing is now certain—the Los Alamos production capacity will be insufficient to meet future requirements for pits. As a result of the NPR, we seek to accelerate planning and initial design work to establish an MPF. Relevant activities about to begin include preliminary MPF design, associated technology development, and initiation of the National Environmental Policy Act process.

Tritium

While the NPR will result in a smaller active stockpile of both operationally deployed and responsive forces, the nuclear stockpile—by warhead type, by year, and by readiness state—has not yet been determined. This will be done in detail as part of the NWC process and will enable NNSA to plan for the delivery of sufficient tritium to meet all military requirements. Because stockpile reductions will not be accomplished for several years, we do know that there will be no near-term reduction in the immediate demand for tritium. NNSA plans to begin tritium production in commercial reactors in fall 2003, and to complete construction and begin operations of a new Tritium Extraction Facility (TEF) at the Savannah River Site so that tritium can be delivered to the stockpile in advance of need.

It will be important for NNSA to assess future tritium needs in light of a number of factors in addition to NPR reductions in the active stockpile. These include potential changes to the tritium loadings of several warhead types and potentially increased “pipe line” needs at the Savannah River tritium facilities (in connection with the new extraction facility).

CONCLUSION

Mr. Chairman, today, our nuclear stockpile is safe, secure, and reliable. We are working hard to assess the implications of the NPR for NNSA and to work closely with our DOD partners in implementation. Most importantly, the flexibility to sustain our nuclear weapons stockpile, to adapt current weapons to new missions, or to field new weapons, if required, depends on a healthy program for stockpile stewardship and peer-review-based certification as well as a robust infrastructure for nuclear weapons production. As numbers of nuclear forces are reduced, it becomes even more important to maintain high confidence in the safety and reliability of remaining forces. We must also have the capability to respond to changes in the strategic environment, if need be, by being able to reconstitute larger force levels with safe and reliable warheads and develop, produce, and certify new or modified nuclear warheads to meet new military requirements. Achieving these goals will require a strong commitment to the recapitalization of the nuclear weapons infrastructure—a smaller infrastructure, to be sure, but one that is sufficiently modern and capable to fully support the NPR and, more broadly, our Nation’s defense strategy.

Chairman LEVIN. General Gordon, thank you.
Admiral Ellis.

STATEMENT OF ADM. JAMES O. ELLIS, JR., USN, COMMANDER IN CHIEF, UNITED STATES STRATEGIC COMMAND

Admiral ELLIS. Thank you, Mr. Chairman, and distinguished members of the committee. I, too, have a brief written statement I would offer for the record and a few comments before we begin the rounds of questioning. It is an honor again to appear before you, particularly as today we address the changes and opportunities represented in the recently completed Nuclear Posture Review.

In so doing, as Senator Ben Nelson noted, I represent the men and women of all of our strategic forces, and in the short time that I have had command, I have deepened my already enormous respect for the United States Strategic Command’s (STRATCOM) exceptional professionals, both civilian and military, who provide, as they always have, a priceless service to our Nation. While sustaining the rigor and professionalism required to support our nuclear forces, they are fully engaged in reflecting tremendous change and challenges ahead as we work to transform fundamentally the strategic landscape.

We welcome the results of the Nuclear Posture Review. More than a much-needed capabilities assessment, it fundamentally addresses more broadly the entire concept of deterrence. It brings increased focus to ensure all our strategic forces, including delivery systems, weapons, infrastructure, communications, and planning receive the resources required to enhance their capabilities and in many cases extend their lives well beyond their original design lives. The attention to infrastructure is particularly welcome as it recognizes the contribution to deterrence of what has been a linchpin of America's military might, and that is our industrial and technological superiority.

I appreciate, echo, and acknowledge the yeoman effort John Gordon and his team at NNSA have expended in bringing the nuclear weapons complex back to health.

A recurring theme from the past decade, repeated by the Nuclear Posture Review, is the importance of our people. From the civilian and military personnel at our headquarters, to the scientists and engineers in the laboratories, and the sailors and airmen operating our strategic forces, they continue a legacy and culture of which we, as Americans, can all be proud. The rigor and exactness appropriate to their awesome responsibilities, which is exemplified by the culture of the earlier Strategic Air Command, continue to this day in the United States Strategic Command and indeed in all of our nuclear infrastructure. This hallmark of excellence is the standard by which we will measure ourselves as we boldly move into a dynamic future.

As a military team, I and the other unified commanders in chief are fully engaged in supporting the disparate elements contributing to the success of the Nation's global war on terrorism. That is a team effort, but I also very clearly understand that there is only one military commander in chief who directly oversees our strategic forces. That task is assigned to me. My shipmates and I at the United States Strategic Command are mindful of this uniquely important responsibility and are committed to continuing that history of service to this great Nation. Thank you. I welcome your questions.

[The prepared statement of Admiral Ellis follows:]

PREPARED STATEMENT BY ADM. JAMES O. ELLIS, JR., USN

Mr. Chairman, Senator Warner, and distinguished members of the committee.

I appreciate the opportunity to appear before you today to testify on the Nuclear Posture Review. This is my first appearance before this committee since my confirmation hearing last September. I am honored to be invited to participate in this hearing on a major report, the conclusions of which will reshape and revitalize, respectively, our strategic policy and capabilities.

As Congress recognized in the Fiscal Year 2001 National Defense Authorization Act, a periodic comprehensive review of our Nation's strategic posture is appropriate as the national security environment changes. The last Nuclear Posture Review was conducted 8 years ago to address how to effectively draw down our strategic forces in the post-Cold War world. For a number of reasons, including a rapidly changing international environment and complex new national security challenges, the time is right to again assess our strategic direction. This Nuclear Posture Review provides that assessment and, indeed, moves beyond assessment to provide the initial details of a new direction, proposing a comprehensive approach that builds on the Quadrennial Defense Review's strategic foundation of assure, dissuade, deter, defend, and defeat.

The Nuclear Posture Review was conducted by the Office of the Secretary of Defense. U.S. Strategic Command participated in the review as did the Joint Staff and

the Services, particularly the Air Force and the Navy. We were consulted on many issues and provided our expertise as well as our frank opinions on the report's findings as they were developed. I am pleased with the Nuclear Posture Review's balance and focus and look forward to working with Congress, the Office of the Secretary of Defense, the Joint Staff, and the Services as we work to implement these findings in the months ahead.

Many of the details and key issues involving the Nuclear Posture Review are familiar to you and have been addressed by others, but I would, however, like to discuss some of the key findings from my perspective as the combatant commander of our Nation's strategic forces.

MODERNIZATION AND SUSTAINMENT

The first finding I'd like to highlight is the recognition of a pressing need for investment across the full range of our strategic capabilities. As we work to reduce deployed strategic nuclear warheads, this investment is needed to sustain and improve our aging operating forces, to recapitalize our infrastructure which has atrophied over the last 10 years, and to refine and enhance current systems. Reductions of operationally deployed nuclear warheads to the lowest numbers consistent with national security, as the President directed, will require that remaining systems be reliable, sustainable, and, therefore, fully credible.

Our current operating forces, our intercontinental ballistic missiles, our bombers, and our strategic ballistic missile submarines, and their weapons, will remain the backbone of our strategic strike forces for at least the next 20 years. These platforms and their weapon systems are projected to remain in service well beyond their original design lives and require significant sustained investment to monitor and, if necessary, to replace aging and obsolete components in addition to more comprehensive overhauls or life extension programs. The NPR fully recognizes this.

Our operating forces could not be effective without robust complementary capabilities including command, control, and communications systems as well as effective intelligence and planning support. Increased strategic flexibility and adaptability will require an equally robust but much more capable nuclear command and control system. The Nuclear Posture Review identifies advances in speed and capabilities in these areas as critical to improving the capabilities of our strike forces. General Myers, the Chairman of the Joint Chiefs of Staff, has similarly identified improvement in command and control capabilities as a vital component of our military's transformation. I fully support this renewed focus on improving these military capabilities. Investments in these areas are critical enablers to not only strategic forces but our overall military capability.

As the Secretary of Defense stated in his testimony last June, our military has been forced to make increasingly difficult choices between equally necessary procurement, readiness, and research and development needs over the last 10 years. Strategic forces have not been excluded from this trend. The Nuclear Posture Review recognizes this and recommends renewed investment in existing and future operating forces, supporting capabilities, and strategic infrastructure. I fully support those recommendations. Thank you for the positive steps you've already taken in this committee to provide much needed funding to improve these capabilities and for your continued support in this vital area.

NUCLEAR WARHEAD REDUCTIONS

A second key finding of the Nuclear Posture Review is the need for a measured approach to operationally deployed nuclear warhead reductions. This approach meets the President's direction and establishes as a goal the lowest number of deployed strategic nuclear warheads consistent with the Nation's national security needs. I fully support it.

The Nuclear Posture Review directs periodic assessments to evaluate the strategic environment and our progress in developing new capabilities for our strategic forces. These assessments allow us to respond appropriately to any emerging threat, dissuade any potential adversary, and provide assurance to our allies of our resolve.

BROADER DEFINITION OF STRATEGIC FORCES

The third key finding of the Nuclear Posture Review is the recognition that our strategic capabilities should not be limited to nuclear weapons alone. The inclusion of non-nuclear, and, potentially, non-kinetic capabilities into our strategic options provides a number of benefits. First, it helps to raise the nuclear threshold by providing the President with strategic options in a crisis or conflict that do not rely solely on nuclear weapons, yet still convey the Nation's resolve and determination. Second, integrating non-nuclear capabilities into strategic forces strengthens our

joint approach to developing and operating military forces. In the past, there have often been unique requirements for nuclear forces beyond those of conventional forces. Now, with technological advances, we have the potential to seamlessly integrate existing or projected enhancements to non-nuclear capabilities such as communications, intelligence flow, and precision strike to improve our strategic capabilities. The integration of what had previously been considered conventional capabilities into national strategic plans allows for the development of responsive, adaptive, and interoperable joint forces that can be employed in a wider range of contingencies. There are certainly challenges associated with incorporating non-nuclear capabilities into our strategic forces, however, the benefits far outweigh the concerns.

OPERATIONAL FLEXIBILITY

The final finding of the Nuclear Posture Review is the need for more flexible and adaptive planning in support of our strategic forces. U.S. Strategic Command is in the process of developing a more flexible and adaptive planning system that retains the rigor and expertise developed over the last 40 years, yet employs modern computing techniques and streamlined processes to significantly improve our planning capability for rapid, flexible crisis response in the face of new national security challenges. This new approach to planning will require significantly more collaboration with the regional combatant commanders as we continue to better integrate our military capabilities across the spectrum of conflict.

CONCLUSION

There are many positive results that will accrue from the Nuclear Posture Review. A comprehensive and focused assessment of our strategic posture has provided new concepts that can both allow us to reduce our deployed nuclear weapons inventory and strengthen our national security to meet this era's new challenges. This bold change in direction will allow us to begin shifting our focus from the number of launchers and weapon platforms stipulated by previous treaties and based on latent mistrust of former adversaries. Instead, we will move toward significantly lower numbers of operationally deployed nuclear weapons reflecting our new relationship with Russia and technologically transform our strategic posture from a purely nuclear focus to the broader capabilities of the new triad.

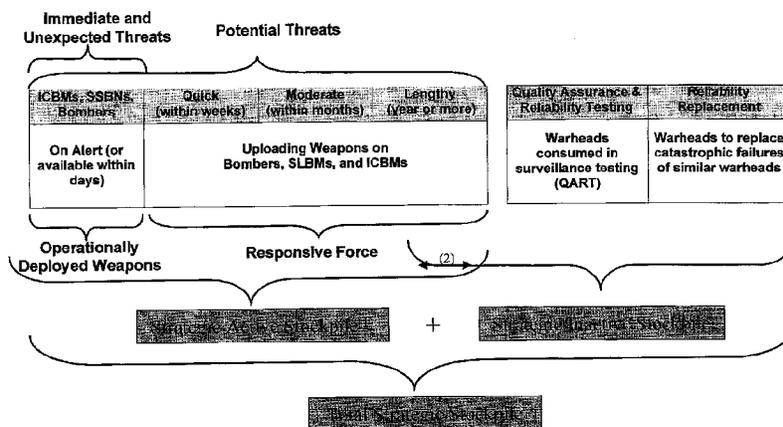
The new triad, when development is complete, will include improved strategic strike forces, active and passive defenses, and a responsive infrastructure all supported by improved command and control as well as robust intelligence and planning capabilities. Over the next decade two of the legs of the NPR's new triad, defenses and a responsive infrastructure, will be combined with a modernized strategic strike force including nuclear and non-nuclear options. This new triad can broaden the definition of strategic forces, enhance deterrence concepts against a wider range of threats, and offer dramatic improvements in the speed, accuracy, and agility of the full range of our Nation's military response.

I look forward to reporting in the future on our progress in implementing the findings of the Nuclear Posture Review as we, together, reshape our strategic capabilities to meet the challenges of this new era.

Thank you very much. I welcome your questions.

STRATEGIC NUCLEAR WEAPONS

“Work in Progress”



Note 1: Includes Logistic spares that are physically located at operational bases but are not included in the operationally deployed weapons
 Note 2: Some Responsive Force weapon stockpile categories (active & inactive) to be determined

BASIC TERMINOLOGY OF THE NUCLEAR POSTURE REVIEW

Strategic Nuclear Forces (Strategic Weapon Systems): Strategic nuclear platforms with their associated strategic nuclear weapons.

- *Strategic nuclear platforms:* (retained in the NPR)
 - 14 SSBNs
 - 500 MMIII
 - 76 B-52s & 21 B-2s
- *Strategic nuclear platform reductions:*
 - 50 Peacekeeper missiles
 - 4 Trident submarines
 - All B-1s (nuclear re-role requirement eliminated)

Strategic Nuclear Weapon: A nuclear warhead and its necessary arming, fuzing, and firing components necessary to produce a nuclear yield that can be loaded on a strategic platform.

Nuclear Warhead: A device that contains the nuclear or thermonuclear system.

Strategic Active Stockpile: Operationally deployed weapons, the responsive force and logistic spares.

- *Operationally Deployed Weapons:* Strategic nuclear weapons that are on operational ballistic missiles or on bombers or in bomber base weapon storage areas (logistic spares in bomber weapon storage areas would not be counted). Operationally Deployed Weapons are for immediate and unexpected threats.
- *Responsive Force:* Strategic nuclear weapons available for uploading on existing strategic nuclear platforms. (Note: Some weapons may be in inactive stockpile.)
- *Logistic Spares:* Strategic nuclear weapons required to meet Operationally Deployed Strategic Nuclear Weapons maintenance requirements.

Strategic Inactive Stockpile: Strategic nuclear warheads reserved for DOE's Quality Assurance and Reliability Testing (QART) and Reliability Replacement requirements. These warheads have certain limited life components removed, but are otherwise maintained to the same standards as weapons in the active stockpile.

- *Quality Assurance and Reliability Testing (QART):* Nuclear warheads retained in the inactive stockpile to replace weapons in the active stockpile withdrawn for DOE's surveillance program.
- *Reliability Replacement:* Nuclear warheads retained in the inactive stockpile to replace similar weapons in the stockpile that suffer a catastrophic failure.

Total Strategic Stockpile: The summation of the strategic active stockpile and strategic inactive stockpile.

The following are not part of the stockpile.

Retired Warheads: Warheads no longer required for military use and are not part of the active and inactive stockpiles. These warheads are awaiting dismantlement by DOE.

Dismantlement: The physical separation of high explosives from special nuclear material. Usually critical nuclear components are retained and non-nuclear components are placed in a demilitarization program.

Chairman LEVIN. Thank you very much, Admiral Ellis. Let us try a first round of 8 minutes today. Secretary Feith, your prepared statement indicates that the Nuclear Posture Review “calls for the destruction of some, but not all of the U.S. warheads removed from the operationally deployed force.” Can you tell us how many warheads will be destroyed?

Secretary FEITH. Mr. Chairman, I can’t tell you that now. That decision has not yet been made.

Chairman LEVIN. Has the decision been made to destroy some of the warheads removed?

Secretary FEITH. Yes.

Chairman LEVIN. That is very different from the briefing we got at the Pentagon, which says that the downloaded warheads will be preserved for the responsive force, that is the slide that I am reading from.

[The information referred to follows:]

Sizing the Nuclear Force

- A new approach to U.S. nuclear requirements to address the spectrum of immediate and potential contingencies
 - Operationally deployed force for immediate and unexpected contingencies
 - Responsive force for potential contingencies
 - Preplanning is essential for immediate and potential contingencies
- Goal of 1,700-2,200 operationally deployed warheads by 2012 to meet requirements of new defense policy goals
 - Force sizing not driven by an immediate contingency involving Russia
- Force structure and downloaded warheads preserved for the responsive force

Secretary FEITH. Mr. Chairman, my understanding is we are going to be preserving some of the warheads, but they will not be available for near-term use. But some of the warheads that will be reduced from the arsenal will be destroyed.

Chairman LEVIN. I just want to alert you that what you say is different from what the Pentagon slide says. It says that the downloaded warheads are going to be preserved for the responsive force. You are saying the NPR says some will, some won’t?

Secretary FEITH. Correct.

Chairman LEVIN. You don’t know how many?

Secretary FEITH. The decision hasn't been made yet.

Chairman LEVIN. Where in the Nuclear Posture Review does it say some would be destroyed? Can you quote that for us?

Secretary FEITH. I don't have it memorized.

Chairman LEVIN. Perhaps your staff can help you. Go on to identify where in the Nuclear Posture Review that says that some of the warheads that are going to be removed from the weapons, from the planes and the missiles will be destroyed. We cannot find that in the Nuclear Posture Review, by the way.

What do you expect the Russian response will be if the decision is made to retain those warheads instead of destroy them, will it be positive or negative? Do they care whether we retain nuclear warheads? Have they indicated to you or to anyone else in the administration if that matters to them as to whether to destroy warheads, that is if they would be affected by our decision not to destroy warheads?

Secretary FEITH. Mr. Chairman, we have been engaged in conversations with the Russians for months now on the concept of strategic stability in the world today. I think the same phenomenon is true on their side that is true on ours, which is that there are some people who are very open to the idea of a completely new concept of strategic stability, and a completely new relationship between the United States and Russia, one in which we are not focused on the threats that the United States poses to Russia or Russia poses to the United States, but rather recognizes the lack of hostility in our relationship. We are focused on developing cooperation with Russia to deal with threats we face in common.

Chairman LEVIN. You are making no assumptions relative to Russia's nuclear weapons delivery systems and warheads in reaching your own conclusion? Is it irrelevant to you as to what their inventory is?

Secretary FEITH. We are not sizing our nuclear force against the Russian threat as was done during the Cold War. That is a very significant change in the way we are approaching this issue.

Chairman LEVIN. Is it fair to say that it is irrelevant what the size of their inventory is?

Secretary FEITH. No. It would not be fair to say that it is irrelevant. We are doing a capabilities-based approach to sizing our nuclear forces rather than the old threat-based approach. That does not mean that the relationship with Russia is irrelevant. It doesn't mean that their capabilities are irrelevant, but it does mean that the approach that we have taken to crafting our nuclear force posture is fundamentally different from the one we took in the Cold War, where we were focused on a specific threat from a specific country and doing our own calculations based on adding up targets in the Soviet Union.

Chairman LEVIN. Looking at the number of nuclear delivery systems, bombers, submarines, and ICBMs under the 1994 Nuclear Posture Review and looking at it under the new Nuclear Posture Review, the numbers remain almost exactly the same, is that correct?

Secretary FEITH. The numbers of delivery platforms remain largely the same, but the number of operationally deployed warheads comes down by approximately 65 percent.

Chairman LEVIN. Correct. That is depending on whether or not you destroy any of those that would be available. If you do not destroy any, they would be available to be placed on those delivery platforms, is that not correct?

Secretary FEITH. Not in the near term.

Chairman LEVIN. What do you mean near term, how many months?

Secretary FEITH. It varies from system to system.

Chairman LEVIN. How many months? Two months to 6 months? Give us the range, depending on the system.

Secretary FEITH. Actually, out of concern for exactly where the line is between what's public and what's classified, I think I'd like to ask Admiral Ellis.

Chairman LEVIN. Assuming that there is no destruction, they would be available? Is that correct?

Secretary FEITH. As I said in my opening remarks, I think this issue of availability, which is another way of referring to the issue of reversibility, really bears some special attention.

Chairman LEVIN. Are you not keeping them for a certain reason, so that they can be placed on systems?

Secretary FEITH. We are keeping them for the purpose of having flexibility.

Chairman LEVIN. So that they can be placed on systems? Is that not the point?

Secretary FEITH. Mr. Chairman, there is an important point here that I am trying to make. Because we do not have the capability to produce new nuclear weapons now, and will not for many years, if we want to preserve some flexibility, even though we are going to substantially reduce the weapons that we have available for use, if we want to preserve some flexibility we are going to take warheads that are available right now for immediate use, and we are going to render them unavailable for immediate use, but we are not going to go all the way to destroying them.

Chairman LEVIN. That's true. You are just repeating what you have said already. But are they going to be available for short-term use, or for near-term use, or for long-term use? They are going to be available because you are keeping them and you are not destroying them. Let me just get to the point.

We have a 1994 NPR. We have how many B52s, 66, under yours 76. How many B2s? — 20 in 1994, how many under yours, 21. How many Trident subs? — 14 in 1994, how many under yours, 14. The totals are exactly the same in terms of delivery systems, and if you maintain the warheads in storage so that they can be placed back on those platforms, then there is no difference between your Nuclear Posture Review and the one in 1994, except that you are moving lots of warheads into storage away from their delivery systems. That is the difference.

That is your purpose. You want that flexibility. Why hide it? You want to have it both ways. You say on the one hand you want the flexibility to reinsert it. On the other hand, it is, as you put it, "exquisitely different," dramatically different from what it was. How is this dramatically different? It looks to me exactly the same, except you moved some thousands of warheads off from the delivery systems into a warehouse where they are available for reinsertion

into the delivery system should you need them. That is the purpose of your flexibility.

Secretary FEITH. They are not available in the near term.

Chairman LEVIN. I understand near term.

Secretary FEITH. In some cases it could be years before they could be available for use, and the issue of what constitutes a reduction is really what we are talking about. I do think it is noteworthy that agreements over recent decades that were praised as nuclear reductions did not do with warheads any more than we are proposing to do with warheads. I think it is also significant that the last administration talked about making reductions and hedging by putting weapons into storage, just as we are suggesting moving weapons into a responsive force. The idea that one renders weapons that are now available for immediate use not available for immediate use is highly significant. It does constitute a reduction.

The reason that delivery vehicles, which as you point out, we are not proposing to reduce, the reason that delivery vehicles were focused on in past arms control agreements was because the United States and the Soviet Union did not feel comfortable focusing on warheads—on the real issue. Because you couldn't count warheads, and since the key concept in force reduction was maintaining a balance of terror between the United States and the Soviet Union, we were focused on Soviet systems that we could verify, and so we looked not at the business end of the weapon, but at the delivery vehicle.

Now, we are not focused on maintaining a balance of terror with Russia, and we are focused on the warheads, and we are reducing them by rendering them unavailable for immediate use.

Chairman LEVIN. It's warehousing terror instead of immediate terror.

Senator Warner.

Senator WARNER. Mr. Chairman, I will yield back to our distinguished ranking member on the Strategic Subcommittee, Senator Allard, to take the balance of my time, but I want to make a little clarification on this important issue that the Chairman raises. Let us try and simplify this so that those who have not spent a lifetime in this business might get a better grasp of the problem. My understanding is that removal of a certain number of warheads to put them in storage, as the Chairman has said, is in the spirit of the agreement with Russia. It does not in any way deviate from the spirit of the agreement.

But since we have no ability to build a new weapon, if in the current inventory which is agreed upon, so to speak, with Russia, we discover through periodic testing that one of those weapons comes up with some negative result in a test, we could simply then go to the warehouse and replace it with one of the other weapons. We cannot suddenly start up a whole line to manufacture a replacement. Let us go and get one out of the warehouse and we will cannibalize those weapons in the warehouse from time to time, maybe to replenish spare parts on the ones that are maintained in the active stockpile. To me, that makes sense given the reality that we have no capability to build a new weapon.

Is that basically one of the reasons in your judgment, Admiral?

Admiral ELLIS. Yes, sir. That is an important consideration. We look at the active and inactive stockpile size, which are the issues you addressed. In addition to the operationally deployed levels would be those warheads in the responsive force drawn down from launchers or platforms to give us the flexibility to respond to future outcomes in the international environment. There are challenges that may be different from those which we expect. There are additional categories that also contribute to that overall stockpile size, logistic spares as you point out, that would be able to be inserted in place of those that had to be removed for refurbishment or maintenance. We have robust quality assurance programs with these very precise devices under John Gordon's stewardship that oversee their reliability and he uses them.

Senator WARNER. I think you have answered my question. I want to go back to my colleague here. When my time comes towards the end of this round of questions, I will go into it further. Thank you.

Senator ALLARD. Thank you, Senator Warner. I just wanted to re-emphasize what my colleague from Hawaii, Senator Akaka, has said. This is no longer a bilateral environment. It is a multilateral environment where we have threats coming from more than two superpowers. So you are talking about something in this NPR that is far different from classic arms control. It is a different world. I think we need to recognize this. I do want to compliment the administration in trying to create an environment of trust instead of mistrust, which we have relied on in the past, and I think that is the key to where we are going policy wise. I also compliment the administration on the flexibility of going from a very inflexible offensive triad to a triad that is more encompassing, that gives more flexibility and incorporates missile defense.

Now, my colleagues have talked about dismantling the warheads and you, I noted in your comments, you said we have never had a provision in any of our strategic arms control agreements with the Soviet Union or Russia that required the dismantling of warheads. Why was a decision made in the Nuclear Posture Review to defer such dismantling at this time?

Secretary FEITH. Senator, I think a large part of the answer is the need for flexibility in light of U.S. inability to produce new weapons.

Senator ALLARD. I want to make this clear for the record. We cannot produce new nuclear warheads. We do not have that capability. We have not done it for a decade, but today the Russian Federation, as I understood from your remarks, has that capability to produce a nuclear warhead today, is that correct?

General GORDON. Senator Allard, we do not today have the ability to construct and build a new warhead, if you will, from scratch in that primarily we do not have a production facility up and running to produce a plutonium pit. To be strictly technical, it would be possible as least theoretically to put together a weapon from older components in some sort of mix-and-match fashion, but that would be difficult, time-consuming, and take away significant capacity.

Senator ALLARD. Does Russia today have the capability to make a new weapon?

General GORDON. To the best of my understanding, Russia is producing new nuclear warheads.

Senator ALLARD. So there is an imbalance today in our agreements with Russia. That is something we really need to recognize. I would also like to address this question to you, Secretary Feith. The Nuclear Posture Review includes some things that we have reason to believe the Russian government likes. For example, a deep reduction in offensive weapons, and in the administration's continuing dialogue with Russian officials, how have they reacted to our NPR?

Secretary FEITH. Senator, I think there are, as you say, aspects that they like and there are aspects that they do not like.

Senator ALLARD. Have they indicated that they will pursue a military buildup in response to the recommendations in the NPR?

Secretary FEITH. Senator, they have said that they are also beginning to reduce substantially their offensive nuclear force levels. We hope both the United States and Russia are making reductions. Each is doing so unilaterally. That is what was announced when President Putin and President Bush met in November in Texas. They each announced unilateral decisions to reduce substantially offensive nuclear forces.

Senator ALLARD. Do you think with the current environment that even though we do not have provisions in that agreement where we require the dismantling of warheads it is likely we will have dismantling of warheads in the future?

Secretary FEITH. One of the issues on our side is just that, and I would ask General Gordon to address this in detail if you are interested. I don't believe we have the capability to dismantle all of the warheads that we are planning to reduce.

Senator ALLARD. That is a good point. General Gordon?

General GORDON. Senator, as I suggested in my opening statement, the capacity that exists at our facilities now, and that in fact is now increasing, is sized to handle the stockpile extension programs as we know them today. During a period of time later in this particular decade, when we have three weapons going through refurbishment at one time, we would have, I would say, very limited capacity to be able to handle a number of dismantlements. Of course, we could handle some through that period of time because there is a small reserve of capacity that is kept. As we work through that period of time in 2010, with the numbers as we understand them today, then the capacity for dismantlements would come back into play in some significant manner.

Admiral ELLIS. As General Gordon has stated, we have a capacity issue, and the life extension programs are currently the bulk of the plan we are working with for his facilities. The life extension programs are intended to ensure our stockpile remains reliable and credible and are essential to the health of the current capability. From a military perspective, if forced to make the trade between that assurance and increased dismantlement, clearly we would come down on the side of preserving capabilities in our current systems while deferring dismantlements until the capacity became available either through completion of those programs or infrastructure expansion to meet those longer-term needs.

Senator ALLARD. I'd like to talk a little bit about the budget. Are the programs required for warhead levels with the modest reductions in ICBMs, bombers, and submarine launched ballistic missiles fully funded? They are old and require steady modernization to keep them viable. Are the programs that are required for maintenance and modernization fully funded in the fiscal year 2003 budget and throughout the Future Years Defense Program (FYDP)?

Admiral ELLIS. General Gordon actually is responsible for that, but my sense is that those are precisely the issues that have been addressed in the Nuclear Posture Review to ensure that we retain that capability given the course that we have chosen, which is to keep the older systems on line with an average age approaching 20 years and now perhaps for an additional 20 years or longer, that has been the appropriate focus and the resources have begun to flow to NNSA to affect that outcome.

Senator ALLARD. In the fiscal year 2003 budget, that is being proposed?

General GORDON. Senator, was your question on warheads or delivery systems?

Senator ALLARD. Let me restate it. Are the programs required to maintain and modernize our deterrent nuclear forces fully funded in the fiscal year 2003 budget and throughout the FYDP?

General GORDON. Let me speak to the nuclear warhead portion of that. The short answer is yes. The increases that the Senate supported for the ongoing budget, coupled with the President's request for fiscal year 2003, and the commitment to be able to have program growth, and to give you a 5-year plan are all designed to modernize and make the necessary improvements to the core elements of the nuclear stockpile. So, the short answer is yes.

The long answer would give you lots of things that say our program is still wound tight, and I get nervous about lots of parts of it, but the short answer is yes.

Admiral ELLIS. I would echo the short answer that General Gordon provided in general terms, yes. The resources and appropriate attention to things such as the D5 life extension programs, the upgrade proposals, the enhancements to the communications and systems capabilities of our bomber force are in general on track and even more importantly perhaps less visible, but absolutely essential command and control linkages and enhancements to our planning capabilities to continue that level of rigor also have been properly addressed. As with all programs, there will be line item issues of concern, but in general we are very pleased, as I said in my opening remarks, with the attention that is being paid to those delivery systems and the capabilities that have to come along with them to assure their capabilities are sustained and improved for the future.

Senator ALLARD. Thank you, Mr. Chairman.

Chairman LEVIN. Senator Reed.

Senator REED. Secretary Feith, you said that the headline for this Nuclear Posture Review would be "mutually-assured destruction is dead." I am wondering why we have 8,000 total warheads in our inventory. If you are reclassifying some warheads as active and some as inactive, why do we have a triad? I think the essence of creating the triad and the number of warheads in it was driven by the fact that we had to survive a first strike and deliver a sec-

ond strike, and yet you claim we have a revolutionary change in thinking, but still we have the same total number of or roughly the same total number of warheads in inventory and the same sort of basic platforms in sea, air, and land. It seems that it might be dead but that is still the governing principle.

Secretary FEITH. Senator, I think that what we have done with the Nuclear Posture Review is create a new way of looking at the problem that goes beyond simply offensive nuclear forces, and the old offensive triad. We are on a glide path to reducing by two-thirds the operationally deployed warheads in our arsenal. Now, part of the reason that we are on this glide path is that in order to achieve what we need to achieve strategically, and handle these goals that were set out in the Quadrennial Defense Review (QDR) of assuring our allies and dissuading potential competitors, deterring and, if necessary, defeating aggression, in order to achieve those goals, we are looking at developing a set of capabilities, not just offensive nuclear weapons.

The set of capabilities that we are talking about we do not now have. They will include missile defenses. They will include other types of long-range precision strike. They will include more highly developed intelligence, and command and control capabilities. As those capabilities develop, our ability to perform our strategic missions and secure the country using offensive weapons, our ability increases to fulfill those strategic response responsibilities through means other than offensive nuclear forces so those forces can come down. That is the concept.

We are dramatically reducing our dependence on offensive nuclear weapons as the basis for our strategic security. I mean this is something that takes some time, and while we are doing this, we are doing this based on a real assessment of what the international security environment is, which is the reason that in the Nuclear Posture Review there are continual reassessments so that we do not lock ourselves in to a concept based on the assumption that we can predict the future. We are building the concept of flexibility and adaptability into our force posture.

Senator REED. Well, you seem to be saying, Mr. Secretary, that for at least the indefinite future, mutually-assured destruction is still a part of our strategic policy, so let me ask you, is it still the policy of the United States to be prepared to respond to a nuclear attack with a second attack?

Secretary FEITH. Sir, I do not want to let any misimpression stand on that point. Mutually-assured destruction is not our policy. We want a strategic force posture that is not premised on the incineration of Russia. That is not the way we are thinking about strategic stability. We do not have that kind of relationship with Russia. The relationship that we had with the Soviet Union in the Cold War is not the relationship that we have with Russia, so I hope I did not create any misimpression on this point about mutually-assured destruction.

Senator REED. It just goes back to the consequences of your review. Can we still maintain a triad? We still maintain air-, sea- and land-based systems presumably to survive an attack by someone as a deterrent factor. We maintain 8,000 warheads in our inventory. In your questioning by the Chairman, you continually

maintained that we are going to keep them there because we do not know what the future is like and because of the fact that Russia can quickly reload their systems. We have this relationship with Russia that has completely changed the strategic balance, but looking forward we cannot guarantee that the relationship will be maintained. It just seems to me that the reality is we still have to maintain a strategic force for the indefinite future. Maybe it is months, maybe it is years, depending on the world situation, which has to recognize the fact that we need to have survivable systems and warheads to make that strategy work. That seems to be what the bottom line of your review concludes.

Secretary FEITH. Senator, I respectfully disagree. Our review is not focused on Russia, as I believe your remarks were.

Senator REED. Mr. Secretary, can you tell me who you are focused on if we are not focused on Russia and why we need 8,000 total warheads, some active, some inactive? Why we need strategic missiles and land-based systems if we are not focusing on Russia? What are we focusing on?

Secretary FEITH. We are focused on the capabilities that we might need to deal with the kinds of threats that could emerge in the future.

Senator REED. Can you illustrate the types of specific threats that will emerge in the future that require the force structure you are proposing with a degree of certainty or uncertainty? What are these threats?

Secretary FEITH. There are certain types of threats that one can imagine. I understand that it is for many people a novel concept to do a force posture review on the basis of what's called the capabilities-based analysis rather than a threat-based analysis. For many years, we focused on specific threats, based on the reasonable assumption that we had an idea of what the threats we faced were and what the threats were going to be in the future. During the Cold War, we had a clear set of threats from the Soviet Union that we were focused on.

Now, what we recognize is that there are a number of countries pursuing nuclear weapons. There are a number of countries pursuing other weapons of mass destruction and missile capabilities. There are possibilities of new coalitions in the world of countries that might threaten us. There is the danger of significant changes in the current, relatively happy international strategic environment. There could be changes in Russia. There could be changes in China. There could be changes in other parts of the world. There could be combinations of countries, as I said, that we have to concern ourselves with.

When we looked at what we need to maintain a nuclear force, on the offensive side and defensive side, we listed the kinds of missions that we need to accomplish. We looked at the kinds of capabilities we may face, the kinds of capabilities we may need to counter, and the threats and we came up with in this new set of ideas that I just outlined and that we referred to in shorthand as the new strategic triad.

Senator REED. Mr. Secretary, this seems to be a very ambiguous, imprecise, and notional view of a strategy. Ultimately, maybe I do not grasp the vision. All of this leads to targeting specific installa-

tions, specific targets. I mean, that is where you end up at. You seem to have this big disconnect between specific threats to the United States, and there are many of them, and the numbers and the systems and the whole review that you are proposing. One could joke that, in assuming that changes in the political situation in Liechtenstein will lead to a potential threat to the United States, we must be prepared for that. That is hypothetically possible but at some point you have to narrow the issues down to credible believable threats. That is not coming out of your discussion.

Chairman LEVIN. Thank you very much, Senator Reed.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman. Secretary Feith, would you say that things were a lot simpler back in the Cold War? And predictable?

Secretary FEITH. In a number of respects they were.

Senator INHOFE. I was listening to your opening statement and I am glad you brought up the whole idea of MAD and how things have changed now. I know it is very difficult to answer questions, specifically questions like Senator Reed is asking, but turning it around and responding in a different way, it has been a few years now since Saddam Hussein kicked our weapons inspectors out of Iraq. Do we have any assurance, I don't mean to get into anything classified, I don't think this is, that they are not into development of a long-range missile? Do we really know?

Secretary FEITH. Senator, there is much that we do not know. We do believe it is clear that the Hussein regime remains interested in working on weapons of mass destruction capabilities, nuclear, biological, and chemical, and missile delivery systems.

Senator INHOFE. Mr. Secretary, I could have asked the same question using Iran, as I said in my opening statement, we do know there is an exchange of technology and systems between the countries that I mentioned and that immediate uncertainty is the concern. Now, you mentioned accidental launch in your opening statement. I'd like to pursue that a little bit.

I know some countries have a fail-safe system. This has always been a great concern. As I understand it, the fail-safe system is just used by the United States, China, and Russia. But an accidental launch assumes two things. Number one, that they are complying with a fail-safe system. We have no way of knowing that. There is no indication of that. Number two, we do not know what country could accidentally launch one. You want to pursue this idea of an accidental launch system of that force?

Admiral ELLIS. The concept that you describe, Senator, certainly is part of the consideration as we work forward on missile defense concepts and the like both regionally-specific and on the national side. While we have assurances as we work through the relationships with Russia, specifically, of which you are well aware, we have no near-term concerns in that regard. This also falls under the category, as you pointed out, of uncertainties with which we have to deal. So it is certainly a possibility and it is something against which we need to consider how we would best be positioned to respond.

Senator INHOFE. I think you probably agree that a policy of deterrence would not protect us in case of an accidental launch?

Admiral ELLIS. You made the point earlier about the whole concept of what is deterred by what and the types of people who might be involved in that. Clearly we are not talking about a rogue state here.

Senator INHOFE. I think that is very significant. I am going to emphasize the fact that we do not know. I used the example of August 1998. That wasn't even classified. People were talking about that and yet we misjudged that by at least 3 years, and so who's next? Who would have thought at that time that North Korea would have the capability and now we have other countries that we know are pursuing it.

Let me ask you something, General Gordon. During the last administration, I was distressed that there were compromises of our nuclear secrets. A lot of the things that happened caused these security failures, such as a policy of the then-administration on color-coded badges, doing away with those, doing away with background checks, doing away with wiretaps, all these things that were in place prior to that. What have you done specifically in these areas now to strengthen that security? I am talking about the labs and elsewhere.

General GORDON. Senator, we have taken a pretty aggressive approach to working security across the laboratories and the plant environments, everywhere from the personnel security to the physical security of the facilities, we have strengthened significantly, especially after September 11. We have a lot of people working really hard, very high visibility to in fact deter a terrorist from attempting to make a run at these plants or at these laboratories.

Within the labs themselves, we tried to get back to a blocking and tackling strategy, getting right down to the individual level on security. We began a program which we call integrated safety, safeguard, and security management where the purpose again is to get the laboratory director involved and reach down to get the individual involved. We couple that with improvements in how we do the access limitations, how we do the badging, and I think across the board we strengthen it. But the core of what we are trying to do is to try to bring individual responsibility back into that with appropriate oversight and appropriate understanding of the responsibilities involved.

Senator INHOFE. Secretary Feith, as part of your confirmation hearing testimony, you focused primarily on ending North Korea's nuclear and ballistic missile programs. Even if we are successful in negotiating into these programs, they still remain a military threat to South Korea. Do you believe that there is in place in South Korea now an adequate military deterrent to North Korean aggression? They have artillery that is better than anything we have. Our Paladin is inferior in both range and rapid fire to North Korea's artillery system. What do you consider to be our state of readiness, if you will, or our ability to defend against North Korean aggression?

Secretary FEITH. Senator, I think you are right to highlight the special dangers that are posed by North Korea both at the conventional level and the threat of nuclear weapons and missiles. But, I believe that we have the forces in place and the general capabili-

ties to defend South Korea. Nobody in North Korea should make any miscalculations about that.

Senator INHOFE. Well, there is a fine line between discussion here today and what can come in terms of the threats that are out there. I am sure that you take all these things into consideration, too. One last question. In terms of the reduction down to the range of 1,700 to 2,200 operationally deployed weapons, the administration first of all said that they proposed a new lower number of nuclear weapons around 1,500. Where are we right now on that? I think the review is suggesting 1,700 to 2,200.

Secretary FEITH. Correct. I think that the 1,500 number came from the Russians, who talked about making a reduction to the level of 1,500 to 2,200.

Senator INHOFE. 1,500 is kind of a starting point and I just wanted to see where we think we are going to end up.

Secretary FEITH. As of now we think we are going to end up from 1,700 to 2,200 by 2012.

Chairman LEVIN. Thank you, Senator. Senator Bingaman.

Senator BINGAMAN. Thank you very much, Mr. Chairman. Secretary Feith, in your statement you say that we are developing a diverse portfolio of military capabilities for a new world. As part of that, do you support the design of a low-yield nuclear earth-penetrating weapon?

Secretary FEITH. The special difficulty posed by deeply buried and hard targets is something that is very much at the core of our minds. On the specific question you asked, I think I prefer to defer to General Gordon.

General GORDON. With respect to what is required, we will again go back to the military on these issues. The emphasis that is in the Nuclear Weapons Council consideration now is actually for a more standard delivery system called an enhanced penetrator which would go in and basically make use of the existing warheads. We will be talking about that over the next few years.

Senator BINGAMAN. I guess the more general question is are we pursuing design, as you plan your activities here?

General GORDON. I know of no such work, planning or working, directly on such a system.

Senator BINGAMAN. There is no design work on any low-yield nuclear weapons at this point?

General GORDON. There is no design work at all going on in nuclear weapons. Now people sit around and talk about things and think about things and look at what's been done in the past, but there is nothing that you can define as a program that constitutes that. There are efforts thought about, talked about, considered towards the possibility of low-yield systems. Many people who consider these issues with respect to hard targets find that a system may not be effective.

Senator BINGAMAN. So, Secretary Feith, is it fair to say that when you talk about a new diverse portfolio of military capabilities, you are not talking about low-yield nuclear weapons? That should not be part of what we are pursuing in that portfolio?

Secretary FEITH. I had various other things in mind, and particular things that I mentioned to Senator Reed a few minutes ago.

Admiral ELLIS. If I might, Senator, to build on General Gordon's statement, there is no intent, there is no process of which I am aware or we are aware, as members of the Nuclear Weapons Council, to produce a new design. There are some concepts that have been discussed as he mentioned, modifications of existing systems to support the targeting of deeply buried targets. But no new design elements have begun.

Senator BINGAMAN. So the item on page 20 of the NNSA budget that came to us the other day that says "support an advanced concept initiative, a phase 6.2/6.2A study for the robust nuclear earth penetrator (RNEP)," which will also maintain weapons design capability, is false?

General GORDON. As I just suggested, we are coming to talk to you in a couple of weeks on that. That is considered a modification of existing systems.

Senator BINGAMAN. That is a modification, but there is no design work going on at the present time. That is not a design of a new system?

General GORDON. When we start this program called 6.2/6.2A it leads to what we formally call design. We are coming up and chatting with you about that. To get to that point, one considers where we are on this issue, and there is significant discussion about developing an RNEP for the military. We are pursuing through the Nuclear Weapons Council a program that does that, modifying a system that does that.

Senator BINGAMAN. Let me just state for the record, Mr. Chairman, I just think we should concern ourselves if there is going to be a new nuclear weapons design pursued. That is contrary to the policy of previous administrations, and if there is a change in that policy, I think we need to have a discussion about it and a chance to express our views.

General GORDON. Without question. We will be coming in consultation on that point, but I would again say with respect to the nuclear weapon portion of it, we envision it as a straight modification of an existing system that is out there now, packaged in a way that could penetrate.

Senator BINGAMAN. Secretary Feith, in response to Senator Reed's questions, you were talking about how there could be changes in Russia, changes in China. There could be new threats. I agree with all of that, and I am certainly not arguing that we should eliminate our nuclear deterrent. But I do not know if any of what you said, changes in China, in Russia, in other parts of the world, any of that justifies maintaining 8,000 warheads in our inventory. I mean, we have the capability even if we get to the 1,700 or the 2,200 level, whatever it winds up being, that is certainly an adequate deterrent against any of our potential adversaries for the indefinite future. Wouldn't you agree with that?

Secretary FEITH. I do agree that if we get to the 1,700 to 2,200 level that we envision, and we get there developing the other capabilities that are part of the concept of the Nuclear Posture Review, that that will be adequate.

Senator BINGAMAN. But even if we do not develop the other capabilities, 1,700 nuclear weapons aimed at you is a pretty good deterrent, is not it?

Secretary FEITH. We think, as I said, we have tried to broaden the analysis of what we need as the deterrent beyond the issue of offensive weapons only. So it is the package. If we have the right package, then that number of offensive systems is adequate.

Senator BINGAMAN. Let me just be clear that I have trouble with this shift from threat-based to capabilities-based assessments. I have been here on the Armed Services Committee 20 years now, and always before the defense budget was justified on the basis of potential threats. Now it seems like since the threats have substantially diminished, the military threats I am talking about, not the threats of terrorist activity, but military threats of the traditional type, since those have substantially diminished, we are getting an explanation that we still need what we had before, but now it is because it is going to be capabilities-based.

I just wonder what the reaction would have been had President Truman come out with that concept at the end of the second world war and said okay, we know our adversaries have lost their capability of threat but we are going to maintain our military expenditures at the same level because we have shifted to a capabilities-based approach rather than a threat-based approach.

Secretary FEITH. Senator, we do not believe that we should retain everything that we have had. I have been calling attention to the fact that we are talking about very substantial reductions in our nuclear forces.

Senator BINGAMAN. Deployed?

Secretary FEITH. In our operationally deployed warheads, absolutely. It is quite clear that a large part of the discussion that we have had this morning is a debate over what one is willing to credit as a reduction. We can be completely open on that point.

In the traditional Cold War arms control debate, nobody debated that nuclear forces were reduced, even though warheads were not destroyed. We are talking about substantial reductions even though the warheads by and large are not going to be destroyed, and we call what we are doing a reduction because we think it is highly significant that we are going to be reducing the number of weapons available for use.

I think that the difficulties that you have said that you have in dealing with a capabilities-based approach versus a threat-based approach, I can sympathize with. This is quite a different concept on how to assess our requirements, and I don't mean to suggest that it is obvious and that anybody should immediately be able to see what it means. It has taken a lot of work within the Pentagon to develop this type of assessment.

The reason that we have decided to shift to this capabilities-based approach, though, is something that I think we all can understand, at least the motivations for it I think we can all understand. We are dealing with a world now where the threats, and this is something that this committee and Chairman Levin in particular have been in the forefront of highlighting, the whole issue of emerging threats, new threats coming in, new forums from new quarters.

The United States needs capabilities to deal with that. We cannot know, and if you look at where we have used military power over the last decade, let us say, in none of the places where we

have used military power over the last 10 or 12 years did we expect to be fighting the kinds of wars we fought. We have been surprised continually.

At some point, it became clear that we should plan to be surprised. We should plan to deal with threats that we cannot now identify as specific types of threats from specific parties from specific geographical locations. So what we have done is we have said we cannot predict precisely where the threat is going to come from, but we can because we know something about technology and we know something about capabilities of potential adversaries we are certain we are going to confront certain capabilities. We need to respond to the capabilities that our enemies might have. The alternative to the approach that we have actually adopted is to go back to the guessing game of trying to guess which threats we are going to have to deal with, but I think recent history should have made us all modest about—I mean, humble, I think, is the proper word—about our ability to guess what specific types of threats we are going to have to deal with and so we are grappling with this issue. It is a very hard problem, and I certainly understand that it is not a comfortable concept. But it is an attempt to deal with the very real strategic problems that arise from unpredictable events.

Chairman LEVIN. Thank you. Before I call on Senator Warner, let me just acknowledge that when Senator Warner was Chairman of this committee, he had enough foresight to create the Emerging Threats and Capabilities Subcommittee, and it was that vision which has put us on that track and I wanted to compliment him for it and also compliment Senators Landrieu and Roberts. Senator Roberts was Chairman of the subcommittee. Now Senator Landrieu is Chairman of that subcommittee, and she has put in an extraordinary amount of work in addressing the emerging threats that you just referred to, Secretary Feith. Senator Warner, let me call on you now.

Senator WARNER. Thank you, Mr. Chairman. Yes, we did create it, but we created it with bipartisan support in which you were an integral member who with me got that done, Mr. Chairman.

I am going to stay for some period of time with this hearing. If Senator Landrieu would like to go ahead, I'd be glad to follow.

Senator LANDRIEU. Thank you, Senator Warner, I do appreciate that because I do want to ask a few questions and I do have to leave. Let me just make a couple of points that are somewhat troubling. I want to follow up on what Senator Reed and Senator Bingaman said about the difficulties posed to us when we move from a threat-based assessment which gives us at least some rationale for the crafting and designing of the defense systems necessary to give Americans the security that they deserve and move to a capabilities-based system. I think it is something that really needs a lot of discussion because what we need is a rationale that makes sure that we are crafting the kind of defenses that in fact deliver security and that we are not spending our money developing weapons against a threat that won't come, meanwhile, underfunding other defenses against threats that really might come. I think the American people are very concerned about that.

The second point I would like to make is that there is an alternative to being surprised. That alternative is to be informed, and

perhaps we have been surprised too many times in the past, and frankly, September 11 was in my opinion an unnecessary and tragic surprise. I would suggest that one way to avoid that is to be better informed and to spend some money on better intelligence, better information, and get clearer information about what the real threats are so we can prevent the deaths of thousands of innocent lives and the pain that has ensued.

The third point is that, you said on the record that in the past we reduced our warheads, but we did not really eliminate them. The truth is that we eliminated the platforms, and thus really eliminated the warheads. In the Nuclear Posture Review, we are neither eliminating platforms nor warheads. We are simply storing them, which brings me to my question. I know you are familiar with the Baker-Cutler report, which is a bipartisan report led by former Senate Majority Leader Howard Baker and former White House Counsel Lloyd Cutler, which said: "the most urgent unmet national security threat to the United States today is the danger that weapons of mass destruction or weapons-usable material in Russia could be stolen and sold to terrorists or hostile nation states and used against American troops abroad or citizens at home."

So my question to you, Mr. Secretary, is do you believe if Russia follows the example of the United States and doesn't eliminate but stores these warheads, then those warheads and their materials will remain a significant proliferation risk, exactly the problem that this report warned of? As I recall, the President referred to this in his state of the union speech, so do you agree that it is in our national security interests to reduce the risk of nuclear theft, and that Russia should eliminate its excess warheads rather than store them?

Secretary FEITH. Senator, first of all, I think that you make an important point with which I agree completely when you emphasize the role of enhanced intelligence and better information in being able to deal with threats. There is no question that not only do you avoid surprise by having better information, but if your intelligence is better and you can target more precisely the opportunity to deal with a particular target using non-nuclear weapons, for example, your security is enhanced. So there are lots of benefits that flow from better intelligence and it is an important part of our concept in the Nuclear Posture Review, i.e. that we should enhance our intelligence.

The point that you make about Russian weapons of mass destruction material I think is also an important point. I also agree with your emphasis on that as something that we need to attend to. I do want to stress that I do not think we need to attend to it in the way that we looked at U.S.-Russian military balances during the Cold War. I don't think that is the issue. I think that the issue is the kind of problem that we have been addressing not in a hostile or adversarial way with the Russians since the end the Cold War, but rather through cooperative programs such as the cooperative threat reduction (CTR) program.

The Russians have a lot of WMD material. Chemical munitions, nuclear material, and the like. There are serious concerns about the security of that material, and we have programs, the CTR program being the umbrella, to reduce the danger that those items

will be stolen or sold. It is a very important issue. I am not concerned about the complete symmetries between the United States and Russia on this point in the way we were when we were talking about maintaining a nuclear balance between us. I would point out that when you say if we do not destroy our warheads, then the Russians might not, and why if we do not should they, that we have a different set of calculations about whether we could destroy our warheads than the Russians have precisely because the Russians have a warm production capability.

In other words, if the Russians in making the reductions that they have announced that they will make did destroy their warheads, they could produce new warheads. They are in fact producing new warheads on an ongoing basis in large numbers. I don't think I can get into the numbers in this forum, but it is no big deal for the Russians to destroy a warhead because they could replace it immediately with a new production item.

We, on the other hand, have not produced a new warhead in a decade, and can and will not have the ability to produce one for almost another decade.

Senator LANDRIEU. I think this is an important issue, a very important issue that the President himself raised. I want to review the question that if we are not destroying our warheads, why do we think Russia will, and preventing these materials from the possibility of distribution to terrorists I think is just essential, and it should build on CTR, which by the way received a slight increase in the budget, but not really in any significant way.

Let me ask you this, and could you answer it very briefly. Secretary Powell testified just a few weeks ago that he expects the United States will enter into a legally-binding agreement with Russia on this issue. He wasn't sure at the time he testified what form this legally-binding agreement would take, whether it would be a treaty or some other sort of document.

What kind of binding document are you looking for, what kind are you envisioning? Will this document cover mutual reductions in warheads, and what is a legally-binding document that is not a treaty?

Secretary FEITH. To take the last question first. In international law, there are the agreements that we refer to as either executive or executive-legislative agreements that are not treaties but nevertheless are considered legally binding. Now, as for what we are talking with the Russians about, we are discussing the offensive force reductions. We are talking about transparency and predictability measures that we could adopt in common. We are talking about cooperation in what we refer to as military technical fields, including missile defense. We have a wide range of discussions. I am heading off to Moscow next week, Under Secretary of State John Bolton is also heading out next week.

Senator LANDRIEU. This document that you are envisioning, some sort of executive agreement, would that ever come before the Senate?

Secretary FEITH. No. I was simply answering your question on what could be a legally binding document that is not a treaty. I wasn't saying that is what we are pursuing necessarily. We are pursuing agreements, multiple agreements with the Russians on

all of those topics that I mentioned. When we achieve the agreements, and we are confident we will achieve agreements with the Russians in this whole area of strategic forces, depending on what it is we can agree on, we would decide what is the appropriate form for the agreement. We are perfectly open if we can achieve an agreement that warrants it to have it be a treaty, but depending on the nature of the agreement we will decide what the appropriate vehicle is.

Senator LANDRIEU. It hasn't been decided yet?

Secretary FEITH. We certainly recognize the important role of Congress in general and the Senate in particular in these matters.

Senator LANDRIEU. Thank you. Thank you, Mr. Chairman. Thank you, Senator Warner.

Chairman LEVIN. You are quite welcome, Senator.

Senator Warner.

Senator WARNER. Before the Senator leaves, I think she made a good point, that it would be very wise to involve Congress in a momentous decision like this. Do not get lost in all the little technicalities of this thing. Just go back and brush off some of the very fine guidance the Senate receives periodically from Senator Byrd on how we are a co-equal partner when it comes to matters of national security, the executive and legislative branches. I think that is a tradition that has to be carried through from administration to administration.

I thought, Secretary Feith, in response to Senator Bingaman's inquiries, that you spoke very clearly on our strategic posture and I believe this document, the NPR, is an excellent one. It presents a very creative approach to this exceedingly important subject, and I agree we have to plan for the uncertainties in the world. I look back to when I was privileged to be at the Pentagon sitting there at the table many years ago and coming before Congress and seeking the authorization to sell F-14s and cruisers to the Shah of Iran. Indeed the F-14s did go. That was the top-of-the-line system that we had in this Nation at that time. Indeed the cruisers were contracted and under manufacture, and then overnight that government collapsed. The government that replaced it poses threats to us, as our President pointed out here just recently to Congress and the whole free world.

I can also remember that a congressional delegation of distinguished senators went to Iraq, very shortly before Iraq invaded Kuwait, and they came home and extolled the virtues of Saddam Hussein and Iraq. Within months, war broke out. We have to be ever-vigilant, and there is no category of weapons that requires greater scrutiny or more careful review. I think as a Nation we are very fortunate to have two experts, one current active duty, one distinguished retired military witness, who are assisting you, Secretary Feith, the Secretary of Defense, the Secretary of Energy, and the President as we formulate these important decisions.

This brings me to the subject that I am always concerned about. When I was Chairman, we had the Comprehensive Test Ban Treaty come before the Senate. We had at that time a series of hearings to fully inform the Senate and the American public about the status of our nuclear weapons stockpile. So we, together with Senator Levin, put together three hearings on this committee, and if I may

say, those hearings provided the foundation for the debates in the Senate and in the Senate's eventual decision not to approve the treaty.

In those hearings, the directors of all the national labs came forward. These are scientists and persons that are not involved in politics and so forth. Their purity was in the science of the day. So my first question is for you, General Gordon. In that debate, the lab directors said that we simply were not moving as quickly as we should with regard to replacing actual testing of nuclear weapons to determine their viability and readiness with the SSP, and the projections for putting in place SSP varied from several years to even one decade or more into the future.

Our inventory is aging, and the scientists determined at what point our stockpile may not be perceived as actually credible. Now, there are two aspects to maintaining the stockpile which are equally important: One, any adversary has to believe that the stockpile is ready to retaliate and should be able to deter and then retaliate, if necessary, the good Lord forbid. But they have to perceive that we have that ability.

Often we forget that those weapons, by and large right here at home in the United States of America and its various installations, are protected by the men and women of the Armed Forces and the civilians who are entrusted with handling them, and they are owed a certification that those weapons are safe. The communities that embrace these installations are owed a certification that those weapons are safe to handle. So General Gordon, bring us up-to-date on the Stockpile Stewardship Program, the progress being made in your judgment on it, and what sort of timeline you see in that vast system of computers that basically can replace the actual testing which again in earlier years was I think safely done underground to verify the reliability, safety, and security of our stockpile.

General GORDON. Thank you, Senator. I would report that the Stockpile Stewardship Program is really going well. But, on the other hand, I cannot tell you for certain that we would ever not need to test. I just simply cannot do that.

Senator WARNER. Let us be careful when we use the word test.

General GORDON. Underground nuclear test.

Senator WARNER. Yes. Let us talk about actual testing versus evaluation with the equipment that is being used in the Stockpile Stewardship Program.

General GORDON. In fact, I would suggest that the Stockpile Stewardship Program is really an experimental program more than it is a computer program because what we are doing is testing pieces and parts, and there is plutonium that is tested in sub-critical underground tests today, and we have learned more about plutonium. There are tests of every component that is inside the system. There is surveillance of every component that makes up a weapon. So that portion of it is going, I would say, quite well.

We continue as we look at our stockpile to find problems with it. Some of it is aging. Some of it has what we tend to call birth-defects. We are finding things we never knew about before because of improved tools that we have been able to develop over the last several years. We know how to fix those problems and I suggested in my opening statement we know how to fix those well enough

that we do not foresee, at this hour, at this day, a need for a test. I can't predict when there would be one.

On the other hand, I wouldn't be so bold as to sit here and tell you that we would never be in that position or that the Stockpile Stewardship Program would somehow be a failure if we had to test. It might be a very successful program if we found out that we had to do a test. So, broadly speaking, we are making progress in all the areas we want to for the long term, with our computer capabilities, with the sub-critical underground test programs that we have continued to conduct, and with the large machines that we are building that will enhance our ability to understand the physics in even greater detail. But it is a bit of a risk to then say that SSP can keep us from ever reaching a testing situation.

Annually, we take a rigorous process that is open, and take a hard look at where we are on the system, on each and every weapons inspection. We look at it on a rigorous basis in which we render results in a report to the President on whether or not there is any indication that we need to test. That looks at each weapon and each system. That involves not only the lab directors, the NNSA, and the Secretary of Energy, but also the Department of Defense and the CINCPAC.

I am broadly satisfied with the progress we are making in SSP, I think we are doing about all we can. There remain issues. There remain questions and frankly, every day, to state the obvious, the 20-year-old weapons are a day older. The plutonium is getting old.

Senator WARNER. The lab directors were very gracious, forthright, and honest with their views. It is important for you to state today that the stockpile as you understand it is safe, that it is credible, and that it meets the goals of this country in terms of our strategic posture.

General GORDON. I agree. I stated that in my opening statement. The stockpile as we know it today is safe. It is reliable, and we are aggressively pursuing the aging defects that we know are there. But they do not affect the safety of the systems.

Senator WARNER. What number of years do you feel are left before all these components of the Stockpile Stewardship Program come together to constitute an effective substitute for actual testing?

General GORDON. I do not want to be cute with you, sir. The idea that you could in 5 years or 10 years from now say I would never have to go back to testing, I don't think I can do that.

Senator WARNER. To achieve scientifically the best substitute attainable for an actual test?

General GORDON. We are on a 7- to 10-year cycle for the complex, the long-term science programs that come in as we know them today, the computing, the large programs, and the refurbishment of the complex so that we could handle materials, that is the time frame we are talking about.

Senator WARNER. That will happen maybe a decade hence?

General GORDON. Yes.

Senator WARNER. Admiral Ellis, I would ask you the same question about the stockpile because you have to, as our strategic commander, tell the world that the stockpile is safe and effective and

it can be deployed first as a deterrent, but, if necessary, if it has to be used, it will work.

Admiral ELLIS. I can state unequivocally, sir, just those thoughts as echoed by General Gordon. It is a safe, effective stockpile, and we have great confidence in its integrity and surety over the near-term. As he mentioned, the Stockpile Stewardship Program that you just described is intended to highlight deficiencies and we are learning things every day about these weapons as we develop these tools, and General Gordon's labs and facilities are able to better discern the issues that will affect this stockpile as it ages over the next 10, 20, or even more years into the future.

It is also, I am sure, known to you that I am directed by the Secretary of Defense to do an independent assessment of the process that General Gordon just described so that we have a check and balance in that process. Even though we are both involved, each of us has a contribution that we need to make to each of those processes. Mine is identified and specified as an independent assessment. I make that assessment annually, formally, and in writing, and just as I have committed to you during my confirmation hearing, I am committed to being open and candid in that review.

Senator WARNER. He has given an assessment that it may be 10 years before SSP reaches a goal, which was to say that we can learn as much through a computer system, or we can learn sufficiently through a computer analysis of existing weapons, as we can from the actual test, and therefore, it is now the fullest possible substitute for the actual test that man can achieve through science. How do you feel about the schedule? When is that going to come?

Admiral ELLIS. Well, I agree that the timelines that General Gordon postulated for delivery of that full Stockpile Stewardship Program, a set of tools and capabilities and facilities approximates that timeline. It is also important to reinforce the point that General Gordon also made. This gives us the ability to know in much more detail and clarity what emerging problems might confront us in the stockpile.

Those problems themselves, in order to be rectified and corrected, could have the potential in a scenario to mandate that we need a test to validate the fixes and corrective actions. So the existence of a fully capable and intensive Stockpile Stewardship Program, in and of itself, as General Gordon has noted, does not guarantee that we may not find a problem that needs correction and that it is of such magnitude that it will require testing to validate the essential elements of the stockpile that we discussed earlier.

Senator WARNER. On the assumption that Russia is likewise complying, and not testing, what is the status of their system similar to our Stockpile Stewardship Program?

Admiral ELLIS. I am not aware that they have begun a program that approximates the level of rigor and scientific advances that are embodied in the program under NNSA. But General Gordon might have a comment.

General GORDON. They may not have the same set of aging problems as we do if they can keep building and replacing the units.

Senator WARNER. Do you wish to add anything, Secretary Feith?

Secretary FEITH. No, sir.

Senator WARNER. Thank you, Mr. Chairman.

Chairman LEVIN. Senator Sessions.

Senator SESSIONS. I think we need to try to get our thinking clear on this very important subject. Some media commentators always think in terms of negotiations. We reach agreements on all these issues, but I think we have to recognize that we are a great Nation. We have saved liberties in the Middle East by stopping Iraq's activities. We have preserved freedom in Kosovo. We have liberated Afghanistan from an oppressive regime.

The question is are we preserving a nuclear capability for our Nation that will allow us to project our military power, deter attacks on the United States, and defend us, if need be. I think that is what we need to be wrestling with. I notice in the open version of the NPR that 12 nations now have nuclear weapons, 28 have ballistic missiles, 13 have biological weapons, and 16 have chemical weapons, so we have, despite our best efforts, a history there that would indicate to us that we are not going to be able to stop those activities and that the rest of the world is not going to stop.

We are talking about a two-thirds reduction in our operational nuclear capability. I think that is significant, Secretary Feith. I think you are exactly right. I am troubled by your testimony that clearly states that we do not have manufacturing capabilities, whereas the Russians do. Let me ask this: Are there other nations that have a production capability for nuclear weapons?

Secretary FEITH. I believe that of the countries that have nuclear weapons, we are the only one that does not have the capability to manufacture new nuclear weapons now.

Senator SESSIONS. So the 12 that have it are all in production capability, all have a capability to produce. I think that is a very important factor. I notice here in *The Washington Post* this article that we are talking about a binding deal with the Russians on this.

[The information referred to follows:]

The Washington Post

February 06, 2002, Wednesday, Final Edition

SECTION: A SECTION; Pg. A15

HEADLINE: U.S. Now Seeking Binding Deal With Russia on Nuclear Arms

BYLINE: Peter Slevin and Walter Pincus, Washington Post Staff Writers

Secretary of State Colin L. Powell said yesterday that the United States is seeking a legally binding agreement with Russia to reduce nuclear arsenals, a change from the Bush administration's earlier desire for an informal understanding between the presidents of the two nations.

The administration has not resolved an internal debate about the form a pact would take, but Powell, in testimony before the Senate Foreign Relations Committee, mentioned the possibility of a treaty or an "executive agreement" that Congress could debate and approve as a joint resolution. Such an arrangement would state the nations' intentions and verification procedures without being specific.

The drive to establish formal terms is a product of Russian President Vladimir Putin's insistence on a binding agreement and the administration's desire to build what Powell yesterday termed a "new strategic framework" with Moscow. Powell noted the personal chemistry between President Bush and Putin and said there had been a "most dramatic change" in relations between the nations. U.S. and Russian officials are working on a document for the presidents to sign in May, when Bush visits Russia. At their summit in the United States last November, Bush pledged to reduce the number of deployed U.S. warheads from today's 6,000 to between 1,700 and 2,200 by 2012. Putin responded with a vow to cut two-thirds of the Russian arsenal, to about 1,500 warheads.

But Putin has said the reductions must be verifiable, irreversible and legally binding, despite the opposition of some senior administration officials to strict, detailed international agreements. The Russian leader also wants a pledge that warheads taken from service will be destroyed and not stored for future use, as the Bush administration has proposed.

Powell presented a review of U.S. foreign policy to the Senate panel one day after the White House submitted a \$ 25.4 billion international affairs budget to Congress. He sought money for 399 more diplomats, better embassy security, more sophisticated computers, increased U.S. broadcasts abroad and peacekeeping sponsored by the United Nations.

"As we have seen in Afghanistan, it is often best to use American GIs for the heavy lifting of combat and leave the peacekeeping to others," Powell said, reflecting the administration's decision to help train an Afghan army but commit no soldiers to peacekeeping duties.

Powell spoke positively about relations with Russia and China while saying that the administration repeatedly conveys its frustration about human rights and weapons proliferation to the leaders of both countries. He also noted that a number of "new friends" in the fight against the al Qaeda terrorist organization have poor human rights records. He named Uzbekistan, Turkmenistan, Tajikistan and Kazakhstan.

The United States has based forces in Uzbekistan, as well as Kyrgyzstan, for the war in Afghanistan as part of an expanded presence in Central Asia. Yesterday, the foreign minister of Kazakhstan, Kassymzhomart Tokaev, told Washington Post reporters and editors that talks are underway about stationing U.S. forces at an air base in his country. He said the troops would be available for humanitarian and military operations.

Administration officials said last night that the United States and Russia have not resolved the terms of a nuclear weapons agreement, with the Russians intent on a signed document containing detailed verification procedures. One reason for Russia's sensitivity is Bush's recent decision to withdraw from the 1972 Anti-Ballistic Missile Treaty despite Russian objections.

Powell testified that the United States understands the importance of codifying the missile agreement and has been examining "different ways in which this can happen." He explained "it can be an executive agreement that both houses of Congress might wish to speak on, or it might be a treaty."

The internal discussion has focused on three different levels of agreements, according to arms control experts from previous administrations who have been informed of the debate.

One approach would be an executive agreement, signed by Bush and Putin, in which both countries would separately state their targets to cut their offensive strategic forces.

A second possibility is a treaty that would formalize verification of the reductions both sides intend to undertake, the sources said.

A third option would be a presidential proclamation designed to reassure Moscow about U.S. intentions in the area of missile defense, according to the sources.

Senator SESSIONS. I have the same concern about this issue that I did about the ABM Treaty with Russia.

Hopefully, we will continue our friendship with Russia. Hopefully, it will grow and we will be friends and have a degree of harmony we have not had in many years with the Russians. But is there not a danger that if we reach an agreement with Russia, an agreement not to test, an agreement not to develop new weapons, that this does not stop any of the other nations who may not be a party to that agreement from increasing their capability, Secretary Feith? Would it bind any of the nuclear-weapons countries if we reached an agreement with Russia to stop them from producing more?

Secretary FEITH. An agreement between Russia and the United States would bind only Russia and the United States.

Senator SESSIONS. All right.

Secretary FEITH. What I wanted to say, though, is that if we can, over the coming years, transform our relationship with Russia into a cooperative one where we are not focused on threatening each other but dealing in common with them against threats that both of us face that will be a major strategic accomplishment. When we look at what we can talk about with Russians now and what we want to achieve in the way of an agreement, there are a number

of things that I think make a lot of sense for us to pursue, and at the top of the list are measures for what we call transparency and predictability because we want to make sure that when we make our nuclear policies and when the Russians make their's that we are not proceeding on the basis of misinformation or error.

It is in our interest to be transparent in these areas with them, and there are things that we are proposing to the Russians that I think would make for a useful new bilateral agreement that would promote greater visibility into each other's plans.

Senator SESSIONS. I agree. I am very desirous that we proceed to improve our relationship with Russia and reach such agreements as we can. But we are no longer in a bilateral nuclear world, are we? We have China, India, Pakistan, all in the news recently, and all of them are improving their nuclear capabilities. Other nations are moving in that direction and others would like to get in the game. If we were to take our numbers down to 1,700, or even lower, as some have suggested, would that not set a goal for some of our competitors? Wouldn't they be able to think that if we could just get a thousand nuclear weapons when we sit down at the bargaining table with the United States, then we would be a peer competitor, we would have a different relationship with them? Should we not be thinking about making sure that our adversaries realize that through technology and numbers they are not going to be able to catch up with us?

Secretary FEITH. This consideration, Senator, is part of our Nuclear Posture Review. When we talked about our strategic goals, including assuring our allies and dissuading potential competitors, I think we had in mind very much what you have just referred to, which is the danger that if we were to come down too far in our nuclear force levels, that we could be encouraging, inducing other countries to build up nuclear weapons to try to become a competitor of ours.

So one of the numerous factors that we balanced in our Nuclear Posture Review is precisely this concern. I do believe, though, that we struck a sensible balance. I do not mean to sound like a broken record, but when questions get asked about aspects of our Nuclear Posture Review either from the side that we have done too much or that we have done too little, the answer inevitably is that all of the considerations that have been raised here by all of the serious members of this committee are valid considerations. But they need to be netted out against each other and against numerous other factors that we have not really dealt with in detail here. So, I think that the whole package that we have put together in the Nuclear Posture Review addressed your concern. I would just say it is a valid concern and it is something that we want to guard against.

Senator SESSIONS. My time is up. I am not questioning the numbers that you are talking about going to because you have maintained some flexibility in that process allowing us, even though we do not have manufacturing capability, to get our numbers back up, if need be.

The delicacy of reaching an agreement with Russia that could put us in a bind that we are not now in is that it could create an opportunity for other nations to move in and try to attempt to be a peer competitor. Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Sessions.

Senator WARNER. Mr. Chairman, could you advise the committee with regard to arrangements for a closed session? My understanding is we will have one.

Chairman LEVIN. We are going to have one, if needed. I was going to ask after the next round of questions whether anyone here felt we should have one or needed one and whether any one here felt they needed one.

Senator WARNER. I would like to register my desire to have one.

Chairman LEVIN. That is fine. If anybody wants one, we will have one. Anybody could either participate in the second round or ask additional questions for the record and we will go into closed session.

Secretary Feith, I was surprised that you did not respond to Senator Bingaman's question about requirements for new weapons, including a weapon for hardened and deeply buried targets. General Gordon does work to meet the military requirements. They, the NNSA, are not supposed to be setting those requirements. So let me ask you this question. Does the Department of Defense have a requirement for a low-yield nuclear weapon for hardened and deeply buried targets?

Secretary FEITH. I do not believe that we have a requirement for a low-yield nuclear weapon.

Chairman LEVIN. Did you want more time?

Senator WARNER. Mr. Chairman, they want to consult among themselves. It could be we could ask that question in closed session in greater detail. I suggest that we could explore that question in closed session, if you want.

Chairman LEVIN. Apparently they submitted a study to us last August saying that there was no such requirement. That was not a classified study. Is there a change from that?

Secretary FEITH. I don't believe so.

Chairman LEVIN. On the capabilities approach, I assume you are looking at capabilities against something. There must be some threats you are considering, as Senator Sessions very properly points out there are different threats that could come up. It is not in the abstract to question what capabilities we want to have against what potential threats. Is that not fair?

Secretary FEITH. It is fair. I think you are right. You are looking at the kinds of capabilities that you think you might have to counter in the future.

Chairman LEVIN. The capabilities that you are countering?

Secretary FEITH. The capabilities you need to counter the capability that adversaries may develop and direct at you in the future.

Chairman LEVIN. Do those capabilities that adversaries might create and direct against you look any different from the threats that you might face? Are you not looking at potential threats when you look at what capabilities we need?

Secretary FEITH. Yes. You are of course looking at potential threats. The terminology, the shorthand expression, threat-based analysis versus capabilities-based analysis, those categories are intended to capture an important difference in emphasis. Obviously we have to anticipate certain types of threats. In the Cold War we had a much higher degree of confidence that the kinds of threats

we were going to have to deal with were going to be threats coming from very specific geographical borders, very specific people, of a much more specific nature. Now we are trying to do our planning based on the recognition that the kinds of difficulties we are going to have to deal with in the future are much less definite. One could argue we are still taking threats into account but we are not taking the kinds of definite projections about who is going to pose which threats from which quarters.

This capabilities-based approach is an attempt to deal with uncertainty. It is an attempt to deal with the unpredictability of the future. It is a very difficult problem that many people as I said, this committee in particular, have highlighted for years.

Chairman LEVIN. We call them new threats. Those would be highlighted potential threats that are new. I do not see that that is any different from what you are talking about. You have relabelled it capabilities, but in effect we have to look at potential threats and be prepared to deal with all potential threats. You can put a new label on it, call it capabilities. Strangely enough, your nuclear posture review ends up exactly the same, except you are going to park a lot of the weapons in a warehouse instead of having them in missiles, ships, and on planes. It comes to the same number of planes, missiles, ships, and the 8,000 is the same except the significant part of the 8,000 is going to be removed to storage. That is the difference.

That is not what I call revolutionary. It is different, for better or worse. So I do not see any difference, in effect, in the real world between your capabilities-based approach and the threat-based approach in terms of our nuclear posture except you propose to shift some of the nuclear weapons from the missiles and ships and so forth to storage.

Secretary FEITH. I think, Mr. Chairman, the shift to storage is a much more significant move than I think you are giving it credit for being, and I would also say that the kind of analysis that was done by STRATCOM in developing a capabilities-based approach really is qualitatively different from the kind of analysis that was focused on a specific target set in the Soviet Union, and I would invite with your permission, Admiral Ellis to comment.

Chairman LEVIN. I would be interested to hear from Admiral Ellis.

Admiral ELLIS. As the Secretary has noted, the assumption and the aggregation of those disparate potential threats, and the precision and knowing all of the alternatives that confront us is unknowable. As we have looked at the capabilities-based approach, we have looked at aggregations, we have looked at combinations and permutations. We have looked, to the extent that we can, at new threats that have not been envisioned yet and that do not exist at the current time. The references to the recent experiences of this Nation indicate the types of things that need to be considered. Not all of those are related to strategic nuclear response and that is what is reflected in the NPR. We have broadened the concept of what is strategic, to include not just non-nuclear, but also nonkinetic weapons. As we broaden the concepts and the awareness of what is deterrence, it is very clear to us that as Strategic Command and the strategic concept shift from the classic all nu-

clear MAD focus to confront the challenges of this new age, we have to be able to think and plan in those terms. We have to be able to respond more quickly than we now can in current doctrine and in current techniques. That is the wholesale new approach.

But I want to emphasize, in all fairness, that this is just beginning. The triad that is being discussed brings together these enhanced intelligence capabilities Senator Landrieu focused on and all of the other pieces, absent those that exist now, which of course, are strategic forces and some of the new and advanced conventional capabilities, have yet to be developed or fully developed. So this is a process, too, that will deliver, we anticipate, over the next decade. Clearly, we are going to make assessments on the appropriate levels of strategic forces, as this journey continues.

Chairman LEVIN. In the past the Strategic Command has been given guidance from the President and Secretary of Defense and then you based the numbers of weapons that might be needed on the guidance that you have received. Is that what has happened previous to now?

Admiral ELLIS. Yes, sir. That is certainly the case.

Chairman LEVIN. Has there been any new guidance in the past year or 2?

Admiral ELLIS. I can talk about that in more detail in the classified session. The guidance is now under development to reflect the new directions and philosophies of the Nuclear Posture Review and will be delivered in the appropriate phasing from both the President and the Secretary of Defense as the events unfold through the spring and we begin this incorporation process as we translate the Nuclear Posture Review into the operational reality.

Chairman LEVIN. Specifically, has there been guidance delivered to you previously?

Admiral ELLIS. That is correct, sir.

Chairman LEVIN. Upon which you have based a recommendation relative to numbers?

Admiral ELLIS. That is correct, sir.

Chairman LEVIN. When was that previous guidance issued?

Admiral ELLIS. That is an annual process. It was 2000, last time.

Chairman LEVIN. The year before last or 2000?

Admiral ELLIS. Yes. I am going to check on this, sir, and respond to that in the closed session.

Chairman LEVIN. My time is up. I have some additional questions. I yield to Senator Allard.

Senator ALLARD. I was reviewing that last Nuclear Posture Review, done in 1994. At that point Secretary of Defense William Perry made a presentation to the committee, and I just read with some interest his main recommendations, and there were a number of them. He stated that at that time the key thing that was then pertinent and is to this discussion today is that you must preserve options for uploading, for reconstituting U.S. nuclear forces should political relations with Russia change for the worse. So, even then, under the Clinton administration, there was a recognition that you need to have some degree of readiness.

Are we not telling Russia and the world that we are ready to take a new approach to try to assure peace worldwide, that we want to do it in a responsible manner, in a way that will make a

difference in trying to change our readiness so that we can promote peace and have some new working relationship with Russia. Do you feel that this document accomplishes that goal?

Secretary FEITH. Senator, I think you have stated the goal correctly from our point of view, and I think that we do have a reasonable chance of achieving that goal.

Senator ALLARD. I think we are splitting hairs when we talk about threats or capabilities. I respect what you are trying to say about capabilities. But the fact is we are dealing with a different world. I have to think we are splitting hairs because I see a terrorist threat out there not any different than many of our potential threats that we have from rogue nations, for example. I wondered if you wanted to comment on that?

Secretary FEITH. Senator, I am not sure I would call it hair splitting. I think that there are honest issues, disagreements about terminology. There are honest disagreements about the right emphasis, the different factors in this analysis. These are very difficult subjects. We tend to talk about them using shorthand and the shorthand strikes some people as misleading and it is useful to have a discussion like this so that you have an opportunity to elaborate.

For example, the fact that the Chairman highlighted what we call capabilities-based analysis and the need to take into account threats. Of course that is correct, and I am glad to have the chance to clarify that. The difference is that in the Cold War we were looking at a very specific set of capabilities in a particular country's hands and we were sizing our force by counting up targets in the Soviet Union. We have moved away from that.

The shorthand we use for that is to refer to capabilities-based analysis, but if you do not have a discussion like this, it is easy for people to perhaps not fully understand what you mean by some of the terminology. So I think it is a useful exercise to explore a lot of these issues and, as I said, I also think that there is utility in enriching the whole public understanding of what we are doing, to have people stressing the different aspects of what we are doing and that are in their view more or less important, I mean the issue of how important is it to destroy warheads versus render them not useful in the near term is something that is worth bringing to the surface.

Senator ALLARD. I listened to some of the questions from the majority side of this committee. I noted that some members of this committee oppose, it sounds to me like, at least two legs of your triad. We had a lot of discussion. I remember last year that they did not support national missile defense. They did not support the offensive portion of what we are talking about, the nuclear capability, so we did not plan for where we had adequate response levels as far as offensive sizing. Are we not substantially increasing the risks that other nations will view us as vulnerable, and as a result of that, be encouraged to build up their own offensive weapons arsenal?

Secretary FEITH. I think that danger and others are the reason why we view the various elements of this new triad as a package. I think it would be imprudent to make the offensive force level reductions without addressing the other elements of the program,

without developing defenses, without developing the greatest intelligence, without developing the infrastructure, without improving command and control.

Senator ALLARD. Mr. Chairman, I think we are coming up on a vote. I want to save my time for other questions. I yield back the balance of my time.

Chairman LEVIN. Senator Sessions.

Senator SESSIONS. I thank Senator Allard for making that point. You are making some real changes in our strategy with regard to national missile defense as a justification for a reduction in weaponry. In all of that, I hope you are thinking clearly. It seems to me that you are. Let us point out one thing, though, with regard to our number of weapons that I think is important. There are two ways to have deterrence or a nuclear capability. One is the number of weapons and the other one is their capabilities, how modern, effective, and how efficient they are in operation. So now we are reducing our numbers. That is correct, is it not?

Admiral ELLIS. The number of the operationally deployed weapons, yes, sir.

Senator SESSIONS. Over the last few years we ceased to manufacture new weapons and we are not undertaking any research and development of more capable weapons, as General Gordon suggested in his remarks earlier, so in two different areas that give us some enhanced capability, we have capped ourselves, is that fair to say?

Secretary FEITH. It is fair to say, Senator. I put it in the context that we made some choices as to how we are going to sustain our nuclear capability, and all of you have been supportive about sustaining that capability at some level. We decided we were not going to build new weapons because of the testing capabilities for that. We decided we weren't going to remanufacture old designs, and we elected to do away with that manufacturing capability and, as a result, the way we have chosen to sustain this capability once we have defined what this is through an aggregation of weapons, active and inactive, that will serve the needs of this Nation to sustain a strategic stockpile with all the uncertainty that the future holds over the next 10 to 12 or 20 years. That was the choice that we made. That was deemed to be in the national interest. We made an effort to sustain that effort in a manner in which you described.

Senator SESSIONS. I thank you for that. It puts us in a bit of a box, and we need to understand that. Then I think we are even further in the box, are we not, Secretary Feith, if we enter into some treaty with Russia that makes us incapable of developing new weapons or increasing our numbers? So we have to watch that as we enter into this negotiating process, do we not?

Secretary FEITH. Yes. We are conscious in the talks with the Russians of the importance of preserving our flexibility to deal with threats that could arise in the future. We intend to preserve that but we don't think that preserving that precludes our reaching certain kinds of useful agreements with Russia.

Senator SESSIONS. Just be careful. Admiral Ellis, it is great to see you again. I remember visiting you in Italy when you were directing the air campaign over Kosovo and discussing it with you. While your planes went out at night, got back in in the early morn-

ing, you did not sleep until the last plane was in, like the good shepherd you are. We had extraordinary success on that. I know you slept in the office wherever you could find a place, and you served so extraordinarily well then. I have great confidence that you will be quite successful in defending the policies that will guarantee that we remain capable of defending our national interests wherever in the world there are threats.

Admiral ELLIS. Thank you for those kind words and that confidence.

Chairman LEVIN. Thank you, Senator Sessions. Secretary Feith, you stated this morning that President Bush and President Putin agreed to substantial reductions. You did not mean to imply, I believe, that President Putin has agreed that the word reduction is the same as relocation? The Russians have not agreed to relocate warheads to a warehouse, which according to you would constitute a substantial reduction. Have they yet agreed to that?

Secretary FEITH. I think what I said, or in any event what I meant to say, is that they announced substantial reductions.

Chairman LEVIN. My question is did you mean to suggest that Russia has agreed that a relocation would constitute a reduction? That is my simple question. Have they agreed to that?

Secretary FEITH. I don't think we asked the question that way.

Chairman LEVIN. You might want to ask yourself that, if you have not, because if you are going to discuss reductions with the Russians, you are going to have to find out whether or not they believe that a relocation of a weapon, to store it, would constitute a reduction. If you are going to enter into serious discussions with them, you are going to have to resolve that issue. It is very much an issue. It is all over the press. That is an issue, yet you say they have never raised it. Is that correct?

Secretary FEITH. Chairman Levin, whoever sets the terms of the debate has the high ground, and I think it is, if one characterizes something as significant as reducing the number of operationally deployed weapons as mere relocation, it changes the debate.

Chairman LEVIN. They have not raised the issue, is that correct? This has not been a subject of discussion between us and the Russians. That is just how you characterized it?

Secretary FEITH. No. I think we have discussed it with them. We have told them that what we mean by reduction is reducing the number of operationally deployed weapons.

Chairman LEVIN. Is that what they mean by it?

Secretary FEITH. We will see. We are in the process of discussing that.

Chairman LEVIN. You do not know yet whether they mean that or not, is that correct?

Secretary FEITH. I do not know for sure where we are going to wind up on that issue.

Chairman LEVIN. That wasn't my question. Not where we wind up. Have they said that that is not what they mean by it, that is my question.

Secretary FEITH. We have had general discussions with them and told them what we intend to do. They have come back and told us what they intend to do. We are next week going to Moscow to work

out greater clarification on these things, I do not know quite how to answer this because it is not definite enough yet.

Chairman LEVIN. Admiral Ellis, from a military planner's perspective, does the continued existence of Russian MIRVed ICBMs make any difference?

Admiral ELLIS. As you look at the classic analysis of single warhead platform versus a MIRV in the old context of confrontation with the Soviet Union, clearly as you know well from your background, the considered opinion was that MIRVed warheads tended to be less stable in that context. I think the important point is that we have moved beyond that, or we intend to move beyond that, as Secretary Feith has noted. Clearly, we are moving in that direction, as you are well aware, and we can talk more about it in the closed session to address that issue in our own forces. We certainly would hope that the Russians would follow suit. I would argue that the implications of that may have changed as the staging of the relationship has moved beyond the historical context in which those concerns were first raised.

Chairman LEVIN. Would you say it is still relevant or perhaps less relevant?

Admiral ELLIS. I am not a scholar in that regard. But I think the issue, as Secretary Feith has noted, is that we are moving in a direction that best serves our national interests and we would hope that the Russians would move similarly in a direction that serves theirs.

Chairman LEVIN. Secretary Feith, executive agreements are not legally binding upon us. Treaties are. There is a difference between treaties under the Constitution and the force of law. Executive agreements do not have the force of law except on the executive who signs them. Go back. See if you want to revise your statement. If you do not, that is fine. Leave it the way it is.

Last question, Admiral Ellis, have you had any contact with your Russian counterparts?

Admiral ELLIS. No, sir. In the 2½ months I have been at STRATCOM, I have not. I have, however, had contact with those who oversee that program in an effort to scope a resumption of that at the appropriate level.

Chairman LEVIN. Are you hoping to do that?

Admiral ELLIS. Yes, sir, absolutely.

Chairman LEVIN. Do you have an answer from the people that are in charge?

Admiral ELLIS. No, sir, I do not.

Chairman LEVIN. The committee will reconvene in closed session in Hart 219 after this vote. We are adjourned until then.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR DANIEL K. AKAKA

COST SAVINGS

1. Senator AKAKA. General Gordon, in your testimony you state that "possible cost savings from having to refurbish fewer warheads for a smaller stockpile would not be realized until well into the next decade." How much will be saved by the year 2012, the time frame for the Nuclear Posture Review?

General GORDON. At this time no savings can be projected by 2012. The NPR reaffirmed the current stockpile refurbishment plans for the B61, W76, and W80, which had previously been agreed to by NNSA and DOD, including the "block up-

grade” concept, which provides flexibility to adjust the plan to evolving weapons numbers. The first block refurbishments start in the fiscal years 2006–2007 time frame, and each block lasts approximately 5 years. In addition, significant costs through the 2012 time frame are driven by the need to restore production capabilities and revitalize the infrastructure, not by the number of warheads in the stockpile, or even the number of warheads to be refurbished.

2. Senator AKAKA. General Gordon, if no cost savings were estimated, why were they not estimated?

General GORDON. NNSA is continuing to work with DOD to size the stockpile appropriately in response to the NPR. Once the force structure and the size of the stockpile are determined and stockpile support requirements are studied, cost savings, if any, will be determined. However, as I stated previously, it is not anticipated that such savings will occur until well into the next decade.

3. Senator AKAKA. General Gordon, in your testimony you mentioned that you have a serious human capital problem. Could you provide more details concerning the extent of your problem and your approach to resolving it?

General GORDON. The NNSA, like most of the Federal Government, has been faced with significant downsizing over the last 8 years. The management approach was to reduce as older workers left Federal employment either through retirement or for new opportunities outside the national security arena. As a result, the NNSA now has an average employee age of 49, with over 233 employees eligible to retire in fiscal year 2002. This trend is expected to continue well through 2006, where the number of employees eligible for retirement will approach 40 percent of the workforce. We are facing a sizable gap in mid-level positions located between entry level and senior management where technical practices and product knowledge are crucial to season and prepare tomorrow’s leaders. The NNSA re-engineering and our long-term workforce plan are focused on consolidating technical expertise, improving mobility by analyzing skill mixes, and targeting recruitment in scientific and engineering curriculums and by expanding and strengthening our ties to the university systems to improve recruitment and educational opportunities for existing employees. This activity combined with the building of NNSA career paths will foster mobility in the development of our younger employees and the leadership capabilities of our senior managers. It will also support re-training by focusing skill needs at a corporate level and bolster our diversity by expanding access to positions complex-wide. My second report to Congress on the organization and operations of the NNSA will lay out the specific objectives and milestones for reinvigorating and rightsizing the Federal staff.

TIMELY UPLOADS

4. Senator AKAKA. General Gordon, you mentioned that you will support the Department of Defense in “uploading the responsive force” and that NNSA’s tasks “must be carried out on a time scale consonant with DOD’s ability to upload these weapons.” In the Defense Department’s planning, what is considered a “timely” upload, in what condition do weapons need to be maintained in order to ensure a timely upload, and how close to launchers do weapons need to be stockpiled in order to ensure a timely upload?

General GORDON. Upload timelines depend on the delivery system to be uploaded and range from weeks for bombers, months for Submarine-Launched Ballistic Missiles (SLBMs), and a few years for Intercontinental Ballistic Missiles (ICBMs). The necessary upload time determines the warhead maintenance condition (limited-life components such as tritium bottles may have to be installed) and proximity to launchers. Since NNSA is responsible for the ground transportation of nuclear warheads and nuclear material within the U.S., including transport of warheads between DOD sites, we will continue to work with DOD to assure that longer-term warhead transportation needs, including potential depot storage of responsive warheads, deriving from the NPR can be met.

RESPONSIVE FORCE DETERRENCE

5. Senator AKAKA. Secretary Feith, the Nuclear Posture Review’s theme is that we should base the number of nuclear weapons on what we need rather than on what others have. At the most, what we need is to deter a nation with a small nuclear arsenal. How does a responsive force of thousands of weapons address this

need, even if the number of nations with small nuclear arsenals doubles or triples in the next 10 years?

Secretary FEITH. The NPR examined the requirements for operationally deployed nuclear warheads in light of the defense policy goals identified in the QDR. These goals are assurance, dissuasion, deterrence, and defense (i.e., defend against and defeat aggression). The NPR's conclusions with regard to the overall requirement for the operationally deployed force informed the President's decision to reduce U.S. strategic nuclear warheads by approximately two-thirds, to a level of 1,700–2,200 operationally deployed warheads, by 2012. Defining these requirements involved both quantitative analyses and considered judgments.

Using a capabilities-based approach, the NPR sized the operationally deployed force and established requirements for the strategic force structure according to:

- the requirements judged necessary to assure friends and allies;
- the requirements judged necessary to dissuade potential opponents;
- the requirements to deter potential opponents;
- the requirements to defend against and defeat an opponent if dissuasion and deterrence fail;
- the need for adaptability and flexibility in an era of uncertainty and surprise; and,
- the need to preserve a force structure that can be reconstituted to provide a responsive capability for dissuasion and the deterrence of potential contingencies.

Based on these considerations, the NPR concluded that a diverse force structure of ICBMs, bombers, and SSBNs should be preserved, and that 1,700–2,200 operationally deployed warheads on a force structure that could be reconstituted efficiently would be adequate to meet these requirements.

However, we can not now know with absolute precision what the requirements for operationally deployed nuclear forces will be a decade from now. Many of the factors that will contribute to determining those requirements, including, for example, the threat environment, are dynamic and cannot be predicted with the precision necessary to identify the specific number of operationally deployed nuclear warheads that will be required in 2012.

The NPR also concluded that we must maintain the capability to reconstitute our nuclear capabilities in the event changes in the international security environment warrant it. It is important to note that our consideration of the deterrence requirement for operationally deployed nuclear forces excluded any immediate contingency involving Russia. As the non-nuclear strike capabilities, defensive capabilities, and responsive infrastructure of the new triad are fielded, the requirements for operationally deployed nuclear forces may be further reduced.

RESPONSIVE FORCE: RUSSIAN REACTION

6. Senator AKAKA. Secretary Feith, if we retain a “responsive force” of thousands of warheads, we should assume that the Russians will do the same. How will we confront the expanded proliferation risk of the stored Russian warheads that would have otherwise been dismantled?

Secretary FEITH. We do not believe that U.S. retention of a responsive capability will cause Russia to retain additional warheads. Russia will continue to deploy and maintain the number of warheads it deems prudent to meet its security requirements. We should not expect Russia to mirror U.S. behavior. In fact, Russia has an entirely different philosophy with respect to the maintenance of its strategic stockpile. For example, although the U.S. stopped manufacturing new nuclear weapons a decade ago, Russia continues to manufacture new nuclear weapons while dismantling old ones every year.

[Deleted.]

The U.S., on the other hand, currently has no nuclear warhead production capability and we are several years from developing one. As the only recognized nuclear power that does not have the capability to produce new warheads, we have an obligation to our future security needs to ensure that any reductions in strategic nuclear warheads are handled in a responsible and responsive manner.

Furthermore, DOD is already addressing the proliferation risk of stored Russian nuclear warheads by working closely with the Russian Federation to improve the security of Russian nuclear weapons in the Cooperative Threat Reduction program. Under applicable international agreements, we are working with the Russian Ministry of Defense (MOD) to enhance the security of nuclear weapons storage sites that hold both tactical and strategic warheads. We also are working together to improve the security of warheads during transportation. In recent years, we have pro-

vided “quick fix fencing” and other equipment for storage site improvements, inventory control systems, personnel reliability and safety equipment, emergency response equipment, and guard force equipment. We also conduct railcar maintenance, and our assistance has helped reduce MOD’s response and recovery times to respond to nuclear accidents or incidents.

7. Senator AKAKA. Secretary Feith, is it in our national security interests to encourage a Russian responsive force, rather than weapon dismantlement?

Secretary FEITH. Russia already possesses a responsive capability inherent in its continued manufacture of new nuclear weapons and delivery systems. Because the United States is not producing new nuclear weapons and lacks the ability to do so, our only means of maintaining a responsive capability is to store existing nuclear weapons. Naturally, we plan to dismantle warheads we no longer need and encourage the Russians to do so as well.

Russia’s maintenance of a large inventory of non-deployed nuclear warheads is driven more by the nature of its infrastructure than a desire to match U.S. warhead inventories. Russia’s philosophy for maintaining its nuclear forces is significantly different from that of the U.S. Russia’s nuclear warheads have a relatively short shelf life, so it maintains a large active complex to produce new warheads to replace warheads whose service life has expired. U.S. nuclear warheads, on the other hand, have a much longer shelf life and, since we have no warhead production capability and are at least several years from developing one, our responsive capability relies on the retention of warheads.

[Deleted.]

THE NPR IN THE CONTEXT OF ARMS CONTROL

8. Senator AKAKA. Secretary Feith, rather than the dire predictions in the 1960s of large increases in the number of nuclear states, the number has actually declined over the past 30 years. Do you feel that our continual reliance on nuclear weapons, as outlined by the Nuclear Posture Review, undermines the global trend away from nuclear weapons?

Secretary FEITH. In 1972, 5 states had nuclear weapons programs; 9 states possessed ballistic missiles; and 10 states possessed chemical weapons. Today, 12 states have nuclear weapons programs; 28 states possess ballistic missiles; and 16 states possess chemical weapons. The United States cannot predict with confidence what nations, combination of nations or non-state actors may pose a threat to our vital interests or those of our allies well into the future. However, we are likely to confront one or a combination of adversaries armed with a wide range of capabilities, including nuclear, biological, chemical, and other advanced weapons and the means to deliver them over a long range. In this context, the Nuclear Posture Review concluded that nuclear weapons would continue to play a critical role in the defense capabilities of the United States, its allies, and friends. They provide credible military options to deter a wide range of threats including WMD and large-scale conventional attack.

The Nuclear Posture Review shifts planning for our strategic forces from the threat-based approach of the Cold War to a capabilities-based approach. As the non-nuclear strike capabilities, defensive capabilities, and responsive infrastructure of the new triad are fielded, the requirements for operationally deployed nuclear forces may be reduced beyond what we can now foresee. If so, the reductions path announced by the President may prudently be undertaken more rapidly and/or deeper reductions may be possible.

QUESTIONS SUBMITTED BY SENATOR BEN NELSON

THE U.S. STOCKPILE: LOWEST NUMBER

9. Senator BEN NELSON. Secretary Feith, last summer in testimony before the Strategic Subcommittee, Admiral Ellis’s predecessor, Admiral Mies, stated that to maintain a “viable nuclear triad,” the bottom line for our nuclear stockpile should remain above 2,000 warheads—somewhere in the neighborhood of 2,200. President Bush has said that the bottom line could drop as low as 1,700. Which figure is correct?

Secretary FEITH. The two statements are generally consistent. As the NPR indicates, the total number of operationally-deployed nuclear warheads is a subset of the total number of weapons in the stockpile. We are maintaining nuclear weapons in storage in part to address the issue Admiral Mies raised, as well as to maintain

a responsive capability should developments in the international security environment warrant re-deploying some weapons. The final number of nuclear weapons in the U.S. stockpile has not been determined.

Based on these considerations, the NPR concluded that a diverse force structure of ICBMs, bombers, and SSBNs should be preserved, and that 1,700–2,200 operationally deployed warheads on a force structure that could be reconstituted efficiently would be adequate to meet these requirements. However, a range is necessary when attempting to identify requirements for 2012 because we cannot now know with absolute precision what the requirements for operationally deployed nuclear forces will be a decade from now. Many of the factors that will contribute to determining those requirements, including, for example, the state of the threat environment, are dynamic and cannot be predicted with the precision necessary to identify “the number” of operationally deployed nuclear warheads that will be required in 2012.

THE RUSSIAN STOCKPILE: RISKS

10. Senator BEN NELSON. Admiral Ellis, are you concerned about the risks of proliferation from terrorists or governments that support terrorists if Russia stockpiles old weapons instead of destroying them?

Admiral ELLIS. Yes, I am concerned about the risks of proliferation associated with the Russian nuclear stockpile; however, I believe the CTR program is addressing these concerns. Sometimes referred to as the Nunn-Lugar program, CTR has enjoyed broad, bipartisan support since its inception in Congress in 1994. As a first priority of CTR, the United States is helping ship nuclear warheads to consolidation and dismantlement sites to encourage their reduction. CTR is also enhancing the security of the weapons storage sites that will remain open, and is a cost-effective means to aid in the “denuclearization” of former Soviet states, to continue to promote stockpile safety and security in Russia, and help stem the proliferation of weapons of mass destruction.

11. Senator BEN NELSON. Admiral Ellis, should the United States and Russia agree to destroy their warheads?

Admiral ELLIS. The United States will dismantle retired weapons or those scheduled for retirement as approved by the Nuclear Weapons Council. From a warfighter’s perspective, it is vital to maintain a credible and reliable stockpile, so I support our current schedules for dismantlement as well as warhead life extension programs. We can prudently pursue additional warhead dismantlement programs when we successfully complete the life extension programs, or when we expand the capacity of the nuclear weapons infrastructure complex in order to concurrently extend warhead life and dismantlement, or when the United States has an adequate warhead production capability.

DEPARTMENT OF ENERGY NONPROLIFERATION PROGRAMS

12. Senator BEN NELSON. General Gordon, when you testified before the Strategic Subcommittee on April 25, 2001, I inquired about the cuts in President Bush’s fiscal year 2002 budget made to the Department of Energy’s nonproliferation programs. There were cuts of approximately \$400 million. That included the Material, Protection, Control, and Accounting Program (MPC&A), which improves physical security at Russian nuclear weapons facilities, which was cut by \$31 million, and the Nuclear Cities Initiative, a program to assist Russian weapon scientists transition to commercial positions, which was cut by \$20 million. How did these programs fare this year, and how important are they in the post-September 11 world?

General GORDON. The budget request for fiscal year 2003 is \$233 million for MPC&A. This is below the fiscal year 2002 level; however, due to the fiscal year 2002 supplemental of \$120 million, we have enough funds to accelerate significantly our MPC&A work by as much as 2 to 3 years.

Regarding our NCI and IPP programs that have now been consolidated under the Russian Transition Initiatives (RTI), we have sufficient funds in RTI to meet our goals. This is because \$10 million was recently released (late in fiscal year 2001) due to the lifting of a legislative restriction, and \$15 million was received in fiscal year 2002 from the emergency supplemental.

Since the September 11 attacks, we have developed a set of aggressive measures to accelerate MPC&A upgrades and complete them 2 years ahead of schedule. Our new schedule is to have the Russian Navy nuclear warhead sites done by 2006 and

all the MinAtom (Russian Ministry of Atomic Energy) sites completed by 2008. This program has taken on new resonance in the post-September 11 world.

September 11 also illuminates the importance of the IPP program. It is critical to prevent the adverse migration of scientific knowledge into the hands of those that would use this knowledge for their own diabolical ends.

13. Senator BEN NELSON. General Gordon, are the resources in the fiscal year 2003 budget request for MPC&A enough?

General GORDON. Yes, I fully support the President's request for a fiscal year 2003 funding level of \$235 million for our MPC&A and Second Line of Defense work. That amount—combined with the fiscal year 2002 budget of \$293 million, of which \$120 million was received as part of the emergency supplemental package—provides the program sufficient resources to accelerate its planned activities with the Russian Ministry of Atomic Energy, Russian Navy, and Russian Customs.

THE WAR ON TERRORISM AND U.S. NUCLEAR FACILITIES

14. Senator BEN NELSON. General Gordon, could you please provide information about the homeland side of our war on terrorism and address the safety of our nuclear stockpile from a terrorist threat?

General GORDON. The DOE/NNSA has a defense in-depth approach to security. This approach consists of access control, physical security systems, and protective force response. Only authorized personnel are allowed unescorted into nuclear weapons security areas which are controlled by armed Protective Force members. Authorized personnel must have a DOE "Q" clearance, be in a human reliability program (i.e., personnel assurance program or personnel security assurance program), and have a "need to know." All other personnel are under strict escort requirements and all personnel entering such security areas are subject to search for prohibited articles.

Physical security systems include barriers, intrusion detection systems, video assessment, and access controls. Protective forces provide additional assessment capability and are present in numbers sufficient to defeat the DOE's Design Basis Threat. The efficacy of the barriers providing delay, systems providing detection, assessment, and response are thoroughly modeled, assessed, and validated by the DOE/NNSA.

The DOE/NNSA also has in place contingency procedures for the recovery of a stolen nuclear weapon and maintains specialized teams that can be readily deployed to nuclear or radiological events.

In addition to physical security measures described above, the DOE/NNSA employs use control on its weapons systems. This includes: Enhanced Nuclear Detonation Safety which prevents the electrical systems from accidentally firing the detonators during accidents; Insensitive High Explosives which unlike conventional explosives are highly resistant to unintended detonation; Permissive Action Links which are electronic locks inside the weapons which prevent it from unauthorized detonation; Command Disable Features which facilitates non-violent disablement of a weapon by destroying critical components if loss of control is eminent; and Active Protection Systems which automatically disables weapons upon unauthorized tampering.

15. Senator BEN NELSON. General Gordon, what efforts and specific steps have you taken to increase security measures at our nuclear facilities?

General GORDON. Following September 11, NNSA immediately increased its security posture from Security Condition 5 (routine security) to Security Condition 2 (terrorist action is imminent). Security Condition 2 includes enhanced response capability, more stringent access controls, additional searches, and heightened awareness. We are currently maintaining security capability at our sites at Security Condition 3 (terrorist activity is more predictable) with some additional measures. NNSA also conducted a vulnerability assessment of our facilities based on the events of September 11 to determine the types of new concerns that needed to be addressed. An emergency supplemental was requested immediately after the events of September 11. These funds are being used by NNSA to increase the protective forces and address the highest priority security improvements to meet heightened security implemented as the result of September 11. Additionally, I established a Combating Terrorism Task Force to review headquarters and field actions implemented to protect our site assets.

16. Senator BEN NELSON. General Gordon, does this budget provide enough resources to ensure that our facilities remain as safe as possible?

General GORDON. As we understand the threats and requirements at this time, the total safeguards and security request of \$510 million for fiscal year 2003 fully funds the Department's current priorities. As we learn more and understand more about the threats we will continue to reshape and rework our requirements and our programs.

QUESTIONS SUBMITTED BY SENATOR STROM THURMOND

NEW CAPABILITIES

17. Senator THURMOND. Secretary Feith, in describing the new triad, you state that nuclear forces will be integrated with, rather than treated in isolation from, other military capabilities. This creates opportunities for substituting non-nuclear strike capabilities for nuclear forces and defense systems for offensive means. What new capabilities must we develop to get the same effects as a nuclear weapon?

Secretary FEITH. Advanced, non-nuclear strike capabilities, integrated with the other capabilities in the new triad, would provide a broader range of effective options for national leaders to consider than has been available in the past. By developing new capabilities, we will enable a future President to make tradeoffs among various options.

The challenge of defeating an adversary's mobile ballistic missiles illustrates these tradeoffs. At present, using existing C³I systems and conventional capabilities, it is difficult to precisely locate mobile launchers and deliver weapons on each target in a timely manner. Should a potential adversary arm such missiles with weapons of mass destruction and launch, or threaten to launch them at the United States or a major ally, it would obviously be urgent that we defeat the threat. In theory, high-yield nuclear weapons could destroy mobile missile launchers in a barrage attack, but such an attack would pose problems of its own. The Nuclear Posture Review seeks to develop capabilities that will give the United States the ability to target and defeat such weapons without resort to nuclear weapons. For example, improvements in intelligence capabilities, coupled with advanced, conventional weapons that continually cover a threat region for an extended time and respond quickly to targeting needs could be more effective and desirable for this important mission. Similarly, ballistic missile defense could help mitigate the threat posed by mobile ballistic missile launchers.

AGREEMENT WITH THE RUSSIAN FEDERATION

18. Senator THURMOND. Secretary Feith, I understand that you believe the adjustments to the nuclear stockpile should be done without negotiations since they would impede or derail the significant reductions that both the United States and Russia want. Does the administration propose to sign an agreement on the reductions? If not, why not? If we sign no agreement, what is the legal standing of any understanding we have with Russia?

Secretary FEITH. The United States is working toward an agreement on reductions of strategic nuclear weapons with Russia because the Russian government has made it a high priority. We will make the announced reductions in our operationally deployed strategic weapons whether or not there is an agreement.

Since the Russian government desires a signed document, the U.S. is willing to consider a range of agreements to promote transparency, predictability, and flexibility.

We are discussing a package of agreements with the Russians, some of which may be legally binding, some of which may be politically binding, and some of which may be statements of intent, with transparency. Substance will determine the final form of the agreement.

RUSSIAN NUCLEAR REDUCTIONS

19. Senator THURMOND. Secretary Feith, although the United States has announced that it will reduce the number of its operationally-deployed nuclear warheads, I am not certain to what degree Russia has announced that it will reduce its nuclear stockpile. Could you please provide the details on Russia's nuclear reductions?

Secretary FEITH. Unlike the United States, Russia maintains its stockpile by continually renewing it, i.e., Russia manufactures new nuclear weapons and dismantles

old ones on an ongoing basis. President Putin has stated that Russia is willing to conditionally reduce the number of its strategic warheads to 1,500 to 2,200 from its approximately 6,000 accountable warheads under START I.

The Intelligence Community estimates that deployed Russian strategic nuclear weapons will fall to fewer than 2,000 warheads by 2012, irrespective of an arms control agreement.

OPERATIONAL VS RESPONSIVE FORCE

20. Senator THURMOND. Admiral Ellis, in Secretary Feith's prepared statement, he describes the responsive force as an augmentation of the operationally deployed force, largely through the loading of additional warheads on bombers and ballistic missiles. Does the responsive force include additional force structure or is it solely additional warheads?

Admiral ELLIS. The responsive force does not include additional force structure. The responsive force is comprised of warheads that are retained to increase weapon loading on existing strategic platforms.

INVESTMENT IN STRATEGIC FORCES

21. Senator THURMOND. Admiral Ellis, the NPR calls for renewed investment in existing and future operating forces. General Myers has already highlighted the need for improved command and control capabilities. What specific improvements in the operational force are your highest priorities?

Admiral ELLIS. My highest priorities for my operating forces are full funding of Trident II and Minuteman III life extension, E-4B and E-6B command and control aircraft modernization and sustainment, modernization of our bomber communication suites, and the supporting strategic cryptographic systems. Our current air, land, and sea based strike assets will remain the backbone of our strategic capability for at least the next 20 years. Many of these assets are scheduled to remain in service well past their original design life and require robust sustainment and modernization programs in order to remain viable until planned replacement dates.

The Nuclear Posture Review calls for development of a broad spectrum of new capabilities. We must invest in new strike, command and control, and intelligence capabilities leading to the full dimensional defeat of the rapidly proliferating hard and deeply buried and mobile target sets. We must transform our strategic war planning system into a system that retains the rigors and expertise developed over the last 50 years, yet employs modern computing techniques and streamlined processes to significantly improve our planning capability. This effort is a critical element in enabling the required rapid, flexible crisis response that integrates nuclear, conventional, and non-kinetic weapons into our war plans.

FACILITY IMPROVEMENTS

22. Senator THURMOND. General Gordon, the NPR calls for improving the nuclear infrastructure to increase confidence in deployed forces, eliminating unneeded weapons and mitigating the risk of technological surprise. How does this goal translate into funding requirements for the Department of Energy?

General GORDON. Nuclear weapons will remain a vital part of the national security strategy for the foreseeable future. Indeed, the R&D and production infrastructure needed to develop, build, and maintain nuclear offensive forces is a key element of the "new triad" established under the NPR. As long as we rely on nuclear weapons, we will require this infrastructure, and talented and skilled personnel, both to ensure the safety and reliability of the enduring stockpile and to permit us to dismantle safely weapons no longer needed.

Substantial work must be completed soon to restore capabilities and capacities in time to begin refurbishment work on key warheads later this decade. Among other things, there is a backlog of \$800 million in deferred maintenance of facilities, and a need for about \$500 million per year over the next 10 years in additional investment to recapitalize the production complex. This investment does not include new construction projects (e.g., a modern pit facility) to ensure sufficient capacity and capability for future-decade stockpile refurbishments.

The condition of the nuclear weapons facilities and infrastructure will, as the backlog of required maintenance increases each year, present increased risk to the stockpile stewardship program. The majority of the facilities in the infrastructure are 40 years old; some facilities are unavailable for use. Many facilities were not designed to meet today's safety, security, and environmental standards. Indeed,

physical and cyber security requirements continue to increase particularly in light of the elevated threat reflected in the events of September 11.

Planned renovations of existing facilities will assure a capacity that will be sufficient to meet the anticipated NPR workload with a reserve capacity that would be available to fix unanticipated problems in the stockpile, respond to new warhead production requirements, or handle a potentially increased dismantlement workload (resulting from force reductions) without disrupting planned refurbishments.

DISPOSAL OF WEAPONS

23. Senator THURMOND. General Gordon, although we are currently dismantling numerous nuclear warheads, the further reductions called for in the NPR present the potential for increased dismantling. How do you plan to dispose of the additional nuclear material that will result from the dismantling?

General GORDON. The President announced in November 2001 that the United States would reduce its operationally-deployed strategic nuclear warheads to between 1,700 and 2,200 over the next 10 years. Some of the warheads removed from operational status will become part of the responsive force. Some will no doubt be retired and dismantled, but specific types and quantities are yet to be determined. Among other things, the NPR reaffirmed the earlier decision to retire the W62 warhead by 2009. All nuclear material resulting from disassemblies is, and will continue to be, considered for appropriate disposition, which may include future reuse or disposal.

NUCLEAR TESTING

24. Senator THURMOND. General Gordon, since the NPR proposes that the United States retain most nuclear weapons, it is critical that these weapons are reliable and safe. Does it also become critical that we are prepared to conduct nuclear testing?

General GORDON. Responsible stewardship requires that we prepare for the possibility of an issue arising in a warhead critical to the U.S. nuclear deterrent that will require testing to re-establish our confidence in the safety and reliability of the warhead. We take very seriously the Presidential requirement for an annual assessment of the safety and reliability of the nuclear stockpile, and, at this time have no information that challenges our confidence in the stockpile such that we would recommend a nuclear test. At the same time, the stockpile is aging beyond its original design life, and refurbishments and modernizations as part of the life extension program are underway (W87) or planned (B61, W80, W76) and will help to ensure that these systems will remain safe, secure, and reliable for an additional 20 to 30 years.

25. Senator THURMOND. General Gordon, what is the current state of our nuclear testing facilities and what will it take to reduce the current 2 to 3 years required to begin testing once a decision to test is made?

General GORDON. It has been about 10 years since the U.S. has conducted an underground test. While a number of key capabilities required for test readiness have been maintained through ongoing stockpile stewardship activities, such as the subcritical experiments program, other capabilities would have to be reconstituted. To enhance our test readiness posture, we must act now to ensure adequate staffing levels and training in critical skill areas, make technical preparations in areas such as diagnostics, maintain required facilities and infrastructure, and conduct additional subcritical experiments and test-related exercises.

The NNSA is currently engaged in a study that I commissioned to determine what steps must be taken to maintain our present capability into the future and what would be required to achieve and sustain a shorter timeframe to conduct a test. This study will be completed by 31 May 2002.

MODERN PIT PRODUCTION FACILITY

26. Senator THURMOND. General Gordon, in your testimony before the committee you stated, "The Los Alamos production capacity will be insufficient to meet future requirements for pits. As a result of the NPR, we seek to accelerate planning and initial design work to establish an MPF. Relevant activities about to begin include preliminary design, associated technology development, and initiation of the National Environmental Policy Act process." How do you plan to accelerate the design of the Modern Pit Facility when you have again deferred conceptual design?

General GORDON. Conceptual design has not been deferred again. During fiscal year 2001, and continuing into fiscal year 2002, the NNSA developed the documentation required to obtain formal approval of Critical Decision 0 (CD-0), Mission Need for an MPF. CD-0 approval is expected in April 2002. Once CD-0 is approved conceptual design of an MPF will begin immediately with a projected completion in fiscal year 2006. The NNSA will follow the baseline approved by the Energy Systems Acquisition Advisory Board and will seek to accelerate completion of the conceptual design consistent with future year budgets.

QUESTIONS SUBMITTED BY SENATOR BOB SMITH

RUSSIAN TACTICAL NUCLEAR WEAPONS

27. Senator SMITH. Secretary Feith, in 1991 and 1992, Presidents George H.W. Bush, Mikhail Gorbachev, and Boris Yeltsin announced their intention to unilaterally reduce U.S. and Russian tactical nuclear weapons arsenals by both reducing the warhead stockpiles and by eliminating entire classes of weapons. The current U.S. arsenal of tactical nuclear weapons (TNWs) has been reduced to around 1,670 warheads, and there are few concerns about the safety of storage conditions of these weapons. There have been reductions in the Russian force, but significant uncertainty remains about the size and safety of the Russian TNW arsenal, estimates of which range from anywhere between 3,500 to more than 18,000. In 1997, the United States outlined its concerns about the security of Russian tactical nuclear weapons and raised the issue in tandem with bilateral efforts to reduce strategic forces in the context of a START III framework.

More recently, NATO has expressed its concerns about the large number of Russian "tactical nuclear weapons of all types" and has called on Russia "to bring to finish the reduction in these forces announced in the 1991-1992, and to further review tactical nuclear weapons." Aside from vague references in speeches, however, little of substance has been done by Russia to clarify what it has done to address the concerns about its tactical nuclear weapons arsenal.

What is the United States doing to attain more clarity from Moscow on the status of Russian follow-through on the 1991 and 1992 Presidential Nuclear Initiatives on tactical nuclear weapons, and the status of the current stockpile of the Russian tactical nuclear arsenal?

Secretary FEITH. There are no recent official U.S.-Russian exchanges on the status of the Presidential Nuclear Initiatives (PNIs). In the early to mid 1990s, the Russian Ministry of Defense sent periodic progress reports to DOD about the elimination of tactical weapons returned to Russia from other former Soviet republics. However, these proffered Russian status reports ceased about 1995. According to the Russian PNIs, the tactical warhead eliminations pledged by President Yeltsin were to be completed by the end of 2000. In various venues, including military writings, the Russians stated in 2000 and 2001 that, except for the elimination of ground forces' nuclear weapons, their PNIs have been completed.

Moscow has never declared the number of nuclear warheads in the Russian stockpile. While bilateral declarations of stockpiles could become part of some future agreement, Russia has argued that non-strategic weapons are outside the scope of START. At this time, Russia continues to deploy a considerable number of tactical nuclear weapons.

28. Senator SMITH. Secretary Feith, what is the United States doing to ensure the safety and the reduction of Russian tactical nuclear weapons?

Secretary FEITH. The Department of Defense, through the CTR program, is working closely with the Russian Federation to prevent nuclear proliferation by improving the safety and security of both strategic and tactical nuclear weapons. Under applicable international agreements, we are working with the Russian Ministry of Defense to enhance the security of nuclear weapons storage sites that hold both tactical and strategic warheads. We also are working together to improve the security of warheads during transportation.

In recent years, we have provided "quick fix fencing" and other equipment for storage site improvements, inventory control systems, personnel reliability and safety equipment, emergency response equipment, and guard force equipment. We also conduct railcar maintenance, and your assistance has helped to reduce MOD's response and recovery times to respond to nuclear accidents or incidents. We are encouraged by the reduction and consolidation of tactical and strategic weapons in Russia by transporting warheads to consolidation and dismantlement facilities. Since the nuclear weapons transportation security project's inception in January

2000, shipments of nuclear warheads to such facilities have increased to seven or eight a month.

RUSSIAN TACTICAL NUCLEAR WEAPONS AND THE TERRORIST THREAT

29. Senator SMITH. Secretary Feith, the threat of a terrorist attack using a nuclear weapon has been more urgent as organized terrorism increases. Russia's stored tactical nuclear weapons are potentially vulnerable to terrorists or unfriendly nations that will buy or steal them. Compared to the United States, Russia lacks stringent, centrally coordinated procedures for ensuring the safety of its tactical nuclear weapons. Russia has an unspecified number of these weapons, which could pose a proliferation and terrorist threat. Tactical nuclear weapons are smaller and more portable than strategic nuclear weapons and some models could be used by terrorists without the authority of centralized command and control oversight mechanisms. What steps are currently being taken to ensure Russian TNWs are secure and will not fall into the hands of terrorists?

Secretary FEITH. The Department of Defense, through the CTR program, is working closely with the Russian Federation under applicable international agreements to ensure that tactical nuclear weapons are transported to dismantlement facilities or to central storage sites where they can be consolidated and protected along with strategic warheads. By taking these steps, we are reducing the likelihood that tactical nuclear weapons could fall into the hands of terrorists. Since the nuclear weapons transportation security project's inception in January 2000, shipments of nuclear warheads to consolidation and dismantlement facilities have increased to seven or eight a month.

30. Senator SMITH. Secretary Feith, now that the United States has a better relationship with Russia and both nations are cooperating to prevent terrorism, what is being done to address specifically the proliferation and terrorist dangers associated with tactical nuclear weapons?

Secretary FEITH. The Department of Defense, through the CTR program, is addressing the proliferation and terrorist dangers associated with both tactical and strategic warheads while in storage and during transportation. Under applicable international agreements, the CTR program addresses a broad range of safety and security measures including physical security, inventory control, personnel reliability and safety, and guard force equipment and training. Progress has been hindered, however, by the fact that the Russian Federation will not permit DOD to access its nuclear weapons storage areas in order for DOD to provide installation and implementation support. Although DOD and the Russian MOD are working on an agreement that would allow DOD site access to provide assistance in this important area, Russian law and regulations currently still prohibit such access.

31. Senator SMITH. Secretary Feith, there has been no specific mention of tactical weapons in the context of President Bush's proposed strategic nuclear reductions, nor have they been noted in any public announcements concerning the recent Nuclear Posture Review. Why have tactical nuclear weapons not been mentioned?

Secretary FEITH. The Nuclear Posture Review is quite specific as to the role of tactical nuclear weapons. The application of the capabilities-based approach to U.S. nuclear forces has resulted in a decision to transform the existing triad of U.S. strategic nuclear forces into a new triad composed of a diverse portfolio of systems. The "strike capabilities" element of the new triad is composed of both nuclear and non-nuclear weapons systems. The deployed nuclear strike capabilities include the three legs of the existing strategic triad and theater-based, nuclear capable dual-role aircraft. Nuclear-armed sea-launched cruise missiles, removed from ships and submarines under the 1991 Presidential Nuclear Initiatives, are maintained in a reserve status.

32. Senator SMITH. Secretary Feith, to what extent are tactical nuclear weapons addressed as part of United States-funded CTR and nonproliferation programs with Russia?

Secretary FEITH. The Department of Defense, through the CTR program, addresses both the safety and security of Russian tactical and strategic nuclear weapons through specific projects. For example, under applicable international agreements, we provide assistance to transport both tactical and strategic warheads to dismantlement facilities and consolidated central storage sites. Our physical security enhancements project addresses nuclear weapons storage sites in Russia that contain strategic and tactical warheads. The United States encourages Russian compli-

ance with the 1991–1992 Presidential Nuclear Initiatives by transporting tactical warheads to dismantlement sites or consolidated storage sites.

Our remaining nuclear weapons safety and security projects support all types of nuclear weapons and do not distinguish between tactical and strategic systems. These projects include inventory control, personnel reliability and safety, guard force equipment and training, nuclear weapon storage site support equipment, physical security enhancements, railcar maintenance, and transportation safety including emergency response equipment.

Progress has been hindered, however, by the fact that the Russian Federation will not permit DOD to access its nuclear weapons storage areas in order for DOD to provide installation and implementation support. Although DOD and the Russian MOD are working on an agreement that would allow DOD site access to provide assistance in this important area, Russian law and regulations currently still prohibit such access.

QUESTIONS SUBMITTED BY SENATOR JIM BUNNING

NATIONAL LABS AND PERSONNEL RECRUITMENT

33. Senator BUNNING. General Gordon, with an aging workforce at our national nuclear labs, what are we doing to put in place a program to recruit young, highly qualified personnel that will protect the legacy of our nuclear programs and transform it for the future security of our Nation?

General GORDON. The report of March 1999 by the congressionally chartered Commission on Maintaining United States Nuclear Weapons Expertise (a.k.a. the Chiles Commission) addressed this subject and developed findings and recommendations aimed at the recruitment and retention of scientific, engineering, and technical personnel needed over the long term to maintain a safe and reliable nuclear weapons stockpile without underground nuclear testing. In response, NNSA established several initiatives to ensure effective critical skills programs at each of the eight facilities and management contractors in the weapons complex. Central to each one was a focus on more effective contractor workforce planning that assesses current and projected mission needs against the existing workforce to identify gaps in critical skills, and develops strategies to recruit and develop employees to minimize and, if possible, to eliminate those gaps. We look to our contractors to develop and implement those plans, and it's our job to provide guidance and oversight on the results.

For each of our eight contractors, NNSA uses the annual performance evaluation plan in the contract to ensure that each contractor focuses on maintenance of critical skills and is held accountable for the success of their efforts. We also established a set of performance metrics with our field sites and contractors that we used to assess overall performance in the complex semi-annually.

For the two nuclear design labs managed by the University of California, Los Alamos and Lawrence Livermore National Laboratories, we established a 2-year task in the recently revised contract specifically focused on critical skills. We are now monitoring results against the plans that the laboratories developed last year.

We are convinced that, with the right amount of management attention, our contractors will be able to maintain needed critical skills and develop a new generation of nuclear weapons stewards. We and our contractors view this as an overarching requirement for current and future mission success.

PRODUCTION CAPABILITY AND A CAPABILITIES-BASED STRATEGY

34. Senator BUNNING. Secretary Feith, currently, it appears that we are the only nuclear power without the ability to produce nuclear weapons. In fact, Russia continues to produce nuclear warheads today. This being the case, explain the shift in our nuclear strategy from a threat-based strategy to a capability-based strategy when the United States has disposed of its own nuclear production capability?

Secretary FEITH. The Nuclear Posture Review recognizes that the defense infrastructure of the United States, including our nuclear infrastructure, has atrophied. One of the key elements of the new triad that resulted from a shift from a threat-based approach to a capabilities-based approach is the need to improve our R&D and industrial infrastructure. This includes the research facilities, manufacturing capacity, and skilled personnel needed to produce, sustain, and modernize the elements of the new triad as well as the supporting intelligence and command and control capabilities. Reestablishing a responsive infrastructure that can augment U.S. military capabilities through development of new systems or accelerated production of existing capabilities in a timely manner provides strategic depth. In particular,

a modern, responsive nuclear weapons sector of the infrastructure is indispensable, especially as the size of the operationally deployed nuclear force is reduced.

NATIONAL MISSILE DEFENSE AND THE NPR

35. Senator BUNNING. Secretary Feith and Admiral Ellis, with the United States' declining strategic nuclear force structure and infrastructure, and the potential for a multilateral nuclear threat, please further explain the significance of developing national missile defense in order to maintain our dominance as a nuclear superpower.

Secretary FEITH. We are developing missile defenses in recognition that offensive capabilities alone may not deter aggression in the new security environment of the 21st century. Missile defenses also provide new capabilities for managing crises when faced with coercive threats to U.S. or coalition partners, thereby assuring allies and friends of our ability to maintain our commitments. Finally, should deterrence fail, missile defenses could protect the United States, our deployed forces, our allies, and friends against attack. Missile defenses are not being developed to create or maintain strategic dominance, but are essential in providing for U.S. national security.

Admiral ELLIS. The Nuclear Posture Review envisions a re-shaping of our strategic capabilities, to include passive as well as active defenses, non-nuclear and even non-kinetic as well as nuclear strike capabilities, a responsive infrastructure, and improved C⁴ISR that enables each of these elements. We will field the capability to respond promptly, decisively, and proportionately to any threat. Our ability to respond is not tied to any one element, but rather to the unique capabilities of each element and the synergies achieved by their interaction. Fielding a missile defense will be one critical element of our new strategic capabilities.

36. Senator BUNNING. Secretary Feith and Admiral Ellis, without NMD, and without a capability to produce nuclear weapons quickly and effectively, what would be the strategic choices available to the United States in comparison with its peer competitors?

Secretary FEITH. The Nuclear Posture Review concluded that missile defenses bring specific capabilities required to meet the objectives laid out in the QDR. Specifically, missile defenses would:

- Assure allies and friends that threats of ballistic missile attack against the territory of the U.S. or its forces will not deter the U.S. from fulfilling its security commitments;
- Dissuade potential adversaries from investing in or developing ballistic missiles by devaluing their utility as instruments of coercion or warfighting;
- Deter ballistic missile attacks by complicating an adversary's attacks and reducing his probability of success; and
- Defend the U.S. population, its forces, and friends/allies should deterrence fail—providing political and military commanders a wider range of options for countering attacks.

The Nuclear Posture Review also found that nuclear weapons continue to play a critical role by providing credible military options to deter a wide range of threats. Thus, a modern, responsive nuclear weapons infrastructure is indispensable, especially as operationally deployed forces are reduced.

Failure to make the investments necessary to construct the new triad will call into question the ability of the United States to further reduce its dependence on nuclear weapons and to provide a more secure America in the face of determined adversaries that may not be deterred by our current offensive capabilities alone.

Admiral ELLIS. The Nuclear Posture Review envisions a re-shaping of our strategic capabilities, to include passive as well as active defenses, non-nuclear, and even non-kinetic as well as nuclear strike capabilities, a responsive infrastructure, and improved C⁴ISR that enables each of these elements. We will field the capability to respond promptly, decisively, and proportionately to any threat. Our ability to respond is not tied to any one element, but rather to the unique capabilities of each of the elements and the synergies achieved by their interaction. This synergy allows us to reduce our reliance on nuclear weapons and meet the President's goal of 1,700–2,200 operationally deployed weapons by 2012. Without a demonstrated missile defense capability, or a responsive infrastructure, we may not be able to meet the President's goal.

37. Senator BUNNING. Secretary Feith and Admiral Ellis, can the United States afford to shrink the inventory of operationally-deployed warheads without a national missile defense?

Secretary FEITH. Missile defenses have an essential role in the new triad. The Nuclear Posture Review sets forth a new deterrent strategy whereby U.S. operationally deployed strategic nuclear force levels and future missile defense forces are not sized to Russian offensive or defensive force levels. Instead, we are pursuing a capabilities-based approach that is not country-specific, but which is designed to address the uncertainties of the future.

Admiral ELLIS. The Nuclear Posture Review envisions a re-shaping of our strategic capabilities, to include passive as well as active defenses, non-nuclear and even non-kinetic as well as nuclear strike capabilities, a responsive infrastructure and improved C⁴ISR that enables each of these elements. We will field the capability to respond promptly, decisively, and proportionately to any threat. Our ability to respond is not tied to any one element, but rather to the unique capabilities of each of the elements and the synergies achieved by their interaction. This synergy allows us to reduce our reliance on nuclear weapons and meet the President's goal of 1,700–2,200 operationally deployed weapons by 2012. Without a demonstrated missile defense capability, we may not be able to meet the President's goal.

38. Senator BUNNING. Secretary Feith, without a nuclear weapons production capability and a national missile defense, will the United States be able to maintain strategic nuclear flexibility?

Secretary FEITH. The operationally deployed forces are sized to provide the capabilities required to meet U.S. defense goals in the context of immediate and unexpected contingencies, i.e., a sufficient number available on short notice to counter known or unexpected threats. Nevertheless, greater flexibility is needed with respect to nuclear forces and planning than was the case during the Cold War. U.S. forces must take into account an increasingly complex security environment in which surprise is a dominant strategic consideration.

In this context, the Nuclear Posture Review found that fundamentally, a diversified portfolio of offensive and defensive forces—combined with a responsive infrastructure and enhanced command, control, communications, intelligence, and adaptive planning capabilities—provides the U.S. with more flexibility than the Cold War triad. Against adversaries with limited ballistic missile capabilities, defenses can provide protection if deterrence based on offensive strike capabilities fails. Defenses that intercept ballistic missiles, particularly missiles fired from mobile launchers, can ease the task of offensive strike capabilities. Similarly, offensive strike capabilities that destroy enemy ballistic missile forces can ease the task of active and passive defenses.

The Nuclear Posture Review also found that nuclear weapons continue to play a critical role by providing credible military options to deter a wide range of threats. Thus, a modern, responsive nuclear weapons infrastructure is indispensable, especially as operationally deployed forces are reduced.

THE STOCKPILE STEWARDSHIP PROGRAM: DATA RELIABILITY

39. Senator BUNNING. General Gordon, since the SSP is based on data from actual nuclear weapons tests, and since we have not had an actual underground nuclear test for some time, how certain are you as to the reliability and certainty of the data generated by the SSP?

General GORDON. Over the last several years, the Stockpile Stewardship Program has greatly increased our understanding of fundamental physical principals and properties of nuclear weapons, far beyond what we had during nuclear testing. Subcritical experiments and gas gun experiments using plutonium have improved our knowledge of issues that affect the performance of a primary in a nuclear weapon. High energy density experiments on NOVA, Omega, and the Sandia Z-machine are increasing our knowledge of properties and processes under conditions relevant to the performance of the secondary stage of a nuclear weapon. When NIF becomes operational in 2004 we will begin experiments for the stewardship program that will lead ultimately to a greater understanding of the pressures, temperatures, and densities that affect the performance of secondaries. The three-dimensional simulation capabilities being developing in the ASCI program provide far more powerful predictive and analytical tools than we have ever had in the past. So in a certain sense, the data we are getting now is better and better analyzed than any we had during the testing era.

Stockpile Stewardship is based on using this improved knowledge and these better capabilities to analyze the effects on performance and reliability of changes in the stockpile as it ages or as we replace components. The goal will be to manage those changes so that we remain confident in the stockpile with the tools we have in hand or will develop.

40. Senator BUNNING. General Gordon, do you foresee a need to test in the future, based on the available data in the SSP?

General GORDON. Senator, obviously we cannot predict the future; however, over the last 6 years both the Secretaries of Energy and Defense have annually reported to the President that the stockpile is safe, secure, and reliable, and that there is no need to conduct a nuclear test. At the same time, the stockpile is aging beyond its original design life, refurbishments and modernizations, as part of the Life Extension Program, are underway (W87) or planned (B61, W80, W76) that will help to ensure that these systems will remain safe, secure, and reliable for an additional 20–30 years. Responsible stewardship requires that we maintain a prudent capability to resume underground testing if an issue rises that undermines our confidence in a weapon system in the stockpile.

[Whereupon, at 12:33 p.m., the committee adjourned.]

**DEPARTMENT OF DEFENSE AUTHORIZATION
FOR APPROPRIATIONS FOR FISCAL YEAR
2003**

TUESDAY, MARCH 5, 2002

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

UNIFIED AND REGIONAL COMMANDERS ON THEIR MILITARY STRATEGY AND OPERATIONAL REQUIREMENTS

The committee met, pursuant to notice, at 9:39 a.m. in room SH-216, Hart Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Reed, Akaka, Bill Nelson, E. Benjamin Nelson, Warner, Inhofe, Roberts, Allard, Sessions, and Collins.

Committee staff members present: David S. Lyles, staff director; and Christine E. Cowart, chief clerk.

Majority staff members present: Richard D. DeBobes, counsel; Evelyn N. Farkas, professional staff member; Richard W. Fieldhouse, professional staff member; Jeremy L. Hekhuis, professional staff member; Maren Leed, professional staff member; Gerald J. Leeling, counsel; and Michael J. McCord, professional staff member.

Minority staff members present: Judith A. Ansley, Republican staff director; Edward H. Edens IV, professional staff member; Gary M. Hall, professional staff member; George W. Lauffer, professional staff member; Patricia L. Lewis, professional staff member; Thomas L. MacKenzie, professional staff member; Ann M. Mittermeyer, minority counsel; Scott W. Stucky, minority counsel; and Richard F. Walsh, minority counsel.

Staff assistants present: Daniel K. Goldsmith, Thomas C. Moore, and Nicholas W. West.

Committee members' assistants present: Jason Matthews and Jeffrey S. Wiener, assistants to Senator Landrieu; Elizabeth King, assistant to Senator Reed; Davelyn Noelani Kalipi, assistant to Senator Akaka; William K. Sutey, assistant to Senator Bill Nelson; Eric Pierce, assistant to Senator Ben Nelson; Benjamin L. Cassidy, assistant to Senator Warner; Dan Twining, assistant to Senator McCain; John A. Bonsell, assistant to Senator Inhofe; George M. Bernier III, assistant to Senator Santorum; Robert Alan McCurry, assistant to Senator Roberts; Mike Bennett, assistant to Senator Allard; Arch Galloway II, assistant to Senator Sessions; Kristine

Fauser, assistant to Senator Collins; and David Young and Derek Maurer, assistants to Senator Bunning.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody. The committee meets today to receive testimony from three of our regional combatant commanders. All of our witnesses are well known to this committee. Admiral Dennis Blair is the Commander in Chief of the U.S. Pacific Command. General Thomas Schwartz is the Commander in Chief of the United Nations Command-Combined Forces Command and U.S. Forces Korea. Major General Gary Speer is Acting Commander in Chief of the U.S. Southern Command.

Admiral Blair and General Schwartz are before the committee for the last time in their current assignments. I just want to thank them on behalf of the committee for their tremendous careers and commitment to the well-being of this Nation.

Our witnesses today command U.S. military forces stationed from the DMZ and the Korean peninsula to the farthest reaches of the Pacific Ocean, to the Caribbean and the South American continent. I would ask each of you to convey the appreciation of this committee to the men and women under your command for their professionalism, their dedication, and their service.

We have a number of important issues to discuss with our witnesses this morning. Among them are the following: Admiral Blair commands the Special Operations Forces recently sent to the Philippines in response to the request from Philippine President Arroyo. The mission of these forces is to help train the Philippine Army to more effectively fight terrorists and insurgents. The terms of reference signed by U.S. Pacific Command and the Philippine Army representatives state that the training exercise is targeted against the Abu Sayyaf terrorist group in the southern Philippines. But there are other terrorist groups with bases located close to those of the Abu Sayyaf. At least one of them, the Moro Islamic Liberation Front, has indicated that they would take military action if U.S. troops encroached on their territory.

I am concerned that our operations in the Philippines could unintentionally expand beyond training the Philippine Army to fighting the Abu Sayyaf terrorist group. I understand that U.S. forces are providing training at the battalion level only, but those headquarters are located out in the jungles. Could the mere presence of our troops on the island of Basilan make them the target of attack not just by the Abu Sayyaf, but by other groups?

How are we operationally and tactically limiting our involvement to training the Philippine Army rather than becoming caught up in the actual fighting between the Abu Sayyaf and the Philippine Army? How are we ensuring that our involvement will remain limited to the Abu Sayyaf threat? Is the 6-month duration for this training mission realistic?

General Schwartz commands our armed forces in South Korea. We all want to reduce North Korea's threatening military posture. I am concerned that the lack of negotiations between the U.S. and North Korea and between North and South Korea is turning back the clock on some of the diplomatic advances that have been made over the last several years.

I am concerned by recent suggestions that the Agreed Framework is in jeopardy and I am interested in hearing General Schwartz's assessment of whether the Agreed Framework contributes to our national security and whether it is still viable.

In the Southern Command area, we need to discuss, among other issues, the implications of President Pastrana's recent decision to end the safe zone of the Revolutionary Armed Forces of Colombia (FARC) on the stability of the Colombian government; whether the existing limitations on the U.S.-trained counterdrug brigade should be maintained; and whether future U.S. assistance to the Colombian military should be geared toward counter-insurgency capabilities.

General Speer has also recently taken on the mission of running the camp for detainees at the U.S. Naval station at Guantanamo Bay, Cuba.

So there is a great deal of ground to cover this morning. Again, I am glad that we have these experts with us. Before we turn to them, let me recognize Senator Warner.

STATEMENT OF SENATOR JOHN WARNER

Senator WARNER. Thank you, Mr. Chairman. Your opening statement embraces many of the sentiments I have and therefore I will ask that my statement to be placed into the record.

Chairman LEVIN. Thank you. It will be made part of the record. [The prepared statement of Senator Warner follows:]

PREPARED STATEMENT BY SENATOR JOHN WARNER

Thank you, Mr. Chairman. This hearing, one in a series of annual hearings this committee conducts to hear from our Unified and Regional Commanders on their military strategy and operational requirements, is, in my view, one of our most important hearings.

Admiral Blair, General Schwartz, General Speer, you are this nation's warfighters—on the front lines, protecting U.S. national security interests and presenting the face of American resolve to allies, friends and potential adversaries. The committee values your unique contributions and perspectives.

Your input and insight provide us with important information we need to make decisions regarding policies and programs that impact each of your areas of responsibility (AOR). This is of particular significance this year due to the ongoing global war on terrorism and this Nation's global responsibilities in which each of you play a critical role.

I want to take a moment to acknowledge both Admiral Dennis Blair and General Thomas Schwartz in what may well be their last appearance before our committee. Both Admiral Blair and General Schwartz are scheduled to retire this May.

Gentleman, you have served our Nation with the highest level of dedication and professionalism. I know what this duty has required of you—the long hours, the missed family events, the cancelled plans. I want to express my personal thanks to both of you for your selfless service to country. We have been fortunate as a Nation to have men such as you at the helm—well done.

Mr. Chairman, I would now like to take just a moment to highlight a number of specific concerns I have within each of our witnesses' AORs.

While China and the Korean Peninsula remain areas of primary concern, in the Asia-Pacific region the global war on terrorism has now moved to the Philippines with U.S. troops deployed to that nation to help the Philippine Government fight terrorist groups. I look forward to receiving an update on the status of that important mission.

Last year, our bilateral relations with China reached a low point following the unfortunate EP-3 incident. I am interested in Admiral Blair's perspective on the current U.S.-China relationship, particularly the current state of U.S.-China military to military contacts and China's reaction to the recent visit of President Bush. Additionally, I look forward to receiving an update on the situation in the Taiwan Strait.

The continuing stalemate between India and Pakistan remains an issue of utmost importance. I am interested in Admiral Blair's perspective on this important region, particularly in light of his regular interaction with Indian military officials.

Tensions remain high on the Korean peninsula. While food shortages remain at crisis level throughout North Korea, there appears to be no letup in North Korea's troop buildup along the DMZ. I look forward to hearing General Schwartz's insights on the situation on the Korean peninsula following President Bush's recent visit to Seoul and the DMZ. I am particularly interested in any change in North Korea's military posture since the war on terrorism began last fall, as well as your assessment of North Korea's ballistic missile and proliferation activities.

Colombia remains a focus of my concern in SOUTHCOM's AOR, especially in light of renewed fighting in that nation. I am interested in receiving an update from General Speer on Plan Colombia, including what role U.S. military advisors are currently playing in Colombia and what, if any, future role you envision our advisors playing. Finally, I am interested in the situation at Guantanamo Bay and your assessment of how the global war on terrorism is impacting operations in SOUTHCOM's AOR.

We welcome our witnesses this morning and look forward to their testimony.

Senator WARNER. I will, however, join you in commending our two distinguished service persons, Admiral Blair and General Schwartz, for a career that each of you can look back on with great pride and share that pride with your family. We often think of the officers themselves, but their families, their spouses, make a direct contribution.

Behind you sit some very competent staff, each of whom would like to move up into those chairs. I always remember when I was in the Navy Department I had two four-strippers; each of them became Chief of Naval Operations. That was remarkable in view of their assignment with me, for them to overcome that and achieve that status.

Admiral Blair, you sit on a key part of the world, including China. I hope you will give us a good, succinct, professional, as well as personal, perspective. The tragic incident of the EP-3 and the loss of one of their pilots, we certainly regret the loss of life. I hope steps have been taken to ensure that the level of recurrence of that incident is much lower. I continue to believe that an incident-at-sea type of framework similar to what we had with the former Soviet Union, and now with Russia, could be adopted with China.

I know you have some concerns about the Homeland CINCNORTH and the various command and control of forces in the Pacific region, and I think it is quite proper that perhaps you express those concerns here. Several of our colleagues here in the Senate have consulted with you on that matter and I would hope you would make your views a part of today's record.

Taiwan continues to be a valued ally. I hope you will cover Taiwan and the continuing stalemate between India and Pakistan.

General Schwartz, we had a very good discussion yesterday when you visited my office and I hope you cover those personnel issues today. I think you have approached them with a degree of realism and pragmatism that needs to be expressed and made a part of today's record. Speaking for myself, I do believe the committee would join in trying to help that situation. It is not just a housing problem. There must be other factors when so many fine professionals, officer and enlisted, look upon assignment to your post as one where they are forced to make a choice between whether they want to stay in uniform and accept that assignment or go on to civilian pursuits. We may as well meet that issue head-on.

I share the Chairman's views about the North-South relationships on the Korean peninsula. The Chairman and I used to work with Dr. Perry. I spoke with him recently, Mr. Chairman, and expressed to him my continuing belief that he made a very valuable contribution in that area, and that we appreciate his willingness to continue to give advice to the Senate regarding the situation on the Korean peninsula.

I hope we can lessen tensions and further reconcile the differences between North and South Korea. The starvation in the North is, as you said yesterday, at one of its higher levels because of the diversion of so much of the world's food supply to the Afghan region. So that is important.

Of course, SOUTHCOM. You are carrying on in the stead of a very fine officer who now sees the Senate quite often. General Pace is one of the principal briefers for the Secretary of Defense to the Senate and the House, and he has handled that very commendably.

Colombia remains a focus and a major concern to this committee and we look forward to your comments today. It is not an easy situation to address.

Thank you, Mr. Chairman.

Chairman LEVIN. Any other opening remarks before we call on our witnesses?

Senator Roberts.

Senator ROBERTS. Thank you, Mr. Chairman.

These three men oversee the regions of the world that are vital to the United States, as has been pointed out by the distinguished leadership of our committee. Aside from the ongoing war in Afghanistan and the war against terrorism, no other issues will be as critical to the future of our Nation as those pertaining to the Pacific and the Korean peninsula and the American Southern Hemisphere.

The potential emergence of China as a peer competitor, a nuclear India and Pakistan, and the entire Pacific Rim fall under the responsibility of the Pacific Command and have a great deal of significance to this Nation. The responsibility of maintaining the pulse on the events that happen or do not happen in regards to Korea, which by the way is one-third of the so-called axis of evil, and being prepared to respond to an attack from Kim Jong Il and a very capable North Korean force, rests with the commander of our Korean forces. Korea is one of the very few places where the potential for a major force-on-force conflict actually exists and continues to exist.

Lastly, I want to salute Major General Speer—this is why I have chosen to make some opening remarks—who is carrying a tremendous load and the responsibility for what I consider to be one of the very critical areas to the United States.

Let me say that, in regards to the Southern Command, I am very concerned that we have sort of a benign neglect. I know that we have a purpose there, we have a mission there, we are trying very hard there, but I regret that the administration has to be so slow in replacing General Pace as CINCSOUTH. This is absolutely no reflection on Major General Speer's ability. If I had two stars on me, I would pin them on you right now so you would have the rank I think you deserve, which would be commensurate with your duties and the way you are carrying out your duties.

But I must say, Mr. Chairman, from a vital national interest perspective there is a great deal to be concerned about to our south and the region should be under the responsibility of a four-star general. There are 360 million people in the Southern Command, living in 31 nations. We have made tremendous progress since the eighties. Average age 14, suffering from malnutrition. We all know both General Pace and General Wilhelm did a great job and, as I have indicated, so has General Speer.

But let me just say that since Kosovo, when we took a lot of infrastructure away from the Southern Command and moved from Panama, I think we are spread too thin down there. If you look at the issues that concern our vital national interest, I am still concerned about not-so-benign neglect. Under the Emerging Threats and Capabilities Subcommittee and basically under this committee, our responsibility is fighting drugs and that is where the drugs are coming from, at least to a great degree. We have a lot of immigration problems. We talk about immigration problems, illegal aliens, in regards to border control, and that obviously is in the Southern Command's jurisdiction.

We talk about trade and the opportunity to feed, as I have indicated, 360 million people with our bulk commodities exchanged for specialty crops, to raise the standard of living there. I do not think we are doing nearly as much as we could. We do not even have Presidential trade authority to get those bilateral trade agreements working.

In terms of refugees, I read a column the other day that said, in regards to that part of the world, that there are more refugees there than there were in Kosovo. That is hard to believe, and yet you do not see any press coverage in that regard.

In terms of terrorism, I think there is a growing threat. We will ask General Speers about that. In Cuba we have a policy, as far as I am concerned, that is very difficult to understand. We get 17 percent of our energy supply from that part of the world—17 percent. There is a lot of talk about 8 percent in regards to Saddam Hussein, but in regards to that part of the world, if something would go wrong, especially with Mr. Chavez down there in Venezuela, it would completely disrupt our economy.

We do not have anybody appointed in regard to the Special Operations-Low Intensity Conflict (SOLIC) position. So I am urging the administration publicly to pay attention to the Southern Command. They are our neighbors. We need a four-star and we need a person in charge of SOLIC and we need to at least answer some tough questions in regards to where we are headed in the Southern Command part of the world.

Again, Mr. Chairman, these are three very important parts of the world. These men are key to protecting our national interests in their regions. I salute them and thank them for appearing before the committee.

Chairman LEVIN. Thank you, Senator Roberts.

Senator Nelson.

Senator BEN NELSON. Thank you, Mr. Chairman.

I would like to welcome these gentlemen here today. On a personal note, General Schwartz, I wore my Pammunjon cufflinks that I received there a few years ago in recognition of your being here

today. I want to commend you on the work that you are doing on the peninsula.

General Speer, I certainly second what my friend from the south in Kansas said. I think you are doing an outstanding job. Of course, the Pacific is where the action clearly is going to be in the future, as well as in South America. I am looking forward to your comments this morning on these important areas and these important issues that face us.

It seems like most of the news today is centered in another part of the world, the Middle East. But certainly we must keep in mind what is going on in other parts of the world and not become so concentrated that we cannot keep a broad perspective of worldwide events and where other challenges and other opportunities exist.

So I appreciate your being here today. I look forward to your comments. Thank you.

Chairman LEVIN. Thank you, Senator Nelson. We also have a statement from Senator Thurmond that will be placed in the record.

[The prepared statement of Senator Thurmond follows:]

PREPARED STATEMENT BY SENATOR STROM THURMOND

Thank you, Mr. Chairman:

Mr. Chairman, I join you in welcoming Admiral Blair, General Schwartz, and General Speer. I especially want to recognize General Speer, who is the acting Commander in Chief of Southern Command, and this is his first appearance before the committee.

General Speer, I hope the fact that you are appearing with the two distinguished officers seated with you at the witness table is a sign of the promotions ahead of you.

Mr. Chairman, the committee is fortunate to have these distinguished officers testify on the status of their commands and the military strategy to support the Nation's national security objectives in their region. Although the national focus is on Southwest Asia and the global war on terrorism, the Pacific region, Korea, and South America are areas of continued concern. These regions not only are areas of continuing instability, but also are areas where the United States has vital economic interests. I look forward to our panel's testimony and I want to thank them for their leadership, professionalism, and concern for the men and women under their command.

Thank you, Mr. Chairman.

Chairman LEVIN. We will go to our witnesses then. Admiral, I think we start with you.

Admiral Blair.

STATEMENT OF ADM. DENNIS C. BLAIR, USN, COMMANDER IN CHIEF, UNITED STATES PACIFIC COMMAND

Admiral BLAIR. Thank you, Mr. Chairman, members of the committee. Before I address the specific concerns that you and other members raised, sir, if I can make a few general comments about the past year in the Pacific, because our men and women have been busy this past year and they have been performing magnificently.

The U.S.S. *Carl Vinson* battle group from San Diego reported to Central Command on September 11, 2001. They had prepared for other missions. They were soon in the thick of the action in Afghanistan and they came up with innovative ways to operate and did it just magnificently. A little later the *Kitty Hawk* battle group, the *John C. Stennis* battle group, patrol aircraft, and the *Peleliu*

and *Bonhomme-Richard* amphibious ready groups with the 15th and 13th Marine Expeditionary Units reported in for duty, and all of them did just magnificent, innovative, and effective things in an entirely new form of warfare which we have fought successfully there, which continues to this day.

Air Force bombers deployed across the Pacific to our base at Diego Garcia and were soon flying combat sorties. Reserve forces came out and augmented our forces in many different ways. Our allies, our traditional allies as well as a broad range of regional security partners, quickly offered overflight rights and the use of facilities to support Operation Enduring Freedom. Several of them, including Australia, Canada, New Zealand, Japan, and Korea, all provided forces to participate in or support the operation.

Now, our part of the mission in the Pacific in this war on terrorism is to eliminate al Qaeda, all of its support and sympathizers, and to make it a very inhospitable place for those outside the region seeking a new home. The key to this is relentless pursuit of both the terrorists and their support and unprecedented cooperation with the other countries in the region, who all share our goals.

We have had some initial successes. There have been recent arrests in Singapore, Malaysia, and the Philippines. This has eliminated both threats to our military forces there and parts of the network that supports al Qaeda. We are providing advice, training, and material assistance to the Philippine Armed Forces as they work to eliminate the Abu Sayyaf Group (ASG), which has links to al Qaeda and also has two American missionaries hostage. Our joint task force there is the largest U.S. operation currently ongoing in the Asia Pacific region, and I will address the issues involved in its deployment a little later.

Sadly, even operations to assist are dangerous. A little less than 2 weeks ago we lost a helicopter with eight soldiers and two airmen aboard.

So the war on terrorism is very much on our minds in the Asia-Pacific region, but our day jobs that were there on the 10th of September still remain: the Taiwan military balance; the EP-3 incident that Senator Warner mentioned; North Korea starving its populace while it still continues to sell missiles and other weapons around the world; continued tensions between neighbors India and Pakistan, which have fought in the past and now have nuclear weapons; all these keep me awake at night and they keep our forces in the Pacific Command very busy maintaining deterrence, staying ready, and through theater security cooperation, supporting our interests in each of those issues.

But let me turn a little bit to those specific command forces, and it all begins with people. First, I do want to express thanks to all the members of this committee and its leadership for the support which you have given our men and women in recent years. Thank you for the largest pay raise in 2 decades, which was passed in this year's bill. That continues to decrease the pay gap between the armed forces and those in the private sector. Our people out there know that you care.

In this high operating tempo (OPTEMPO) world, we need to keep this trend moving and work on other financial stress points. As General Schwartz has testified many times so eloquently, our peo-

ple in Korea routinely run hardships for which there is inadequate compensation. Elsewhere in the Pacific, costs for the things involved in these long moves, like quarantine costs for pets and shipment costs for an additional car, really add up, especially for junior enlisted families when they move overseas. We need to continue viable quality education and proper housing for all of our families.

Also on the personnel side, to fight this war on terrorism we have had to bring additional people into the Pacific Command. They have come primarily from the Reserve component and they have performed important jobs magnificently. As we brought reservists into our headquarters, which were operating on a wartime basis from September 11, the Deputy Secretary of Defense waived the congressionally-mandated fiscal year 2001 10 percent headquarters manpower reduction. We also brought most of these reservists on board in order to increase the security of our bases.

Our estimate is that we need about 5,000 additional billets to sustain this war on terrorism indefinitely in the Pacific Command region. We need to address tradeoffs between mobilizing Reserves, which is how we have handled it in the short-term, and the proper mix of active billets, and of course we need to continue to buy the equipment that will either decrease the numbers of people we need or increase their effectiveness.

Our ships, planes, and ground equipment performed well in the battle in Afghanistan. It was a tribute both to the people who maintained them and to those investments in readiness that have been made in recent years. But we will require continued sustained funding for operation and maintenance, especially of the select forces that we have ridden hard and put away wet in these operations. I am talking about Navy forces, Marine Corps forces, Special Operations Forces, intelligence, surveillance and reconnaissance forces, and strategic airlift in particular. We need to replenish ammunition stocks which we have used in these and other recent campaigns, particularly the precision-guided munitions.

Our theater security cooperation with our allies and partner nations has never been more important. It is this sustained interaction that both improves their readiness for coalition operations so they can join us quickly and effectively and also it is the basis for our using their bases when we need them to support shared interests. Some of our allies and partners, particularly the Philippines, will need continued assistance to wage the war on terrorism which is in our combined interests.

Transformation of the Armed Forces has been an important interest of this committee and it is important for the Nation. In the Pacific Command we have made some significant improvements in the speed of formation of our joint task forces, the speed of their decisions. We have conducted experiments which have given an insight into dramatic gains that we can make on the battlefield.

Every time we find that when we get engineers working directly with operators, with financial and other support coming from the services, from Washington, we make tremendous strides. I urge this committee not to settle for transformation that will take decades, but to insist on transformation that is measured in months or in small numbers of years, and transformation to take care of

the real challenges that all of us regional Combatant Commanders face every day.

Lastly, I urge this committee to keep an eye on the condition of our bases, camps, and stations. As we pour a lot of money into the protection of these bases from the outside, they still are crumbling on the inside. These are the "canaries in the coal mine." These are the indicators of whether the money that you put in for readiness is really getting down to the field.

I can tell you we are still not working down that backlog of deferred maintenance which we have in the Pacific Command. Far too many of our family homes, barracks, buildings, and the utilities in places like Schofield Barracks, Camp Pendleton, Elmendorf Air Force Base, and Pearl Harbor Naval Station are still old and shabby. We owe our people first class facilities for them to do their work well.

So members of the committee, I certainly appreciate the chance to be before you to discuss these issues in detail and I look forward to detailed comments and questions. Thank you.

[The prepared statement of Admiral Blair follows:]

PREPARED STATEMENT BY ADM. DENNIS C. BLAIR, USN

INTRODUCTION

Mr. Chairman and Members of the committee: on behalf of the men and women of the United States Pacific Command, I thank you for this opportunity to testify on security in the Asia-Pacific region.

Incidents and action drove the year 2001 for the U.S. Pacific Command (USPACOM). In February, U.S.S. *Greenville* collided with and sank the Japanese fisheries training vessel Ehime Maru, resulting in the loss of nine Japanese lives. Soon after, a Chinese fighter jet collided with one of our EP-3s, resulting in the loss of the Chinese pilot and the detention of our crew on Hainan Island for 11 days. During this time, seven USPACOM personnel from Joint Task Force-Full Accounting died in a helicopter crash in Vietnam. Then came the terrorist attacks of 11 September. We have gone on the offensive against terrorism while sustaining our readiness, improving the readiness of regional forces to contribute to coalition operations, and transforming the capabilities of our forces. The men and women of USPACOM have been busy.

We cannot provide adequate protection to our citizens and our forces while only playing defense. Since 11 September, combating terrorism on U.S. territory and throughout the Asia-Pacific region has been USPACOM's top priority. We are succeeding, largely as a result of cooperation among many nations.

Countering terrorism has accelerated security cooperation in the Asia-Pacific region, but has not fundamentally altered the region's security challenges. A secure, peaceful and prosperous Asia-Pacific region remains very much in the interests of America and the world. An uncertain Asia will present crises and dangers. We continue to base our power and influence on our values, economic vibrancy, our desire to be a partner in this critical region, and our forward-stationed and forward-deployed forces of USPACOM.

Overall, we are in better shape than we were a year ago. We have gone on the offensive against terror organizations we did not know the name of a year ago. Although there are persistent deficiencies, particularly in facilities upkeep and replenishment of precision weapons, our readiness is on its way to a satisfactory level. If we can maintain our momentum, the future is bright for the U.S. Pacific Command.

COMBATING TERRORISM IN THE ASIA-PACIFIC REGION

International Terrorism in the Asia-Pacific Region

The terrorist threat in the Asia-Pacific region (APR) consists primarily of local groups with links to al Qaeda that are hostile to the United States and our friends. These groups have plotted attacks against American forces, embassies, and other citizens, and have provided transit assistance to al Qaeda members. Our understanding of the threat has increased greatly since 11 September, as we brought more intelligence resources to bear and shared intelligence with other countries.

Jemaah Islamiyah, which has plotted against U.S. and other nations' citizens, vessels and facilities in Singapore, is one group of concern. The Governments of Singapore and Malaysia moved quickly against this al Qaeda-linked group. Continued vigilance, actions such as this, and enhanced cooperation among governments, will keep terrorists on the run and root them out over time.

At present, no "Afghanistans"—sanctuaries for active terrorist organizations with governments fully supporting them—exist in this area of responsibility (AOR). Governments throughout the region fundamentally support the campaign against international terrorism. Each country in the region faces different circumstances and unique challenges, and each has varying capabilities in contributing to the international war on terrorism. Domestic political considerations are factors in countries such as Indonesia and Bangladesh. However, nations in this region are cooperating with the United States in many different ways, and this cooperation is succeeding against international terrorism.

We have actively engaged our regional partners to support Operation Enduring Freedom (OEF) in Afghanistan. Our Asia-Pacific allies and regional partners have condemned the terrorist attacks of 11 September, and many are contributing resources. We appreciate the many military contributions of our allies and regional partners, Australia, New Zealand, Japan and the Republic of Korea.

Australia invoked the ANZUS Treaty immediately following 11 September for the first time in the 50-year history of this treaty. In addition to its ongoing naval contribution to Maritime Interdiction Operations supporting U.N. Security Council Resolutions against Iraq, Australia provided additional ships to the Arabian Gulf and aircraft to Diego Garcia. Australia was one of our first allies to deploy ground troops to Afghanistan. New Zealand has provided a contingent of its Special Air Service for operations as well.

The Government of Japan has implemented major policy and legislative changes to allow Japan to provide force protection and logistical support to U.S. installations in Japan. The Japan Air Self Defense Force has flown relief missions to Pakistan and lift missions for our forces in the USPACOM AOR. For the first time since World War II, the Japan Maritime Self Defense Force is at sea far from Japanese waters, providing fuel and other support to coalition naval forces.

The Republic of Korea (ROK) is providing air and naval logistic support to OEF. Several other countries have given overflight rights and seaport and airport access to our aircraft and ships.

The bottom line is that our previous bilateral and regional cooperation with the countries of the APR has paid off in valuable cooperation with regard to the war on terrorism.

Antiterrorism Efforts—Defense

USPACOM's Force Protection Program has effectively protected our armed forces and supported civilian authorities throughout the Asia-Pacific region since the 11 September terrorist attacks. We activated Joint Rear Area Coordinators (JRACs) to counter the threat and accelerated the Critical Infrastructure Protection (CIP) Program.

JRACs integrate the defensive measures by all the military units in the same location—Hawaii, Alaska, Guam, Japan and Korea. In addition, they coordinate Department of Defense (DOD) efforts with Federal, State, and local agencies. JRACs have written and exercised plans and are fielding the Area Security Operations Command and Control (ASOCC) system. Over the past year, we have made significant progress identifying and protecting critical infrastructure by making CIP part of all major exercises and using JRACs to protect critical assets. We are also accelerating the fielding of the Pacific Mobile Emergency Radio System in Hawaii and Alaska to improve coordination efforts between civilian authorities and their JRAC counterparts. USPACOM's JRACs and CIP program are widely recognized as the model for interagency coordination, combined scenario-based training events, and unprecedented cooperation and information sharing.

Following the attack on the U.S.S. *Cole*, USPACOM began a full reassessment of vulnerabilities at foreign ports we visit. We have established plans and increased deployable security measures at all these ports. To date, we have completed 25 force protection memoranda of agreement (MOA) with U.S. embassies, including MOAs with embassies in India, Russia, Singapore, Malaysia, the Philippines and China. These agreements clearly delineate U.S. responsibilities for all our military forces in Asia-Pacific countries.

A major challenge is to sustain these intense efforts over the long-term. Substantial resources are required to maintain higher Force Protection Conditions (FPCONs) that will be a way of life for many years to come.

As long as we are engaged around the world, terrorists will look for soft spots for further attacks. On every deployment, every exercise and especially now at home stations, force protection is an essential mission.

Counter-terrorism—Offense

USPACOM forces—U.S.S. *Kitty Hawk*, *John C. Stennis*, and *Carl Vinson* battlegroups, patrol aircraft, and U.S.S. *Peleliu* Amphibious Ready Group with the 15th and 13th Marine Expeditionary Units—played major roles in the successful Afghanistan campaigns. At the same time, we have gone on the offensive in the Pacific region.

We have already deployed personnel to U.S. embassies in the Philippines, Indonesia, Malaysia and India to better integrate our operations with interagency country teams. We have established a Directorate for Counter-Terrorism to fuse all sources of intelligence, to plan and coordinate operations, and to begin true interagency integration across the region. We have sent equipment and an assistance team to the Philippines. Our Joint Intelligence Center Pacific (JICPAC) has rapidly improved its support to the counter-terrorism mission. Analytical depth and breadth of the terrorism threat in the AOR has significantly improved, with increased collection, analysis, and reporting in this area.

To build coalition support for our offensive efforts since 11 September, I have visited the Philippines, Thailand, Malaysia, Indonesia, India, Singapore, Japan and Korea, and met with each country's U.S. ambassador, and key senior government and military leaders to discuss our intentions, and how their support can help. The response to our plan has been positive, and we are building capability to act with other countries against terrorism.

We continue to foster interagency participation in our planning and operations. While our counter-terrorism cell includes a Joint Interagency Coordination Group to seamlessly interconnect with the national architecture as it is established, a Joint Interagency Task Force with direct tasking authority that transcends agency stovepipes would be a more effective organization.

USPACOM Requirements for the War against Terrorism

Manpower

Legislation mandating a 15 percent headquarters manpower reduction over 3 years was passed before 11 September. As we launched the war on terrorism, we brought additional Reserve component (RC) personnel on board to handle the increased workload. On 12 October 2001, the Deputy Secretary of Defense waived the fiscal year 2001 10 percent headquarters manpower reduction. As long as the war on terrorism continues, there will be more requirements for intelligence, operations, logistics, communications, and planning officers on USPACOM combatant headquarters staffs.

The war on terrorism has created new manpower requirements. Over 5,000 additional billets are needed to address the full range of force protection, antiterrorism, and counter-terrorism missions throughout USPACOM. Examples of additional manpower requirements include increased shore and harbor security patrols in response to enhanced Force Protection Conditions (FPCONs), additional teams to assess security of foreign ports and airfields we visit, and around-the-clock manning of JRACs and crisis action teams. We are working to address these manning and management challenges from within existing endstrength levels.

Combating Terrorism Readiness Initiatives Fund (CBT RIF)

Funding obtained through CBT RIF continues to play a major role in addressing emergent requirements. This initiative provides the geographic CINCs additional avenues for resourcing against emerging threats. Some examples of USPACOM funded CBT RIF projects include weapons/metal detectors and explosive vapor detectors for Marine Corps Base Okinawa and blast mitigation windows for Yongsan Base in Korea. USPACOM received \$3.95 million in CBT RIF funding in fiscal year 2001. USPACOM received nearly \$3.9 million more in the first allocation of fiscal year 2002 funding, including \$850,000 for U.S. Forces Korea (USFK). However, USPACOM still has over 1,070 unfunded Anti-Terrorism Force Protection (ATFP) projects totaling nearly \$1.5 billion to achieve full compliance with current standards. Service funding will meet some of these requirements, but the CBT RIF program fills the gaps.

Foreign Military Financing (FMF)

FMF is an essential tool for our allies and partners to improve their capabilities against international terrorist groups and their supporters. A detailed discussion of

FMF funding requirements, with particular emphasis on FMF for the Philippines, is included at pages 34–35.

OTHER REGIONAL DEVELOPMENTS

Australia

Australia remains America's oldest ally in the Asia-Pacific region. Last year we celebrated the 50th anniversary of our defense treaty. Australia's steadfast support has been a key facet of our counter-terrorism campaign in the Asia-Pacific region.

Australian armed forces remain in the lead role in East Timor and in the shaping of East Timor's new defense force. In addition, Australia maintains an important presence in Papua New Guinea, Bougainville and the Solomon Islands, ensuring peace and security in these problematic areas. The Australian government has been active in promoting the return of democracy in Fiji and security and peaceful development throughout the archipelagic states of Southeast Asia and the South Pacific.

Our relationship with Australia is mature and as strong as it has ever been. USPACOM works hard through bilateral and multilateral fora to keep the ANZUS Treaty relationship with Australia healthy and looking forward. We are currently conducting a strategic top-down interoperability study with Australia's armed forces. It will return great long-term dividends in acquisition, information technology, operations, research and development, and further strengthening the relationship with this trusted ally.

Japan

Japan hosts nearly 41,000 U.S. Armed Forces personnel and 14,000 additional sailors afloat with the Seventh Fleet. It contributes \$4.57 billion in host-nation support, the most of any U.S. ally. These forward-stationed and forward-deployed forces are key to the U.S. commitment to defend American interests throughout the Asia-Pacific region. The U.S.-Japan alliance is the cornerstone of U.S. security interests in Asia and fundamental to regional security and peaceful development.

Over the past year, Japan and the United States have made steady progress in strengthening our alliance. We signed the first bilateral defense plan under the 1997 revised Defense Guidelines. It incorporates additional Japanese support for U.S. operations, and opens new areas for defense cooperation.

After 11 September, Japan passed historic legislation to assist U.S. combat operations. For the first time since World War II, Japan sent its Self-Defense Force (JSDF) overseas to support a combat operation and work with other countries in a U.S.-led coalition.

JSDF roles and capabilities are evolving to meet future challenges. In addition to Japan's military contribution in support of OEF, the JSDF will deploy a 700-member engineer battalion to East Timor in March 2002, and will continue to provide a 45-man transportation unit as part of the Golan Heights U.N. Disengagement Observer Force. The JSDF has also worked closely with USPACOM components in restructuring bilateral exercises to develop skills for humanitarian assistance; search and rescue; non-combatant evacuation; consequence management for chemical, biological and nuclear incidents; and complex contingency operations likely to occur in the future. I am also encouraged by the increased attention the JSDF is giving to cooperating with regional armed forces—the ROK in particular.

We successfully completed the search and recovery effort on the Ehime Maru last October with the recovery of eight out of nine missing crewmembers. The U.S. Navy's intense efforts and our two nations' exceptional cooperation overcame the effects of the tragedy, and even strengthened the ties between our two countries in many areas.

We continue to work to be good neighbors on our bases in Japan. Japan closed the industrial waste incinerator next to the U.S. Naval Air Facility Atsugi, ending an environmental hazard. Because of steady progress made under the Special Action Committee on Okinawa (SACO), a relocation site for Marine Corps Air Station Futenma has been selected in northern Okinawa, and detailed discussions have begun over the type and scale of the facility.

Japan's timely, meaningful and visible contribution to the campaign against terrorism is a new stage in our alliance relations. This lynchpin relationship is vital for security and peaceful development in Asia.

Republic of Korea (ROK)

Encouraging events on the Korean Peninsula in 2000 appeared to indicate a new era. However, progress stalled last year. Since March 2001, the North has canceled events and refused to meet regularly with the ROK. At the same time, North Korea's "military-first" policy remains. Its training cycles in 2001 were at normal levels, but the ongoing 2002 winter training cycle has featured unusual corps-level ac-

tivity. North Korea continues to maintain more than 60 percent of its forces within 100 kilometers of the Demilitarized Zone (DMZ). The North remains a formidable force that we must guard against and deter.

During 2001, the U.S. and the ROK successfully negotiated several important alliance issues. Our military relationship is on a stronger footing every year.

The Special Measures Agreement (SMA), once completed, will significantly increase contributions to the maintenance of U.S. troops on the Peninsula. Under the SMA, the ROK will cover 50 percent of the non-personnel stationing costs for U.S. forces by 2004. The Commander of U.S. Forces Korea (USFK) has also reached a tentative agreement with the ROK government on a Land Partnership Plan (LPP) that will consolidate U.S. force presence. The plan will reduce the number of major U.S. bases in Korea from 41 to 26 while enhancing training and combined warfighting capability. Commander USFK and the ROK Ministry of National Defense have agreed to review the 1990 agreement to relocate Yongsan Army Garrison, the home of USFK, from its location in downtown Seoul.

We must continue to enhance the quality of life for our troops and their families stationed in Korea. The ROK provides critical Host Nation Funded Construction (HNFC) support. However, HNFC, coupled with the current level of U.S. Military Construction (MILCON) funding, is inadequate. Many of the facilities, including unaccompanied personnel housing and family housing, are of Korean War vintage. Personnel live in inadequate barracks, apartments, even Quonset huts and "temporary" Vietnam-era buildings that we have maintained at increasing cost as age, infestation, and Pacific weather have taken their toll. The fiscal year 2003 funding shortfall for facility construction and modernization across Korea is estimated at \$315 million. Congressional support of MILCON funding for Korea in the fiscal year 2001 supplemental and fiscal year 2002 MILCON Appropriations bills was sorely needed and very appreciated. We seek your continued support for MILCON and sustainment, restoration and maintenance funding as provided in the President's fiscal year 2003 budget.

The ROK increasingly contributes to regional security by deploying over 400 troops to the peacekeeping mission in East Timor, in addition to its other peacekeeping commitments in Western Sahara, the Republic of Georgia, Cyprus and the India-Pakistan border region. ROK forces participate in exercises such as Rimpac (a major, multilateral naval exercise), Pacific Reach (a submarine rescue exercise also involving naval forces from Japan, Singapore and the United States), and Cope Thunder (a multilateral air exercise in Alaska). Most recently, the ROK and USCINCPAC co-hosted a Multilateral Planning Augmentation Team (MPAT) workshop in Korea. Hosting an exercise with over 20 non-U.S. participants, including Japan, was a significant first for the ROK.

Following the 11 September tragedy, the ROK aggressively supported our efforts to combat terrorism. They have dispatched forces to support Operation Enduring Freedom, currently deploying four C-130 aircraft, a naval tank landing ship (LST) and a Mobile Army Surgical Hospital (MASH) unit. The ROK has also sent liaison officers to the headquarters of USCINCPAC and Commander in Chief, U.S. Central Command to coordinate ROK government support for the Afghan campaign and continuing war. The ROK has worked closely with USFK to fully ensure the highest levels of protection of U.S. forces on the Peninsula. This is in addition to the \$45 million pledged for the reconstruction of Afghanistan.

By joining the coalition to combat global terrorism and participating in peacekeeping missions and USPACOM's regional exercises and cooperative initiatives, the ROK plays a very positive role in the region. Although there has been little or no substantive progress toward normalization and reunification of the Peninsula, the United States and the ROK have strengthened our alliance, and the ROK has continued its contribution to regional security.

Philippines

Our relationship with the Republic of the Philippines (RP), a long-time U.S. ally, had major developments last year. The RP continued to be a strong partner in regional security initiatives—hosting various conferences, the annual bilateral Balikatan Exercise linked to the regional Team Challenge exercise, and numerous Joint Combined Exchanges for Training (JCETs).

The Armed Forces of the Philippines (AFP) are challenged by budgetary constraints, logistical problems and a lack of adequately trained personnel. These factors hamper the AFP's ability to deal with internal insurgent groups, like the Abu Sayyaf Group (ASG) that also has ties to al Qaeda and poses a threat to Americans.

President Arroyo has championed Philippine and regional support for the international counter-terrorism campaign. During her November 2001 visit to the United States to commemorate the 50th Anniversary of the U.S.-RP Mutual Defense Trea-

ty, she and President Bush agreed that the 11 September terrorist attacks on the United States, and the terrorist activities of the ASG (which now holds Filipino and American hostages in the Southern Philippines), underscore the urgency of ensuring that the two countries maintain a robust defense partnership into the 21st century. The two leaders agreed to strengthen the military alliance on a sustained basis, through increased training, exercises, and other joint activities. Finally, they declared that the American and Filipino people stand together in the global campaign against terrorism.

USPACOM has deployed a Joint Task Force (JTF) to the Southern Philippines and has organized a substantial program to improve the maintenance of AFP equipment. The JTF package includes: a training/advisory team of Special Operations ground, naval and air personnel to train the AFP from their Southern Command Headquarters potentially down through company level. Training will focus on effective counter-terrorism campaign planning, intelligence/operations fusion, psychological operations (PSYOP), civil-military operations (CMO) and field tactics. Additionally, civil affairs (CA), maintenance, medical, and other support personnel round out the Special Forces team.

The JTF initial deployment of advisors was approved during implementation planning in January 2002. The recently concluded Terms of Reference (TOR) provided both governments with the necessary framework for executing our deployment to the Philippines.

The war against the ASG will not be won by military operations alone. Improvements in law enforcement, intelligence, economics, business, information, media, academia, community leadership and religion will have enduring and important roles in the battle. A solid, sustainable socio-economic program by the Government of the Philippines in the affected areas is also essential. USPACOM is working on a civil affairs assessment to support the JTF operation. Our training, assistance, and maintenance package will improve the AFP's CT capabilities. Continued U.S. support to the Philippines through the FMF program is critical to the success of the AFP's campaign against terror.

Thailand

Thailand is one of the nations in Asia most committed to building regional approaches to the future challenges of counter-terrorism (CT), counter-drug (CD) interdiction, peacekeeping operations (PKO), humanitarian assistance (HA), and other transnational concerns. The Team Challenge multilateral training event to improve multinational capability/interoperability is held in Thailand.

Thailand has taken a leading role in Southeast Asia in support of peacekeeping operations (PKO) by maintaining battalion strength forces in East Timor and again supplying the U.N. military commander there. Thailand has also sponsored several multilateral PKO seminars. We have supported humanitarian demining in Thailand and are transferring that program to Thailand in fiscal year 2002. USPACOM continues to respond to Thailand's request for U.S. assistance to the Royal Thai Army in combating drug traffic across the Burma-Thai border. Joint Interagency Task Force West (JIATF-W) is the standing task force for all CD issues in the theater and has the lead in training, equipment, and organizational coordination initiatives to assist the Thais with their CD mission. Full funding of fiscal years 2002/2003 Foreign Military Financing (FMF) for Thailand is critical to our efforts to help Thailand sustain its CD and PKO over the next 2 years.

Since 11 September, Thailand has coordinated fully with the United States in combating terrorism by supplying access to Thai military facilities, granting overflight permission, making formal public statements of support, and cooperating in information sharing and in investigation of terrorists using Thailand for a transit point and for other support. During a December 2001 trip to Washington, DC, Prime Minister Thaksin offered the U.S. Deputy Secretary of Defense Thai security contributions to multilateral presence in Afghanistan.

Our effective military-to-military cooperation with Thailand meets the security concerns of both our countries. Our attention to Thai political and military priorities supports our ability to call for access to military facilities. Thailand will continue to be our key ally in Southeast Asia.

Singapore

The March 2001 completion of the deep-draft pier at Changi Naval Base, constructed entirely at Singapore's expense, will support continued U.S. presence in the region for many years to come. U.S.S. *Kitty Hawk* was the first aircraft carrier to berth pierside at Changi. Though not a formal treaty ally, Singapore is a solid security partner in the Asia-Pacific region, a vocal proponent for U.S. access, and a strong supporter of U.S. counter-terrorist efforts. Additionally, Singapore supports

and hosts many significant multilateral activities. Last year, it hosted Exercise Pacific Reach, participated in Exercise Cobra Gold and numerous anti-piracy regional conferences, and hosted a Western Pacific Naval Symposium (WPNS) regional Mine Counter-Mine exercise.

Singapore seeks greater interoperability with the U.S. armed forces. It views high technology and advanced hardware as a deterrent and is increasing its cooperation with the United States in several projects. Singapore participated with Extending the Littoral Battlespace (ELB) Advanced Concept Technology Demonstration (ACTD) and is active in other developments such as the Joint Mission Force (JMF) and Asia-Pacific Area Network (APAN).

Singapore has worked against terrorist groups in the country who were targeting U.S. interests. Immediately following the 11 September attacks, Singapore was unwavering in its support to Operation Enduring Freedom, allowing our aircraft to use its airfields and increasing protection to vital shipping in the Strait of Malacca.

Singapore's arrest of 13 al Qaeda-linked terrorists in December led to additional arrests in Malaysia and the Philippines in January. Information sharing between these countries provided unprecedented insights into the al Qaeda network in the Asia-Pacific region.

Singapore has rapidly matured into a solid regional partner in a strategic location.

India

U.S. military relations with India have greatly expanded over the past year. India offered rapid and valuable assistance to the United States in conducting military operations in Afghanistan. USPACOM officers have met with their Indian counterparts and agreed on programs and exercises for the next 6–18 months. The primary areas of cooperation focus on peacekeeping, counter-terrorism, special operations training and naval activities.

We are closely following India's current confrontation with Pakistan. Throughout our interaction with our Indian counterparts, we continually stress the importance of a peaceful negotiated long-term solution to the Kashmir issue.

India and the United States have many common interests and our growing military cooperation will support this increasingly important security relationship.

Indonesia

Indonesia continues to go through a complete transition toward a modern democracy and a market economy. A key factor influencing Indonesia's political transformation and the prospects for its stability and unity are the Armed Forces of Indonesia, or TNI.

Military reform made some progress last year, but more remains to be done, especially in the areas of accountability and professional conduct. Separatist and sectarian violence in Aceh, the Moluccas, Sulawesi, and Irian Jaya, and inadequate TNI resources and capabilities have slowed the momentum of reform. TNI's future course is central to Indonesia's development and important to U.S. interests in combating terrorism, maintaining freedom of navigation on important trade lanes, and supporting regional security.

The Indonesian government has condemned terrorism and approved overflights of U.S. aircraft supporting the war on terrorism. It has improved security for our citizens and the U.S. embassy in Jakarta. However, Indonesia's very geography makes it vulnerable to terrorist penetration. With many challenges on its plate, and diminishing resources, Indonesia's security apparatus does not have full control of its borders. Moreover, Indonesia has not aggressively investigated domestic elements that are sympathetic to the aims of al Qaeda. We need to strengthen cooperation with Indonesia on terrorism. Current restrictions on our interaction with the TNI limit our effectiveness. However, the newly established Regional Defense Counter-Terrorism Fellowship Program may offer us a valuable tool to provide TNI mid-grade officers non-lethal training focused on counter-terrorism and combating transnational threats. We look forward to exploring this possibility with Congress.

USPACOM activities with TNI include inviting some officers to multilateral conferences, subject matter information exchanges, senior officer visits, and the annual naval Cooperation Afloat Readiness and Training (CARAT) exercise focusing on humanitarian assistance and anti-piracy. CARAT 2002 will now include a counter-terrorism element.

A responsible, developing Indonesia is key to the security and development of the Southeast Asia region; it is in our interest to help ensure the security of this important country.

East Timor

East Timor is preparing for independence in May of this year. U.N. Transitional Administration in East Timor (UNTAET) support has been successful in assisting and guiding East Timor toward independence. USPACOM forces in U.S. Support Group East Timor (USGET) played a vital role in supporting this monumental international effort. USGET has provided a significant U.S. presence, vital civic actions, humanitarian assistance, and regular ship visits. Today, East Timor is generally secure from the militias, and ready to face the challenges of a democracy.

After East Timor's independence, USPACOM will transition from civic action orientation in East Timor to a more traditional military cooperation program. This program will support an international effort, led by Australia, to further develop the East Timor Defense Force into a viable self-defense force.

China

Many important political, economic, and military developments occurred in the People's Republic of China (PRC) last year, and Chinese actions affected U.S. military relations with the People's Liberation Army (PLA).

Last year's military exercises in the PRC showed a measurable increase in quality, as the PLA continued to modernize its forces, with an emphasis on integrating ground, air and naval forces into a viable joint capability, and on creating a more professional officer and noncommissioned officer cadre. In addition to basic maritime combat skills, the 2001 exercises demonstrated efforts to conduct joint amphibious operations combined with missile and air strikes against key targets, such as airfields, naval ports and command centers.

China continued to build and exercise its force of short-range ballistic missiles ranging Taiwan. It still seeks to develop a range of military options to influence and intimidate Taiwan, and has not abandoned the option of using force to resolve Taiwan's status.

Across the Strait, Taiwan's armed forces continue to restructure and modernize. They are reorganizing and modernizing command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR). The U.S. government last year approved the sale of naval, ground and air equipment to maintain Taiwan's sufficient defense in the near-term. Taiwan still needs to focus on developing and modernizing C⁴ISR, integrated air and sea defense, and the ability to integrate its armed forces to conduct effective joint operations.

The PLA is still years away from the capability to take and hold Taiwan. Continued improvements in Taiwan's capabilities and development of USPACOM capabilities will be necessary to maintain sufficient defense.

The April 2001 EP-3 crisis was eventually resolved—the crew and airplane returned. However, the aggressive behavior of the Chinese pilot who caused the collision and the detention of the crew for 11 days damaged China's relations with the United States.

Military-to-military relations are resuming slowly, and in accordance with the National Defense Authorization Act. It is in the interests of the United States to interact with the PLA to address common interests, such as combating terrorism, peace-keeping operations, search and rescue, counterdrug, counterpiracy, and humanitarian assistance. These interactions should be reciprocal and transparent and serve to reduce misunderstandings and the risk of miscalculations on both sides.

POW-MIA EFFORTS IN SOUTHEAST ASIA

Joint Task Force-Full Accounting (JTF-FA) continues progress on the fullest possible accounting of Americans unaccounted for as a result of the war in Southeast Asia.

The risks of this noble mission were sadly underscored by the helicopter crash on 7 April 2001. Seven American service members and nine Vietnamese tragically died in Quang Binh Province, Vietnam, while conducting advance work for the 65th Joint Field Activity (JFA). We may never know the exact details of the accident, but a report by the U.S. investigator indicated that deteriorating weather conditions, poor visibility, and pilot error were factors. This tragic incident was a deep loss for USPACOM, the task force, and the American and Vietnamese people.

During fiscal year 2001, JTF-FA conducted nine JFAs—three in Vietnam, five in Laos, and one in Cambodia where 211 cases were investigated and 37 sites excavated. One JFA in Vietnam was canceled due to the tragic helicopter crash. JTF-FA continues to maintain its pace of operations in fiscal year 2002, with 10 JFAs scheduled—4 in Vietnam, 5 in Laos, and 1 in Cambodia.

Last year, 44 sets of remains were identified and returned to their loved ones. JTF-FA recovered and repatriated 27 remains still to be identified, but believed to

be Americans unaccounted for (16 from Vietnam, 10 from Laos, and 1 from Cambodia).

We remain committed to obtaining the fullest possible accounting of Americans still missing in Southeast Asia and to the return of all recoverable remains. We seek continual support for funding of this mission.

THEATER SECURITY COOPERATION

Theater Security Cooperation Overview

Ready forces are the foundation for USPACOM's cooperation with the Asia-Pacific region. They reassure our friends and partners, and dissuade our potential enemies. During 2001, we maintained a strong program of Theater Security Cooperation (TSC) designed to maintain coalition warfighting skills for deterrence, and build regional coalition capabilities to carry out common missions, from peacekeeping through combating terrorism.

The three primary goals of TSC—*influence, access, and competent coalition partners*—led to an active program that proved its worth after 11 September. All countries in the Asia-Pacific region declared support for the global war on terrorism, and contributed in many ways.

Seminars, simulations and multilateral exercises are inexpensive and powerful ways to develop the capabilities to work effectively—as coalitions in complex contingencies (such as East Timor); as partners in countering terrorism, illegal drug trafficking, and piracy; in managing the consequences of chemical, biological or nuclear attacks, natural disasters and accidents; in evacuating citizens caught in the path of violence; in search and rescue of mariners and airmen in distress; and in providing humanitarian assistance. TSC develops a cadre of competent coalition partners able to contribute when called upon.

Such a call came 11 September. Under the banner of Operation Enduring Freedom, many of our partners in enhanced regional cooperation stepped forward to make significant contributions to the emerging OEF coalition. We have also focused on building long-term, strategic relationships necessary to plan and execute the protracted theater campaigns to eradicate terrorism. Many of our efforts with key allies and friends, such as Australia, Japan, Korea, the Philippines, Thailand and Singapore, are expanding on strong foundations nurtured by TSC to improve our counterterrorism capabilities. With other strategic nations in our theater, such as India, the events of 11 September are the catalyst for accelerating more meaningful military-to-military contact and cooperation. Finally, many nations, such as Vietnam, Cambodia, Laos and Burma, have offered varying levels of support and cooperation to the global campaign against terrorism. Their proposed contributions and offers, although perhaps not strategically significant, forecast meaningful regional cooperation on a threat that affects all Asia-Pacific nations.

We will continue to cultivate and maintain the necessary operational access and coalition cooperation (diplomatic/financial/military) to plan and execute current and future operations. For all these purposes, USPACOM should maintain a baseline of multilateral conferences and International Military Education and Training (IMET) for every country.

Coalition Exercises

Team Challenge 2002 links the multilateral Cobra Gold exercise in Thailand with the bilateral Balikatan Exercise in the Philippines to address bilateral and multilateral training objectives, and to improve the readiness of regional armed forces to contribute to multilateral operations. Singapore will participate again this year alongside Thai and U.S. forces in Cobra Gold. Observer nations (with an eye toward possible participation in future years) will include Japan, Philippines, Malaysia, Indonesia, France, ROK, Mongolia, Russia, China, India, Cambodia, Tonga and Sri Lanka; Vietnam has been invited. In Team Challenge, we will exercise elements from the full spectrum of missions that our combined forces may be called upon to do together, from complex contingencies to humanitarian assistance. Team Challenge continues to be our largest multilateral exercise in theater, while serving as our premier Combined Joint Task Force training exercise.

International Military Education and Training (IMET)

IMET is the cornerstone of our Theater Security Cooperation Program. It provides education opportunities for personnel from foreign armed forces to study U.S. military doctrine and to observe U.S. commitment to the rule of law, human rights, and democratic values. It is the best means for promoting professionalism within foreign armed forces, and exposing foreign armed forces to the principle of a military responsive to civilian control. IMET is an effective tool for assisting armed forces to develop in ways that meet their own and U.S. objectives. Indonesia is a case in

point, where officers from the Indonesian armed forces have not attended professional U.S. military education courses since 1992, with an attendant loss of U.S. influence on an entire generation of Indonesian company/field grade officers.

Regional Defense Counter-Terrorism Fellowship Program

The Regional Defense Counter-Terrorism Fellowship Program complements the IMET program. DOD funding will be used to send foreign military officers to U.S. military institutions and selected regional centers for non-lethal education. This program will provide the regional CINCs with additional flexibility in executing our security cooperation strategies, and it will have an immediate and positive impact in encouraging reform, professionalism, and regional cooperation in addressing counter-terrorism and other transnational threats.

Foreign Military Financing (FMF)

FMF for acquiring U.S. military articles, services and training enables key friends and allies to improve their defense capabilities and improve their potential contributions as a coalition partner. In response to our original fiscal year 2002 FMF request, three USPACOM countries were granted FMF funds: Mongolia (\$2 million), the Philippines (\$19 million), and East Timor (\$1 million), which gains its independence 20 May of this year.

To prosecute the global war on terrorism, it is in the U.S. interest to provide equipment to select countries facing threats. The administration is reviewing potential threats and options.

Philippines FMF Maintenance Program

The Philippines FMF Maintenance Program is the foundation for effective security assistance to the Armed Forces of the Philippines (AFP) in their campaign against terror. We are in the first year of a 5-year, \$68 million FMF plan to sustain critical AFP military capability while promoting clear and positive actions to correct budgetary and logistics deficiencies. We have developed courses of action to improve AFP readiness rates for specific systems such as C-130 aircraft, UH-1 helicopters, 2½ ton trucks, and 78-foot Fast Patrol Craft. We have also developed a statement of work to implement contractor management assistance and ways to track improvements in readiness rates. Full funding over the 5-year program will enable the AFP to sustain higher readiness levels for key weapons systems. This funding is essential for the AFP to achieve a self-sustaining capability.

As the efforts in the Philippines evolve, possible opportunities to maximize effectiveness of counter terrorism operations may require additional resources. Fiscal year 2003 FMF funding for the Republic of the Philippines Maintenance Program remains key to achieving one of our long-term goals of improving AFP readiness.

Enhanced International Peacekeeping Capabilities (EIPC)

EIPC programs promote standards for peacekeeping doctrine, training, and education at the institutional level. In fiscal year 2001, five USPACOM countries (Malaysia, Mongolia, Nepal, Philippines and Thailand) received a total of \$2.227 million to achieve this goal. In fiscal year 2002, we hope to add Fiji, Madagascar, Tonga and India to this list. While EIPC programs are not as visible as IMET or FMF grants, EIPC plays a key role in developing host country self-sufficiency to train its forces to be effective players in worldwide peacekeeping efforts.

Nonproliferation, Antiterrorism, Demining, and Related Programs (NADR)

NADR funding supports U.S. efforts to reduce threats posed by international terrorists, landmines, and stockpiles of excess weapons, as well as by nuclear, chemical, and biological weapons and their associated technologies. We have received limited funds in the past, primarily for demining activities in Cambodia, Laos, Thailand, India and Vietnam. Our war against terrorism could benefit by any expansion of these programs. We will work closely with U.S. Country Teams to ensure we use these limited funds wisely.

Overseas Humanitarian Disaster and Civic Aid (OHDACA)

OHDACA appropriation provides the critical ability to respond to humanitarian needs in the Asia-Pacific region and is the primary source of DOD financing for foreign disaster assistance, demining, excess property donations and other humanitarian projects. While other Federal agencies also have responsibilities to respond to man-made and natural disasters, armed forces are frequently called upon first. Additionally, our annual assistance programs provide important access to some countries where other means of security cooperation are inappropriate. These non-threatening programs demonstrate the peacetime capabilities of DOD to our Pacific neighbors without impacting readiness. Approved fiscal years 2002/2003 Humanitarian

tarian Assistance requirements for construction projects and property donations total approximately \$5.1 million.

East Timor Defense Force (ETDF)—Logistics System / East Timor Engineer Plan

The U.S. armed forces continue to conduct operations in East Timor by providing liaison officers, engineers and humanitarian assistance during ship visits. Fiscal year 2002 engineering priorities include water plant, electrical system, and health clinic projects. The State Department programmed \$4.8 million in FMF funds in fiscal years 2001–2003 to assist in developing the East Timor Defense Forces (ETDF) logistics support system and to conduct training to develop the skills necessary for self-sufficiency. We will need to look at avenues to provide the ETDF the support they need to provide for their own security. There should be no haven for terrorism in the Asia-Pacific region, in countries with histories old or new.

Asia-Pacific Center for Security Studies (APCSS)

The APCSS regional study, conference, and research center continues to do great work. Graduates from its 3-month executive course total 764 from 41 countries, including Pakistan. I meet many of the outstanding graduates when I travel, and all are convinced that the regional approach works.

Asia-Pacific Regional Initiative (APRI)

The APRI program increases USPACOM access, regional readiness and U.S. influence in the Asia-Pacific region. APRI funding supports a wide range of exercises, programs, and training symposiums such as Exercise Team Challenge, the Pacific Reach multi-national submarine rescue exercise, the annual multilateral Chiefs of Defense conference, and search and rescue and humanitarian assistance/disaster relief exercises.

Asia-Pacific Area Network (APAN)

Funded by the APRI program, APAN provides information exchange throughout the region that directly supports Theater Security Cooperation. It functions as an interactive Web-based network that is attracting ever-widening attention and participation. APAN's membership has grown from about 300 users from 17 countries in June 2000 to more than 4,000 self-registered users (by 1 January 2002) from every country in the Pacific region except Burma and North Korea. APAN has also attracted users from over 20 other countries outside the region. The Web site supports regional exercises and conferences, and provides information resources to functional areas such as peacekeeping operations, disaster management and counter-terrorism. More importantly, it has been a catalyst to the creation of multinational information-based relationships and collaboration. Since APAN's operational capabilities and information are entirely unclassified, they are available to government agencies and non-governmental organizations (NGOs) that are important as participants in complex humanitarian emergencies and as partners in any combined military effort. After 11 September, APAN began a commercially secured Web site for Hawaii's Joint Rear Area Coordinator (JRAC) effort, a multi-agency effort comprising 17 Federal, State, and local agencies in Hawaii responsible for critical infrastructure. APAN is working with the U.S. Coast Guard to develop a similar commercially secured operational network capability for multinational collaboration in the Northwest Pacific and with the Department of State for similar collaborative sites to support ASEAN Regional Forum Confidence-Building Measures in Counter-Terrorism and possibly Maritime Security. Part of the international experience of 11 September has been overcoming resistance to new operating methods and information-based relationships. APAN has encouraged regional countries and United Nations organizations and NGOs to use and contribute to building experience in network centric operations that will pay off in future multinational force operations.

Multinational Planning Augmentation Team (MPAT) Program

The MPAT Program, also funded through APRI, brings together expert military planners from nations with Asia-Pacific interests that can rapidly augment a multinational force headquarters. Using standardized skills, they would plan and execute coalition operations in response to small-scale contingencies in the region. Through a series of workshops and planning exercises, MPAT members have developed a knowledge base of the various national crisis-action-planning procedures in the Asia-Pacific region and strong working relationships with each other. MPAT members have also begun developing common crisis-action planning procedures that any lead nation could use during a crisis.

We have successfully completed three MPAT workshops each involving over 25 countries, co-hosted by the Philippines, Thailand, and Korea respectively. We have also completed six concept and standard operating procedures (SOP) workshops. The

strength of the MPAT program lies in its ability to foster the development of a consensus on multinational responses to crises in a region with only a strong bilateral tradition.

The Center of Excellence in Disaster Management and Humanitarian Assistance (COE)

COE plays an important role in our pursuit of key strategic objectives in USPACOM. COE engages countries in the Asia-Pacific region, builds burden-sharing relationships among our friends and allies, and prepares U.S. forces to perform effectively in complex contingencies. COE's mission in disaster management, humanitarian assistance, and peace operations offers a low profile tool to engage civilian and military communities throughout the theater that might otherwise be hesitant to work with us. COE's support of our peace operations capacity building efforts in the Asia-Pacific region have helped improve capabilities in the Philippines, Thailand, Bangladesh, Nepal, and Malaysia. Finally, by promoting broader collaboration among non-traditional partners, COE contributes to the creation of an environment less hospitable to terrorism.

READINESS AND RESOURCES

Personnel

The war on terrorism along with ongoing commitments throughout the Asia-Pacific region place heavy pressures on our troops and their families. It is especially important today, that our young men and women in uniform feel the support of our country. The quality of life (QOL) initiatives included in the Fiscal Year 2002 National Defense Authorization Act are welcome and let our people know their elected representatives value their hard work and sacrifices.

Thank you for supporting the administration's request for the largest pay raise in two decades. Competitive pay is essential to attract and retain the highly skilled personnel critical to our national defense.

There are areas where compensation has failed to keep up with the times. For example, most American families today own two cars for parents' jobs, school, and children's extracurricular activities. This is a necessity, not a luxury. At present, our military families are only allowed to transport one vehicle when transferred to and from overseas duty stations in the United States. Developing programs to meet the needs of today's military families will go a long way toward improving retention.

Another much-needed improvement is reducing Permanent Change of Station (PCS) out of pocket expenses. We calculate the average military family pays \$1,700 above reimbursements when moving to Hawaii. Legislation like that in the Fiscal Year 2002 Defense Authorization Act, to increase partial reimbursement of mandatory pet quarantine fees incurred by members transferred to various overseas locations within and outside the United States, helps reduce this financial burden. The removal of entitlement limits that previously excluded junior personnel from receiving proper reimbursement for expenses incurred during their first PCS move is also a standout. Even a seemingly small gesture, like helping our volunteer Reserve or Guard members deal with excess accrued leave as they move from hot spot to hot spot, sends a message that we care.

In past conflicts, Reserve component (RC) personnel have mobilized to serve in and around combat zones. For the war on terrorism, we have mobilized thousands of reservists and guardsmen to protect our military bases and civilian facilities like airports. The President has clearly stated that the war on terrorism will continue for years. RC support will be a vital part of the war effort. In USPACOM, our reservists have done a magnificent job. The flexibility and support of their employers has been a key element of this successful mobilization.

We need to reexamine RC policies and programs to sustain the war on terrorism over the long-term. Cold War-era regulations and public laws still sometimes prevent RCs from providing the responsive and flexible capability they are so eager to deliver. I applaud the efforts of the Office of the Secretary of Defense (OSD) and Joint Staff to push for improvements to law, policy, and regulations. I support ways not only to increase funding but also to modernize the rules that govern RC support. To do this, we need more full-time support to perform tasks like managing manning documents, pre-screening medical records before recall, and providing support at the locations where the RC personnel are frequently mobilized.

While we are fortunate to have many eager and talented volunteers willing to make sacrifices to serve their country in times of crisis, I am concerned about the long-term impact of reliance on recalled Reserve augmentation forces. Given the nature of our protracted war on terrorism, we need to take a hard look at Active-Duty

Force levels required in the next 5–10 years to combat terrorism, because now is the time to make recruitment and force authorization adjustments.

State of Housing, Family Support

Military family housing remains one of our top QOL priorities. We are working to replace or renovate substandard military family housing by 2007. Pacific Fleet (PACFLT), Marine Forces Pacific (MARFORPAC), Pacific Air Forces (PACAF), and U.S. Army Pacific (USARPAC) will meet this goal with their current master plans and programs. We must continue to restore and increase funding to ensure that our military family housing is safe, modern, and secure. Congressional efforts last year resulted in a welcome and much needed increase in attention to overseas MILCON in USPACOM. I applaud your efforts to fix the grossly inadequate housing in Korea and other deficiencies throughout the AOR. There is still so much to do.

People are our most important resource. Recognition, adequate compensation, and housing are the foundation of a decent quality of life for our people and their families.

Operations and Maintenance (O&M) Funding

The second important component of readiness is sufficient operations and maintenance funding for training and maintaining equipment.

Last year I testified that with regard to our funding for Operations and Maintenance (O&M) “news is not positive” and, “accordingly the readiness of our component commands is not expected to reflect any significant increase this fiscal year.” I am happy to report this year, due to supplemental funding, our readiness picture is more optimistic.

Funding for training and maintenance across service components has been adequate to keep units trained and their equipment in good repair. This readiness was proved in combat as USPACOM carrier battlegroups (CVBGs), amphibious ready groups (ARGs), and marine expeditionary units (MEUs) deployed on short notice to Afghanistan and were effective in combat immediately.

Let me highlight my current readiness concerns.

Precision Guided Munitions (PGMs)

Ongoing support of Operation Enduring Freedom (OEF) has significantly reduced the already limited worldwide stocks of precision munitions across all services, especially the Joint Direct Attack Munition (JDAM). The President’s fiscal year 2003 budget request contains aggressive programs to restore inventories to adequate levels. Sustained funding to restore/increase PGMs stockage levels to support the spectrum of military operations—counter-terrorism (CT) operations, small-scale contingencies (SSCs), major theater wars (MTWs), training/testing expenditures, theater positioning, and combat-sustainment requirements—must remain a priority.

Intelligence, Surveillance, and Reconnaissance (ISR) Aircraft

Our AOR requires more ISR aircraft coverage to meet operational demand. While I cannot provide exact numbers in this forum, our collection rates of required intelligence information is dangerously low. Recent funding of ISR aircraft as part of the counter-terrorism (CT) supplemental will help, but this projected increase must be realized in increased surveillance units in this theater. New aircraft must also be developed to replace aging ISR assets. The projected retirement of aircraft over the out years puts at risk Service commitments to maintain a minimum number of operational ISR aircraft.

Aircraft Readiness

Mission Capable (MC) rates for Pacific Fleet (PACFLT)/Marine Forces Pacific (MARFORPAC) aircraft and cannibalization of Pacific Air Forces (PACAF) aircraft continue to be major readiness concerns in USPACOM. Availability of repair parts is a significant contributor to aircraft readiness shortfalls. Although funding for repair parts for Navy, Marine Corps, and Air Force aircraft has improved in the past 2 years, shortages still exist, causing cannibalizations on PACAF aircraft and crossdecking/temporary equipment loans in PACFLT. Of PACAF aircraft tracked from January to December 2001, 80 percent did not meet the aircraft standard for cannibalization rates.

Infrastructure, Logistics Inventories, and Related Support

The final component of readiness is infrastructure, logistics inventories, and related support. This component still requires attention.

Facilities: Sustainment, Restoration, and Modernization (SRM)

The combined effects of aging facilities and years of under funding have produced an enormous backlog of restoration and replacement projects. The current recapital-

ization backlog was caused by a combination of factors. Funding intended for facilities sustainment has often been diverted. When bases closed in the Philippines, Guam, and Hawaii, SRM funds were not redistributed for remaining facilities but were reduced as part of the "peace dividend." Rising utility costs and higher costs to accomplish base-operating support by contract further reduced funds available for SRM. As a result of inadequate funding, bases, camps, posts and stations across the Asia-Pacific region are shabby and deteriorating to a point we can no longer ignore. Our people deserve much better than this; they deserve to live and work in a quality environment.

At current Future Years Defense Plan (FYDP) funding levels, the \$5.3 billion USPACOM recapitalization backlog will nearly double over the FYDP. USPACOM requires an additional \$8.4 billion over the FYDP to eliminate the backlog and prevent future backlog growth through proper sustainment.

SRM funding shortfalls not only affect quality of life, but also impact readiness, operation plan (OPLAN) execution, retention, and force protection. Unfunded backlog projects affect OPLAN execution in Korea, Guam and Wake Island. Without additional funding, recapitalization backlogs will continue to grow if we do not realign or close any installations or facilities, and will further deteriorate, jeopardizing critical functions throughout USPACOM's AOR.

New Pacific Command Headquarters

Construction on the Nimitz-MacArthur Pacific Command Center at Camp Smith is underway and going vertical. Completion is scheduled for December 2003. We appreciate the restoration of \$3 million included in the fiscal year 2002 MILCON Appropriations Act to fund critical design elements, including antiterrorism force protection (ATFP) and information security requirements. Unfortunately, this funding was reduced by over \$400,000 due to an across-the-board reduction of all fiscal year 2002 MILCON funding, creating an unexpected shortfall just as critical ATFP and information technology security requirements are being addressed.

Pacific Security Analysis Complex (PSAC) MILCON04

USPACOM needs a single shared intelligence complex on Oahu, Hawaii, that optimizes the missions and operations of both Kunia Regional Security Operations Center (KRSOC) and the Joint Intelligence Center Pacific (JICPAC). The current KRSOC is obsolete. The facility was built in 1945, and the last major renovation occurred in 1979. Current estimates for necessary renovations to ensure a 30-year continued use exceed \$185 million, with annual operating costs of approximately \$8 million. Construction costs for a new KRSOC facility, incorporating Naval Security Group Activity (NSGA) Pearl Harbor and NCPAC, are currently estimated at \$220 million, with annual operating costs of \$6 million. Additional savings in renovation costs to NSGA Pearl Harbor and NCPAC are estimated at \$9 million. Thus, it would be less costly in the long-term to build the new facility.

The JICPAC theater intelligence production facility has force protection vulnerabilities due to its location on a main civilian thoroughfare. Co-locating with KRSOC would lead to savings of roughly \$30 million over 4 years in JICPAC operating costs, and enhance fusion of all-source intelligence. The PSAC presents an unprecedented opportunity for immediate in-depth collaboration between the premier signals intelligence and production centers.

USPACOM Simulation Center MILCON04

Increasing exercise activity, training complexities, and command, control, communications, computers, intelligence (C⁴I) modernization have outgrown USPACOM's exercise simulation infrastructure and support capabilities. This deficiency significantly reduces the ability to train USCINCPAC and Joint Task Force (JTF) commanders in crisis action readiness procedures; degrades the ability to improve combined interoperability with friends in the region; and contributes to increased operating tempo (OPTEMPO), training time and associated costs for USPACOM forces before responding to contingencies. The current facility does not support future technologies or meet force-protection requirements. The planned state-of-the-art simulation center will link with simulation centers throughout the Asia-Pacific region to train joint integrated forces, rehearse mission requirements, provide commanders with quick-reaction combat analyses, and exploit information from open sources. It will transform USPACOM through the use of advanced simulations, collaborative tools, and C⁴I systems in joint experiments.

Wake Island Airfield Funding

Wake Island remains critical for support of strategic deployment of forces for major theater wars (MTWs). The funding in the Air Force program is the first year

of a multi-year program that must be maintained to ensure availability of this critical asset to meet wartime contingency requirements.

Mobility Infrastructure and Strategic Lift (C-17/C-5) Reliability Enhancement and Re-engine Program

USPACOM depends on continued funding of the programmed C-17 aircraft buy and the C-5 aircraft Reliability Enhancement and Re-engine Program and Avionics Modernization Program. Equally important are our efforts to exploit advanced sea-lift technology to reduce our dependency on premium airlift. Over the past year, III Marine Expeditionary Force (MEF) has been testing and evaluating off-island deployments using a leased High Speed Vessel (HSV). Initial analysis of the HSV suggests considerable cost savings while significantly reducing in-transit deployment time for Marine forces. Based on these encouraging initial returns, we are pursuing the HSV as a theater-lift asset in USPACOM.

Real world operations in other theaters are impacting USPACOM's exercise program. We are beginning to face regular shortages of airlift and aerial tankage. This, in turn, makes it more difficult to train soldiers, sailors, airmen, and Marines that we are depending on to execute ongoing operations. For example, to send the 3rd Wing to Red Flag to prepare them for deployment to Operation Southern Watch, we will need to contract civilian airlift at a cost of approximately \$1.1 million. The original budget was \$250,000 using KC-10. Overall, the PACAF exercise program has been cut \$734,000 and the JCS exercise program was cut \$1.2 million. Successful achievement of combat readiness training will hinge largely on sufficient funding for exercises.

Intelligence

The events of 11 September have introduced additional requirements on our already heavily tasked national and tactical intelligence systems. The demand for precise and timely intelligence has never been greater, including in-depth understanding of long-term potential adversaries, regional hotspots, and transnational threats—terrorism and the proliferation of weapons of mass destruction.

Signals Intelligence (SIGINT)

National and tactical SIGINT systems must be modernized to meet the advances in global telecommunications technology. National Security Agency (NSA) and Service SIGINT capabilities are key to our daily operations and the execution of OPLANs and contingencies in the USPACOM AOR. They must be funded to continue modernizing SIGINT collection capabilities against both modernized militaries and terrorists. Funding is also needed to replace the Kunia Regional Security Operations Center (KRSOC) and accompanying land-based collection architecture.

Our support to Operation Enduring Freedom (OEF) has exacerbated our peace-time shortage of intelligence collection aircraft. While additional aircraft are in the pipeline, we still need more in the inventory to help us reach and maintain our long-standing minimum theater requirements, and we need them soon. We encourage development of a follow-on to current manned aircraft and await availability of high altitude, long dwell, unmanned aerial vehicles. We must also upgrade the collection equipment on the aircraft. This is especially true for SIGINT, where existing collection equipment is ineffective against modern communication technology. Similar land and maritime collection capabilities also need upgrades. USPACOM fully supports integrated, joint development of the next generation signals collection tools, along with further consolidation of funding to hasten this event. Extra aircraft and new collection tools are meaningless, though, if we lack trained personnel to exploit the information. The existing shortage of linguists has worsened due to the war on terrorism. We now face regional languages and dialects never considered important before 11 September.

Imagery Analysis

Requirements for imagery continue to grow. New platforms are producing an increasing flow of data, but our ability to exploit this data has not kept pace. We are doing well on the Tasking portion of the Tasking, Processing, Exploitation, and Dissemination (TPED) of imagery, but insufficient communications and lack of imagery analysts hamper the remaining aspects of the process. Additional funding is needed to realize the full potential of this intelligence source. USPACOM still requires a robust theater-level intelligence gathering capability against the entire threat spectrum.

Command, Control, Communications, and Computer Systems (C⁴) Capabilities

Information technology (IT) continues to influence warfare at every turn. C⁴ is the unsung workhorse of any operation, requiring 24 hours a day/7 days a week reliable,

timely and uncorrupted service. As evidenced by the world's recent response to terrorist events, the need for information sharing between service, joint, and coalition partners, as well as local, State, and Federal organizations, has increased exponentially. This requirement places a strain on an already antiquated and stressed communications network. Since C⁴ encompasses a wide spectrum, I will focus on three primary areas of continued need: (1) an end-to-end communications infrastructure, (2) information assurance, and (3) interoperability.

First, the end-to-end communications enterprise provides the foundation to electronically link garrison and forward-deployed forces to commanders at all levels. USPACOM's vast AOR, mostly separated by ocean and encompassing countries with under-developed C⁴ infrastructures, requires forces to rely heavily on satellite communications (SATCOM). We continue to make great strides in many of the SATCOM programs and I thank you for your continued support. However, aging equipment and specifically, limited Ultra High Frequency (UHF) SATCOM capacity over this AOR, is fast becoming a factor in my ability to command and control forces. With the recent terrorist attacks and our ongoing efforts to root out terrorism as a whole, SATCOM connectivity to our highly specialized forces is more critical than ever before. The new challenge is to ensure that critical SATCOM upgrades, the fielding of new satellite programs, and the launching of new satellites remain on track to replace the aging fleets currently orbiting the earth in support of warfighters.

As an inseparable partner with the space segment, we must inject similar technology advances into the base, post, camp, and station infrastructures. In the Pacific Theater, we still operate on cables and wiring installed as far back as the 1960s. These cables are no longer dependable. Coupling this condition with the ever-increasing user requirements for more and more information, we must quickly modernize to support the growing bandwidth and increased speed requirements of our intelligence gatherers, planners and warfighters. Information is truly a force multiplier.

Our second focus area is information assurance (IA). How we protect our sensitive information from potential adversaries while providing access to, and sharing it with, our coalition partners is probably the toughest challenge we face in today's C⁴ environment.

Although we have made significant strides to improve IA in USPACOM, we are far from 100 percent protected. Cyber warfare never rests. Our USPACOM networks continue to receive daily cyber probes and potentially dangerous virus and hacker attacks. They can occur at any time and any place in the theater and the consequences can be severe, if we are not on guard around the clock. The payback for IA is not always as easily recognizable as with the production of new airplanes, ships, or tanks. You cannot touch and feel information protection, but a loss of critical or time-sensitive information, or a denial of service, can be far more detrimental to national security than any single weapon system. An example of the heavy IA investment needed for additional hardware is the protection afforded by current cryptographic equipment to secure networks for command and control of daily operations. Replacement parts for this aging equipment are difficult to obtain—a limiting factor as technology increases the speed, connectivity, and capacity of our networks. Cryptographic modernization programs are essential to improve the effectiveness of the U.S. Government cryptographic inventory. For example, airline flight schedules and blueprints of our embassies are simply tidbits of information. But, that information in the wrong hands may improve the enemies' chances of producing devastating results as evidenced by recent terrorist incidents.

Ongoing IA improvements will require a continued heavy investment in equipment, training and technically skilled people. I ask for your support as we strive to implement a "defense in depth" posture into our daily information operations.

The third C⁴ area is interoperability. The events of 11 September have caused us to concentrate hard on interoperability, especially with civilian and coalition partners in support of global counter-terrorism efforts. We must reassess our processes in these areas.

I firmly believe we must revamp our acquisition system, especially in the area of IT. Long-term replacement programs are detached at an early stage from the dynamic reality of operations and warfare. They emerge decades later with new systems that are better than what they replace, but not as good as what they could or should be in meeting the needs of the warfighter.

Our system does not put engineers together with the operators to fix real operational problems, deal with real war plan deficiencies and emerging threats, or take advantage of real opportunities. The current system, which drives the actions of the detached bureaucracy of requirements writers, contracting officers and program

managers, is only tenuously connected to what our forces need to operate and fight better.

We must integrate the engineers with the operators in a spiral development approach in which we build a little, test a little, and then build a little more. Let them see firsthand the interoperability problems that exist between civilian, joint and coalition organizations. For example, our Joint Task Force (JTF) commanders use service variants of our Global Command and Control System (GCCS), because the joint version is not as capable as the service variant and is not fully fielded across the theater. As another example, the land mobile radio systems that our police and fire departments use are not interoperable with our military systems. These incompatibilities prevent key personnel from sharing critical information in a timely fashion, and could easily lead to catastrophic results.

We can address many of these interoperability issues by using this spiral development approach, and putting engineers in the field during joint exercises, training maneuvers and technology demonstrations. Initially, this approach comes with an increased cost until we can identify capabilities in programs that we do not need. But the timely and increased operational capabilities provided to the warfighter as result of it more than justify the initial expense.

Maintaining our leading edge in C⁴ technology, assuring our critical information and improving interoperability with our coalition partners are essential to protecting American security interests in the 21st century. Our command is working hard to mitigate these limitations; however, we need increased C⁴ funding to maintain the operational edge over our adversaries.

Multiple Theater War Sustainment Issues (Harvest Eagle, APS-4)

Refurbishment and reconstitution of Air Force Harvest Eagle bare base assets are key to both current operations plans (OPLANs) and USPACOM operations in support of the global war on terrorism. Harvest Eagle's tent-based housing modules allow forward-deployed or reinforcing units to establish airfield operations where local infrastructure is austere or lacking. Degraded before their use in current operations, our deployable bare-base assets capacity will continue to be a limiting factor to executing OPLANs and contingencies without fully funding refurbishment and reconstitution.

Shortfalls in pre-positioned equipment and supplies to support combat operations in the Korean Theater of Operations are also of major concern. The Army maintains a strategic inventory of sustainment supplies as part of Army Pre-positioned Stocks (APS). These stocks sustain forward-deployed and initial follow-on ground forces, and include major end items such as engines, repair parts, medical supplies, packaged petroleum products, barrier/construction materials, operations rations, and clothing required to sustain combat operations.

Additionally, we have significant shortfalls in Army APS-4 Sustainment Stocks designated to replace projected combat losses, especially critical during the early stages of a major theater war (MTW) on the Korean Peninsula. Within these sustainment stocks, Class VII (Major End Items) and Class IX (Repair Parts) have the most serious shortfalls. Finally, less than 30 percent of Joint Service Lightweight Integrated Suit Technology chemical protection suits (to support operations in a nuclear, chemical, biological environment) are available in sustainment stocks. The combination of these shortfalls degrades our ability to conduct sustained combat operations on the Korean Peninsula.

USPACOM FORCE TRANSFORMATION

Our enemies and potential enemies are working hard to develop ways to defeat the U.S. Armed Forces. We cannot allow our current military dominance to lead to complacency and future defeat. Force transformation is a priority at USPACOM. We have made rapid progress over the past year in developing Joint Mission Force capabilities, in our Advanced Concept Technology Demonstrations (ACTDs) and in aligning force transformation with our Joint Training and Theater Security Cooperation (TSC) plans. Experimenting as we exercise and operate is becoming routine. Individual commanders are also making advances through their own initiatives, with service and USPACOM support. Examples include the High Speed Vessel (HSV) that Marine forces on Okinawa have leased to make movement within the theater faster at less expense and the development of numerous networking and decision support capabilities. We continue to work closely with U.S. Joint Forces Command (USJFCOM), the executive agent for joint force experimentation, and are increasing the involvement of allies and coalition partners to enhance interoperability and combined force capabilities as we transform U.S. forces.

Joint Mission Force (JMF) Objectives

The objectives of USPACOM's JMF concept are to enhance the speed of action, precision, and mission effectiveness of Theater Joint Task Forces (JTFs). Our vision is to create a seamless Joint/Combined Pacific Theater response force capable of accomplishing the full spectrum of missions, from a complex contingency through humanitarian assistance (HA), and serving as the leading edge during a major war. This transformation effort has moved from its concept development in war games to implementation in exercises that enhance our ability to rapidly form and deploy a JTF.

Through the JMF concept, Battle Staff Rosters supported by service components now provide tailored on-call augmentation for key billets at USPACOM's designated JTF headquarters. These staffs are trained to provide the performance of a Standing JTF Headquarters, without incurring the overhead of a separate organization. Command relationships for designated JTF and component commands are already established and rehearsed to enable rapid activation and deployment.

Command, control, communications, computers, intelligence (C⁴I) baseline requirements have also been established and are routinely tested in our command and control exercise program to ensure our ability to establish a common operating picture and theater network for collaborative planning. Our JTFs now use newly published CD-ROM based and Web-accessible standard operating procedures (SOPs) internally linked with checklists and templates. Information management serves as the foundation for the SOP, and is supported by a standardized JTF Web site that facilitates Web-centric information pull. Our primary JTFs now train to assigned missions with packaged, mission-oriented training standards, including new tasks designed to examine draft doctrine linked to technology, for integrated and synchronized fires and maneuver.

The current focus for transforming JTF capabilities are in the areas of joint fire and maneuver, battle space situational awareness and the common operational and tactical pictures, coalition force integration, force protection, and rapid JTF formation.

Based on 3 years of development, the JMF concept is our prototype standing JTF Headquarters. JMF provides greater flexibility for multiple crises, capitalizes on component core competencies, requires no additional manpower, and allows for normal service rotations and deployments.

During Exercise Kernel Blitz (Experimental) in June 2001, we demonstrated Wide Area Relay Network (WARNET) technologies in the Extending the Littoral Battlespace (ELB) ACTD. Our follow-on JTF WARNET initiative will provide our JTFs with organic, wireless, and secure connectivity for planning and execution at the tactical level. The JTF WARNET communications network, associated applications, and interfaces support joint forces across a widely distributed battlespace to provide real-time and near real-time command and control (C²), collaboration, common tactical picture and joint fires across service boundaries. Under the technical leadership of the Office of Naval Research with substantial funding support from OSD, JTF WARNET development continues for prototype deployment with operational forces in 2004.

Coalition Involvement in Joint Mission Force (JMF) Efforts

Our JMF concept is an essential part of Theater Security Cooperation (TSC). To improve regional readiness for coalition operations, we are developing a Multinational Force (MNF) SOP tailored from the JTF SOP we built last year. This more generic document will include broad operational considerations that our multinational partners can readily implement when one acts as the lead nation with the United States serving in a support role. The Multinational Planning Augmentation Team (MPAT) serves as the instrument for MNF SOP development. The MPAT conducts collaborative development of the document over the Asia-Pacific Area Network (APAN) and at workshops in the region. Joint Experimentation with coalition partners is coordinated in bilateral venues such as the Annual Staff Talks with Singapore and Australia. This spring, USPACOM will fully involve coalition partners by hosting a Coalition Transformation Workshop as part of our annual ACTD conference.

Joint Task Force (JTF) Joint Experimentation Program (JEP)

Our JTFJEP focuses on transforming JTF operations and is fully coordinated with the JEP of USJFCOM. Our JTFJEP includes technology insertion experiments during exercises to advance our practice of JTF operations, both in the U.S. and coalition venues.

This year we have planned two major experiments. The first experiment will occur as part of our command and control exercise (C²X) series where we train for

rapid formation of a JTF. Our C²Xs over the past year made significant advances in sharing common procedures and a common operational picture (COP) among JTF subordinate commanders, and in collaborative planning. We will experiment next with advanced capabilities to manage and control information flow on the JTF networks, and incorporate advanced fires management capabilities. Our second experiment will be in a coalition environment during Exercise Cobra Gold with Thailand, Australia, Singapore, and Malaysia. By experimenting as we exercise, we provide a continuous series of field-tested warfighting improvements in joint and combined operations before we make key procurement decisions.

Advanced Technology Development

I am a strong supporter of USPACOM's Advanced Concept Technology Demonstrations (ACTDs). They provide important near-term joint and combined warfighting capabilities. Since I last spoke with you, USPACOM has been awarded 6 new ACTDs, bringing the number of ACTDs involving USPACOM to 18, more than any other major command. Almost all our service Component Commanders, designated JTF Commanders, Subordinate Unified Commanders, and each of my Staff Directors have responsibility for executing one or more ACTDs. USPACOM forces are involved in transformation across the theater.

Our six new ACTDs will provide new operational and tactical capabilities.

- The Micro Air Vehicle ACTD will provide small units enhanced situational awareness using miniaturized sensors on a man-portable unmanned air vehicle.
- The Language and Speech Exploitation Resources ACTD will reduce language barriers and improve coalition operations by providing a tool to automatically translate languages.
- The Joint Explosive Ordnance Disposal—Knowledge Technology Operations Demonstration ACTD will provide Explosive Ordnance Disposal (EOD) teams in the field with a portable, rapidly updateable, computerized database for safely disarming explosive devices in the field.
- The SPARTAN ACTD will provide enhanced battlespace awareness and increased force protection for surface and subsurface operations, by demonstrating the capabilities of unmanned surface vessels with modular sensor packages. SPARTAN is also the leading candidate for an improved TSC initiative involving co-development of advanced capabilities with coalition partners. The Singapore Armed Forces are interested in co-developing this system with us.
- The Thermobaric Weapon ACTD provides a standoff weapon for attacking tunnels and underground facilities. This program potentially provides two to three times the lethality over currently fielded penetrating weapons.
- The Signals Intelligence Processing ACTD provides improved capabilities to collect and process signals.

Coalition Theater Logistics

In parallel with transforming our forces, we must also bring along coalition partners. Last year, I testified that, thanks to your strong support, we were starting work on our Coalition Theater Logistics ACTD.

This is an important initiative, co-sponsored by Australia, to demonstrate how coalition logistics information can be exchanged at the national, operational and tactical levels. Over the last year, we've finalized operational requirements; signed a project arrangement with Australia that leverages technology from both countries, and embarked on a technical development program that puts us on the brink of providing a coalition force with a breakthrough capability—plan and execute coalition force deployment through selective information exchange between existing national logistics information systems. Continued support will ensure that we achieve all our objectives.

We have also partnered with Thailand and are beginning discussions with Singapore, Korea, and Japan to partner with them during future phases of ACTD development. In parallel with transforming our forces, we must also bring along coalition partners.

Joint Warrior Interoperability Demonstration (JWID)

USPACOM is the designated-host commander in chief for the fiscal years 2002 and 2003 execution of the Joint Staff J6I-sponsored JWID. Despite numerous other interoperability and transformation initiatives in progress, JWID has exceptional potential to address the real and near-term command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR) interoperability challenges facing joint and coalition operations. Working with the U.S. Marine

Corps, this year's lead service, USPACOM has broadened the scope of challenges being investigated, focused the operational environment underpinning JWID to simulate demands of current military operations, expanded the list of countries participating to include Pacific Rim countries for the first time, and introduced warfighter rigor in executing the demonstration period and assessment of proposed technology solutions.

U.S. industry and government activities have responded to the call for interoperability solutions that span the C² spectrum from strategic to tactical and that embrace new approaches to challenges in the situational awareness, common operating picture, decision support, collaboration, logistics, multi-lingual, joint and coalition fires, multi-level security, and medical arenas. For the first time, there will be incipient focus on support for humanitarian assistance and disaster-relief enablers. Due to success in our JMF program, USPACOM has introduced a Combined Task Force Web-portal interface for organizing, visualizing, and transferring the products produced by various JWID demonstrations and interoperability trials.

We have also made a concerted effort to enhance the understanding and participation by other Commanders in Chief to ensure that the results from JWID will deliver solutions to the C⁴ISR challenges that each of them confront in routine and contingency operations.

Multi-Domain Dissemination System (MDDS)

An unresolved challenge of furthering coalition readiness in the Pacific is the problem of multi-level security. Our intelligence-sharing relationships with our theater partners vary from country to country. Therefore, completely separate structures for passing classified information are required to interoperate with each individual country. To meet this requirement, developing and accrediting multi-level security technology, such as the MDDS, remain a high-interest item in USPACOM. Such technology and capability is imperative toward fully realizing our engagement strategy for any Pacific coalition force.

SUMMARY STATEMENT

In summary, the forward deployed and forward-stationed forces of the U.S. Pacific Command are making a difference in promoting American interests in security and peaceful development in the Asia-Pacific region. We are relentlessly pursuing terrorists that threaten American citizens and interests. With a sustained effort and support of regional partners, we will succeed in rooting them out. U.S. Pacific Command's priorities remain readiness, regional (theater) security cooperation, and transforming U.S. forces to achieve a revolution in military affairs. The men and women of the U.S. Pacific Command appreciate this opportunity to tell their story and the support that you give them.

Senator REED [presiding]. Thank you, Admiral.
General Schwartz.

STATEMENT OF GEN. THOMAS A. SCHWARTZ, USA, COMMANDER IN CHIEF, UNITED NATIONS COMMAND, U.S. FORCES KOREA, COMBINED FORCES COMMAND KOREA

General SCHWARTZ. Yes, sir. Senator Warner, members of the committee, thank you for having me here today. I appreciate this opportunity. I am honored to be with you today. After 27 months in Korea, almost completing 6 years service in Korea, the highlight of my 35 years is being a part of this great alliance and serving our country in northeast Asia.

We are accomplishing our mission every day, no doubt about it. We are deterring war. We did it for 50 years. President Bush came to us recently and he said to the public: We will do it for 50 more if need be; we are committed to the alliance. That is very reassuring.

We are ready to fight tonight. We know it. South Korea knows it. The good part of that is, North Korea knows it. That is all part of deterrence. That is why we have peace and prosperity on the peninsula today, because we are trained and ready.

I am proud of our soldiers, sailors, airmen, and marines that are there. They face the enemy every day. I am amazed every day at how positive they are—upbeat about the mission, understanding, and willing to drive on and stay trained and ready.

I am also pleased to announce to you that over 175 Senators, Congressmen, and members of their staff have come to the peninsula within the last 2½ years while I have been a combatant commander to visit, to understand, and to hear the Korean story brief. It has been reassuring to us and to all those soldiers, sailors, airmen, and marines serving overseas. We thank you so much.

It is a great story, Korea, but it is a hardship story. Eighty-five percent of the young men and women serving our country today who are classified by the Department of Defense as serving in a hardship area serve on the peninsula of Korea. It is not easy. There are expenses to them out of pocket that, even lowballing it, are \$4,000 to \$6,000. While their families are at home trying to make do, they are spending this money. It is a hardship on these families. It is a hardship on the young people. This is one of the reasons that I am very excited about the initiative, both in the House and the Senate, to try to give them some tax break to help compensate for some of the sacrifices that they make.

We have a high declination rate of command. I discussed this with Senator Warner yesterday. In fact, the first three lieutenant colonels and colonels that I called to congratulate on command in Korea informed me they were not coming, they were declining command and resigning from the United States military. That is not reassuring, but it is a track record that we have to do something about.

I report to you that North Korea remains without a doubt the major threat to stability and security in northeast Asia. The President was clear about this when he was on the peninsula. He was strong, he stated his convictions, and there is no doubt in either Korea's mind where this country stands with respect to North Korea.

Kim Jong Il continues to build his military at the expense of his people. He grows stronger while his people suffer, and he remains dangerous, adaptive, and unpredictable, again at the expense of his people.

I would remind you, as we all well know, every day we serve there we are not at peace. We need a road map, if we are not at peace, to a peaceful solution. We refer to those as confidence-building measures. We have come to a good agreement with the South Koreans about a road ahead, about the confidence-building measures, a four-phased approach to dialoguing with North Korea.

Senator Warner, you asked about the dialogue and how it was going. It is not going well. We are ready to talk. The President came to the peninsula and said to North Korea that we are ready to talk. The stumbling block there? North Korea. We are waiting. We will wait patiently, but we are ready to engage.

I am amazed every day at this great alliance. I am amazed and I have to report to you how great the Republic of Korea is as an ally. They have stepped up to the plate. Right after September 11, President Kim asked "What can we do?" They offered 470 personnel. They have sent their navy, an LST. They have sent four C-

130s. They sent a medical support unit. They are willing to meet any request that we have, and President Kim said they would spend in excess of \$500 million to support this effort. He would exceed the money he spent on Operations Desert Storm/Desert Shield. Quite an ally.

They also have stepped up to the plate in the Special Measures Agreement. Last year, I can report to you, they contributed \$425 million in direct contributions. We just finished a contract negotiation with them. This year they will contribute \$490 million; the year after that, 10 percent more to about \$550 million; 10 percent more after that, to \$600 million. That is stepping up to the plate. That is a good ally.

They have increased their contribution from a measurable 41 percent to an expectation of 50 percent, and if you throw in a new agreement we have with them on the Land Partnership Plan they will exceed 60 percent of the contribution. Of course, we set a goal of 70. They are on the move and they are making a difference.

I am excited about the Land Partnership Plan because it is best referred to as BRAC-Korea. I looked at the 85 camps and stations we had. I looked at the 41 major installations on that peninsula and I said we can do better. We can consolidate. We can improve the quality of life, we can improve the force protection, and we can improve the readiness of the forces in Korea if we shrink this footprint.

We have negotiated now for 2 years with the Koreans and on the 15th of March we are going to sign a landmark agreement called the Land Partnership Plan, BRAC-Korea. It will cost the Koreans in excess of a billion dollars to consolidate our forces, again stepping up to the plate. It is a win for that country because we return over 50 percent of the acres we currently own—every acre is precious in Korea—and it is a good step forward in terms of our relationships. It is a win-win situation for both countries.

My priorities I think are well stated in the summary that I submitted to this committee. I would be glad to answer questions on them in the future.

Let me conclude with this, if I may. This alliance is strong. This alliance is ready. We have a world-class military called the Republic of Korea. It is becoming a high tech, information age military. It is moving and transforming with us, a remarkable ally. I am proud to serve there, proud of what our country is doing there, trained and ready.

Thank you very much, sir.

[The prepared statement of General Schwartz follows:]

PREPARED STATEMENT BY GEN. THOMAS A. SCHWARTZ, USA

Chairman Levin, Senator Warner and distinguished committee members, I am honored to appear before you as Commander in Chief, United Nations Command, Republic of Korea—United States Combined Forces Command (CFC); and Commander, United States Forces Korea (USFK). We want to first express our deep gratitude to the United States Senate for the consistent support you have provided our forces over the years. During the last year several members of the Senate spent time visiting the men and women of USFK. From this committee, Senator Bunning, Senator Nelson, and Senator Sessions honored us with a visit last year. They experienced the culture of this critical region, saw the area's urbanization and economic growth and were able to discuss current issues with the Korean people. They talked with American troops about their sense of mission and readiness to fight, monitored

their morale, and mentally noted the incredible sacrifices they make every day. They had the opportunity to see for themselves the “good, bad, and ugly” living and working conditions in Korea and to visit with many of our service members and families. The more than 37,000 soldiers, sailors, airmen, marines, and Department of Defense civilians of USFK benefit from your commitment, which enables us to accomplish our vital mission, the defense of Korea.

We welcome this opportunity to present a brief update on the current security situation. We are grateful to report today that the ROK–U.S. security alliance remains strong. Our alliance continues to be one of the greatest enjoyed by the U.S., and remains essential to the peace and security of Northeast Asia. This great alliance is effectively deterring North Korean aggression today, and if called upon, will successfully defeat a North Korean attack. The tragedy and subsequent challenges of terrorist attacks on the World Trade Center and the Pentagon have actually strengthened our cohesion, as the Korean government works with us to combat terrorism on a global level. We stand ready to support the war on terrorism, and to continue close coordination on many issues. Our efforts will continue to ensure security and contribute toward regional stability. Northeast Asia demonstrates enormous economic potential, but it is a region with a long history of conflict and strife.

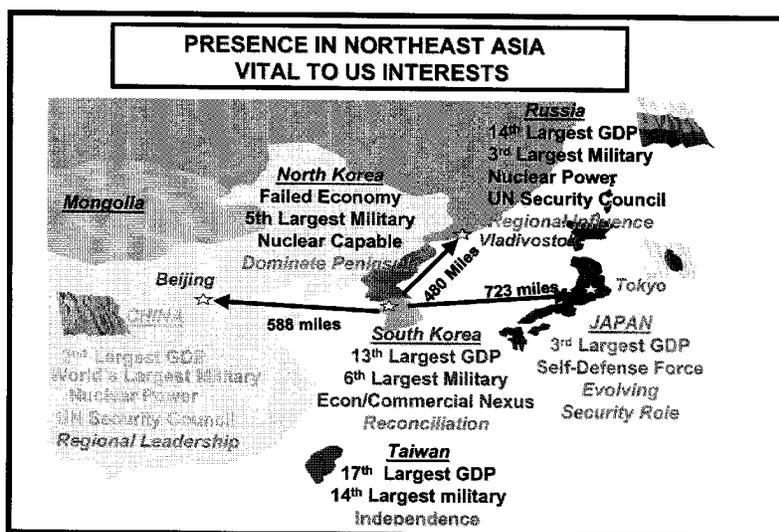
Today we will key on the following topics: (1) Northeast Asia, A Critical Region for America, (2) Korean Peninsula Overview, (3) North Korean Overview and Strategy, (4) ROK–U.S. Alliance, (5) Vision for the Future, and (6) Command Priorities. Throughout this statement, we will identify key requirements and areas that merit continued attention and the full application of available resources. On behalf of all the service members of USFK, I want to thank you for all Congress has done to improve and enhance the successful mission accomplishment of this command. Your efforts have advanced the national interests of our great nation and promoted peace throughout the region.

I. NORTHEAST ASIA—A CRITICAL REGION FOR AMERICA

Northeast Asia is second only to the Americas in economic impact to the U.S. It is a geographic crossroads, a place of historic conflict and an area of great hope for the future. The physical presence of U.S. ground, air, and naval forces in Korea and Japan contribute significantly to U.S. interests and to those of our Northeast Asian allies, friends and partners. These contributions will endure well into the future. U.S. presence provides the military security in Northeast Asia that encourages economic growth and political stability. The U.S. has made great strides in our ability to rapidly project power, but there is no substitute for some degree of forward presence when faced with limited warning times, an unpredictable foe, and the tyranny of distances. Physical U.S. presence brings peace of mind to the democratic nations of the region, and provides tangible deterrence. Our presence also provides the access and influence necessary for defending the Republic of Korea today and responding to regional threats in the future.

This security is directly responsible for much of the economic vitality and political stability in the region. Physical presence has fostered the rapid expansion of the mutually reinforcing elements of democratization and market economies. The U.S. commitment in Northeast Asia provides the confidence necessary for foreign investment to flow into the region. The results are staggering. In the course of a single generation, the countries of Japan, China, Korea, Taiwan, and Singapore have risen respectively to numbers 3, 4, 7, 8, and 10 in total trade with the U.S. China (\$4,800,846 billion), Japan (\$2,950 billion), Korea (\$626 billion), Russia (\$620 billion) and Taiwan (\$357 billion) rank as the 2nd, 3rd, 13th, 14th and 17th largest economies in the world when measured by Gross Domestic Product (GDP) purchasing power. This U.S. presence is a force for stability and prosperity that diminishes the need for costly arms races and successfully deters aggression in an area with a history of regional wars, revolutions and memories of violent colonization.

For over two millennia, the Korean peninsula has sat astride a geographic fault line where civilizations and cultures clash. The interests and influence of the four great powers—U.S., China, Russia and Japan, converge on the Korean Peninsula. Ancient cultural animosities remain a dynamic political force. China is striving for an increased regional leadership role through economic development and military modernization. Russia seeks to increase its regional influence and power. Japan is accelerating the evolution of its security role internationally, as well as in the region. Throughout history, great powers have clashed on the Korea peninsula. As a result, the Korean peninsula has witnessed over 30 major wars in its history. Today, the current demarcation line between North and South Korea remains the most heavily armed in the world.



Northeast Asia is currently the world's most dynamic region as the figure below illustrates. Five of the world's six largest militaries (China, U.S., Russia, North Korea, and South Korea) and four nuclear-capable powers converge on the Korean peninsula. Northeast Asia's military forces are primarily ground-focused and lack precision weapons. Conflict would result in tremendous devastation, property destruction and loss of life. In this geo-political landscape, the presence of U.S. forces supports peace and stability to the region. Northeast Asia is truly a critical region for the U.S. and the world.

II. KOREAN PENINSULA OVERVIEW

Optimism over the pace of North-South reconciliation efforts following the June 2000 summit meeting between ROK President Kim Dae-jung and Chairman Kim Chong-il, the dictator of North Korea, has been tempered by a year of progress and then followed by year of slowdown in peninsular dialogue. Chairman Kim Chong-il has yet to follow through on his promised visit to South Korea. North Korea unilaterally cut off most Inter-Korean contacts in March 2001 and has elected to not sign an agreement to de-mine a portion of the Demilitarized Zone (DMZ) that would pave the way for a North-South transportation corridor. Ministerial talks resumed in September, but planned family re-unions were abruptly cancelled in October by North Korea. The sixth Ministerial Talks ended with limited measurable results in November 2001. No further talks are planned at this time. Unfortunately, we have come to realize that North Korea is either unwilling or unable to significantly improve relations with the ROK or U.S. The security situation remains dynamic and the military threat has not been fundamentally reduced on the peninsula or in the region. The North Korean military continues to remain a formidable threat to the security of Northeast Asia. North Korea remains on the U.S. State Department's list of "Nations that Sponsor Terrorism." On January 29th, our president stated our "goal is to prevent regimes that sponsor terror from threatening America or our friends and allies with weapons of mass destruction. Some of these regimes have been pretty quiet since September the 11th. But, we know their true nature. North Korea is a regime arming with missiles and weapons of mass destruction, while starving its citizens." Despite attempts by the South Korean government, North Korea has shunned all attempts to discuss substantive military confidence building measures to reduce tensions. As reported in numerous press accounts, Pyongyang views these confidence-building measures as "premature" and continues to castigate the U.S. administration's policies as being too aggressive.

North Korea initially responded to the events of September 11 with "deep regret" and some condemnation of the acts. In addition, Pyongyang publicly rejected terrorism and the support of terrorist organizations, and signed two anti-terrorism trea-

ties and announced plans to sign five more. However, started to condemn Pyongyang criticized the American military actions in Afghanistan and elsewhere. Although North Korea did welcome the new Afghan government, North Korea has responded negatively toward President Bush's recent state of the Union address in recent writings and public broadcasts. Although we welcome and hope for more direct North-South dialogue and reconciliation, we watch with caution as the military threat from North Korea continues to remain high, both in conventional capability and weapons of mass destruction. North Korea continues to divert a large percentage of its national resources toward military expansion and modernization, and maintains approximately 70 percent of its forces within 90 miles of the DMZ.

In 2002, we expect North Korea to continue diplomatic outreach strategies designed to garner much needed economic aid and assistance. However, in 2003, three critical events will influence the political-military affairs on the Peninsula. First, changes in regional politics will take place with elections in the ROK. Secondly, pressure will intensify on the DPRK to start cooperating with the International Atomic Energy Agency (IAEA), so as to avoid unacceptable delays in the delivery of essential nuclear components necessary to build two light water nuclear reactors in North Korea. Third, while North Korea has said it will continue a moratorium on missile launches until 2003, it has not made a commitment to extend beyond that time. These three events form a potential nexus for increased tension on the Peninsula. These key events are centered around the United Nation's International Atomic Energy Agency (IAEA) inspections of reprocessing facilities in the north, which must occur prior to delivery of key components for the light water reactors. We will watch these events carefully. Failure to allow a timely completion of IAEA inspections into the history of the North Korean nuclear program could jeopardize existing agreements.

III. NORTH KOREAN OVERVIEW AND STRATEGY

North Korea continues to pose a dangerous threat to the stability and security on the Korean Peninsula, the region, and, increasingly, the world. They remain a dangerous adversary with regional operational reach and global proliferation impact. The Kim Chong-il Regime continues to maintain a large, capable, and forward deployed military—making the area between Seoul and Pyongyang the most militarized place on earth. Korea remains a place where U.S. Forces could almost instantaneously become engaged in a high intensity war involving significant ground, air, and naval forces. Such a war would cause loss of life numbering in the hundreds of thousands and cause billions of dollars in property destruction. The military capabilities and policies of North Korea have remained fundamentally unchanged since my testimony last year.

Political Environment: Kim Chong-il is firmly in control and, with the support of the military and his leadership circle, he establishes all policies for North Korea. We were optimistic throughout last year that the June 2000 summit between Kim Dae-jung and Kim Chong-il would lead to improved North-South relations. In the months that followed the June Summit, the North and South held several Ministerial and sub-Ministerial discussions as well as three small-scale family reunions. In early 2001, the North for its own reasons broke off discussions with the South. President Kim's administration, with U.S. support, has continued to pursue dialogue with the North, and has taken a number of steps to encourage the North to return to the table. As President Bush has noted, we are disappointed that the North has yet to react favorably.

On June 6, 2001, President Bush stated our willingness to undertake serious discussions with North Korea on a broad agenda, including improved implementation of the Agreed Framework, verifiable constraints on North Korea's missile programs and a ban on its missile exports, and a less threatening conventional military posture. This position has been restated repeatedly by Secretaries Powell, Rumsfeld and others.

Over the years, North Korea has established diplomatic relations with 150 countries. This past year, North Korea focused its efforts on establishing diplomatic relations outside the Northeast Asia region, particularly in Europe where it established relations with 13 of the 15 members of the European Union. Kim Chong-il visited China and Russia in part to counter-balance the South's growing relationship and influence with the North's historical benefactors, but also to garner much needed economic assistance and political support. This increased diplomacy allows them to enlarge their donor base for aid while expanding their growing illicit trade activities.

The North Korean diplomatic outreach, in many ways, undermines the international legitimacy of the regime. Ambassador after ambassador who have visited

North Korea tell me about the dismal and almost surreal conditions that exist there. Authoritarian controls strictly censure all facets of information into the country. The more North Korea engages other countries, the more the world learns about North Korea and they see for themselves the reality of life for the people that live under the Kim family regime.

Economic Environment: North Korea remains incapable of feeding its population or providing for its basic energy needs. Their infrastructure continues to deteriorate and they are unable to reverse their current economic situation through improved industrial production. Consequently, they depend on others, predominately the U.S., the ROK, Japan, and China to meet their food and fuel needs. The North maintains a policy that ensures the military gets first priority on national resources. The policy allows the Korean People's Army (KPA) to operate a parallel military economy in which weapons, missiles, and drugs are produced for sale. Profits from those sales accrue directly to the military. Additionally, Kim Chong-il continues to provide luxury items such as cars, housing, and food to supportive senior leaders to ensure their loyalty. We see no potential change in this policy that is clearly designed to support the military and ruling elite at the expense of the North Korean people.

Accurately assessing the size and condition of the North Korean economy is difficult at best. North Korea continues to treat most economic data as a state secret and much of its economy is supported by foreign aid and illicit activities. Consequently, economic assessments of the North Korean economy remain nothing more than educated guesses. Based on current and projected conditions in North Korea, we expect no significant economic change in 2002. North Korea will continue to require and receive outside aid for survival.

Role of Military: The Korean People's Army (KPA) is by far the dominant presence in the country. It is the one instrument of power that enables North Korea to extract aid from its neighbors in the region. The KPA ensures regime survival by controlling the internal situation and deterring external threats. The military also plays a major role in the economy. The armed forces are North Korea's largest employer, purchaser and consumer. It provides the regime with a substantial portion of its hard currency through weapons sales and illicit activities.

Conventional Forces: The KPA is the fifth largest active duty military force in the world, numbering over 1.17 million personnel. The ground force is the world's third largest, numbering almost one million soldiers. An estimated six million Reserves support the Active-Duty Force. The North Korean air force has over 1,700 aircraft. The navy has more than 800 ships, including the largest submarine fleet in the world. The North fields a total artillery force of over 12,000 systems, including 500 long-range systems, deployed over the past decade, with the ability to strike Seoul from their current location. About 70 percent of the North Korean Army is deployed south of Pyongyang and those forces are capable of conducting an attack with very limited tactical warning. However, an attack scenario appears unlikely at this time because North Korea clearly knows that its regime would ultimately be destroyed as a result of any attack.

Asymmetrical Forces: The North's leadership has developed substantial capabilities in ballistic missiles, special operations forces, and weapons of mass destruction. The North's asymmetric forces are dangerous, receive a large portion of the military budget, and are well trained. Methodical improvements continue in each area.

Because the North's ballistic missile program provides such powerful diplomatic and political leverage, the North's ballistic missile program remains a top priority. Over the past 2 years, North Korea has upheld its self-imposed moratorium on flight-testing long-range missiles, but has not halted research and development. They continue to refine their missile capabilities by continued testing of rocket engines and other components. Kim Chong-il stated to President Putin that the current missile flight-testing moratorium will remain in place at least until 2003. However, they continue to export missiles and missile technology throughout the world. Their ballistic missile inventory includes over 500 SCUDs of various types that can threaten the entire peninsula. They continue to produce and deploy medium-range No Dong missiles capable of striking Japan and our U.S. bases there. Pyongyang is also developing multi-stage missiles capable of striking the continental United States. They have tested the 2,000-kilometer range Taepo Dong 1 missile and continue significant work on the 5,000 plus kilometer Taepo Dong 2 missile.

North Korea's special operations forces (SOF) are the largest in the world. They consist of over 100,000 personnel and constitute a significant force multiplier. We consider them a tough, dedicated, and profoundly loyal force. They undergo year-round training to develop and maintain their skills. During wartime, these forces would attack from the ground, air and sea against both our forward and rear areas. The North will concentrate SOF against our critical warfighting nodes and seek to prevent rapid force and sortie generation by U.S. and ROK forces.

North Korea also possesses weapons of mass destruction. A large number of North Korean chemical weapons threaten both our military forces and the civilian population centers of South Korea and Japan. We assess that North Korea has very large chemical stockpiles and is self-sufficient in the production of chemical components for first generation chemical agents. Additionally, North Korea has the capability to develop, produce and weaponize biological warfare agents. They can deploy missiles with chemical warheads and potentially have the ability to weaponize biological agents for missile delivery.

We continue to be concerned with North Korea's potential nuclear threat. Though in January 2002, North Korea allowed the IAEA to visit an isotope facility, North Korea still refuses to comply with nuclear non-proliferation protocols. If North Korea will not allow inspections of their nuclear facilities, the international community cannot verify that they have in fact stopped their nuclear weapons development program. Current assessments indicate that North Korea may have produced enough plutonium for at least one, and possibly two, nuclear weapons.

Proliferation: North Korea contributes to the instability in the Middle East and South Asia through its aggressive sales of arms, missiles, and technological expertise. Missile sales and the transfer of missile technology to Iran, Syria, Libya, Iraq and Pakistan especially trouble us. The possibility that North Korea could transfer nuclear technology to extremist regimes is real and is one of our greatest concerns.

Illicit Activities: North Korea engages in a variety of other state-sponsored illicit activities to include counterfeiting of U.S. currency, money laundering, the production and sale of illegal drugs, trading in endangered species, and smuggling. In many cases, these illicit deals are sponsored by the military, with the cash profits returning to military hands.

Force Improvements: North Korea cannot afford to significantly modernize its aging conventional force. They continue to produce limited numbers of replacement systems and depend on China and Russia to provide equipment and spare parts. North Korea continues to modernize systems that can marginalize specific U.S. military strengths. North Korea is adaptive. They study our actions, most recently in the Balkans and Afghanistan, in order to develop tactics and techniques aimed at offsetting our technological advantage. They concentrate their efforts against U.S. surveillance, precision munitions and force generation capability. They continue to improve their command, control, communications and intelligence (C⁴I) systems, harden and bury their facilities, improve lines of communication, disperse forces, and improve camouflage, concealment, and deception (CC&D) measures. The result of these efforts has been to increase the survivability of North Korean combat power, and to complicate our ability to generate the forces and sorties required to defeat a North Korean attack.

North Korean force improvements are indicative of their continued policy to maintain a large, capable and effective military. Unfortunately, many people view the North Korean military from a cold war or conventional perspective and mistakenly assess them to be incapable of challenging the ROK—U.S. alliance. Such people become blind to the continuing threat posed by North Korea. The North Korean military is evolving in ways that make them a threat into the 21st century. They constantly study how we fight and develop capabilities that leverage their strengths against our weaknesses. They are adaptive and are methodically improving their military capabilities. They can conduct operations that span the spectrum from smuggling, kidnapping and assassination, to conventional combat. They are clearly the type of current and future threat that is described in the Quadrennial Defense Review.

As a result of their specific actions, North Korea continues to pose a dangerous and complex threat to the peninsula and the WMD and missile programs constitute a growing threat to the region and the world. The Kim Regime seems unwilling or unable to change its stated intent, goals, and policies. Consequently, they will continue to use the threat of military action to gain concessions, mostly in the form of economic aid from neighboring countries in the region and the United States. It is our opinion that North Korea's infrastructure will continue to degrade and that the regime will require outside aid to meet basic food and fuel requirements. Despite the extreme hardships on its people, the Kim regime will continue to support the elite and the military at the expense of the general population. Kim Chong-il will remain in power and the North Korean government will likely not experience an economic driven collapse in 2002. Although an attack on the ROK would cause many casualties and great destruction, CFC would rapidly defeat North Korean forces.

IV. ROK-U.S. ALLIANCE

The alliance between the Republic of Korea and United States of America remains the best in the world. It is an alliance built on honor, respect, a common set of values and a commitment to the defense of the freedom of South Korea. Our power, might and daily readiness are unmatched. Unquestionably, our South Korean partners are professional warfighters. They can mobilize over 4.5 million service members and can bring 54 divisions to the fight. Our combined warfighting assets after full mobilization include over 1,500 strike aircraft that can launch over 2,000 daily sorties, over 1,000 rotary aircraft, more than 5,000 tracked vehicles, 3,000 tanks and over 250 combat ships to include four or more carrier battle groups. If necessary, this unequalled combined combat power and might will decisively defeat a North Korean attack and destroy its military and the Kim regime. It is this real and over-matching power that strengthens our deterrence mission and ultimately provides regional security.

Our continuing cooperation and understanding is a success story in many ways. This success has been institutionalized in our Mutual Defense Treaty of 1953, the Status of Forces Agreement of 1966, the annually conducted Security Consultative Meetings that have been held since 1968 and Military Committee Meetings that have been held since 1978. The Republic of Korea has actively supported American non-proliferation efforts and joined the Missile Technology Control Regime (MTCR) in 2001. The ROK expects to resume chemical weapons destruction by the spring of 2002 and hopes to achieve a 4 to 5 percent destruction this year and 45 percent destruction within two to 3 years. Three alliance areas deserve particular note: *Impact of September 11*, *Wartime Fighting Readiness*, and an update on the *Special Measures Agreement and Defense Burdensharing*.

Impact of September 11: The public condemnation of the terrorist acts against the U.S. was led by President Kim Dae-jung, who pledged support in the spirit of the Mutual Defense Treaty. He was quick to pledge support even greater than the ROK provided during Operation Desert Storm. The outpouring of sympathy from the Korean people and military was phenomenal, as was their commitment to the security and safety of U.S. troops. The ROK immediately moved to match words with deeds, sharing intelligence, increasing force protection measures and planning support packages for multi-theater use for Operation Enduring Freedom (OEF).

We believe the events of 11 September will prove to be a seminal event in the history of the ROK-U.S. alliance. As we speak to you today, ROK forces are leading a U.N. mission, providing force protection for U.S. interests on the peninsula, and supporting OEF on a global scale. The ROK sent liaison officers to both PACOM and CENTCOM and quickly learned how the war on terrorism would be prosecuted. They have worked hard to learn lessons about how to support freedom's effort on both a regional and global scale. ROK forces are standing shoulder to shoulder with U.S. forces from Tampa to Kyrgyzstan and from CENTCOM to PACOM. They have accomplished this while increasing their U.N. support and taking command of the U.N. mission in Cyprus. This is an incredibly strong alliance!

In addition to their efforts on the Korean peninsula, our allies have sent forces in support of OEF. The ROK Navy has been supporting OEF since 18 December 2001, with one Landing Ship Transport (LST). Utilizing over 170 personnel, they have delivered construction materials for runway repairs to coalition facilities at Diego Garcia and are assisting with search efforts regarding the downed B-1 bomber. The ROK Air Force continues to support U.S. global efforts with four C-130s conducting transportation operations between Guam and Wake Island with support as far west of Diego Garcia. Furthermore, the ROK has provided a Mobile Field Hospital since February. This team of 130 personnel has provided medical care in the vicinity of Afghanistan in support of coalition efforts in OEF. Overall, the ROK has committed over 470 personnel, high value equipment, and significant force structure to support OEF objectives. The ROK support for the U.S. led coalition against terrorism has been comprehensive from humanitarian aid to global deployments of medical personnel, navy ships and air force units. We believe this type of support is key to a greater global and regional perspective for the Republic of Korea and will assist their evolving role as a regional leader.

The Republic of Korea, along with Japan, will co-host the 2002 World Cup Soccer Games between 31 May and 30 June. Teams from thirty-two nations will participate. An estimated five million visitors are expected to attend these events. This is the largest sporting event in the world and is of enormous importance to the Republic of Korea, Japan and all of Northeast Asia. This is the first time the World Cup has been held in Asia and the first time it has been co-hosted by two nations. In the wake of the September 11th attacks against the World Trade Center and the Pentagon, the world is looking to the Republic of Korea and Japan for assurance

that they can provide a secure and stable setting for the World Cup Games. Unfortunately, the World Cup could also provide a lucrative terrorist target. The Republic of Korea has prepared extensively to ensure the utmost safety and security of athletes, officials and visitors, but is seeking the benefit of U.S. support and experience from our lessons learned.

The ROK JCS has formally requested U.S. military support to the ROK for 2002 World Cup Games. We will work with ROK JCS to respond to their request in order to strengthen an already unshakable alliance and demonstrate U.S. resolve to prevent further acts of terrorism or aggression. The U.S. Forces Korea staff continues to work the details of our support to the World Cup Games closely with the ROK JCS Staff. We have found this coordination effort to be another opportunity to leverage the strength of this great alliance. As the Secretary of Defense told me—this command and the Nation pledges its assistance to our ROK allies. Together, we will ensure that these games are safe!

Wartime Fighting Readiness: Combined Forces Command (CFC) is ready to fight and win tonight. We are making great strides in our capabilities and readiness. In this section, we will briefly discuss three topics: (1) *Exercise and Training*, (2) *Force Protection Initiatives*, and continued (3) *Modernization efforts by ourselves and the ROK*.

(1) *Exercise and Training Programs*—The primary component of our warfighting readiness and bedrock of this great ROK–U.S. alliance is the CFC *Exercise and Training Program*. Both the content and timing of these combined and joint exercises successfully posture this command to deter, defend and decisively win any military engagement. However, because of the proximity of the threat, the complexity of this theater and the high turnover of both ROK and U.S. military personnel, we must conduct robust theater level exercises annually to maintain combat readiness. Each exercise is unique and focused on essential components of the combined warfight. The Exercise and Training Program is a critical pillar in our theater engagement strategy, I cannot stress this enough. We must fully resource this program. That being said, I regret to report that *any loss or reduction of dollars to support these exercises will weaken readiness and deterrence, hamper our combined forces training and put at risk our ability to fight and win.*

The exercise support we receive from the U.S. Chairman of the Joint Chiefs of Staff is invaluable. The combination of the increased cost of strategic lift with a flat-line strategic lift budget has eroded our exercise strategic lift capability. We must address this by some means. Simply put, we are bringing fewer personnel to train for a higher cost than ever before. It would be unwise to let this trend continue over the Future Years Defense Plan (FYDP).

We have made significant changes in our exercise program over the last year. The linkage of the Reception, Staging, Onward Movement and Integration (RSOI) exercise and the Foal Eagle (FE) exercise is a monumental step for this alliance. We have not sacrificed realism nor readiness—we've enhanced it. We have not reduced our exercise tempo—we've made a giant step forward in quality training. We monitor everything we do in combat readiness training carefully because these exercises are not hypothetical. These training events exercise the real "go-to-war" plans. Korea remains one of the only theaters in the world where real war plans form the basis of our exercise program.

We are working equally hard to improve our training capability. The training environment, for U.S. forces stationed in Korea, is best described as a "Tornado in a Closet." Our 93 percent personnel turnover rate, as well as constraints with land to train on, provides significant challenges. Personnel and units can, and do, train to standard, but it requires intense, detailed, and creative planning and management on the part of our leadership to make this happen. Our commanders accept these challenges, and become innovative in their approaches to provide better and more realistic training environments for their Soldiers, Airmen, Sailors and Marines. We are creatively maximizing our Joint Use Ranges using mobile target sets that synchronize our efforts with ROK forces. We have several initiatives aimed at improving our urban training capability and we have a strategic roadmap aimed at improving key training areas such as Rodriguez Range for joint and live fire training. The fiscal year 03 President's Budget restored the Korea Battle Simulation Center to full funding; we must now address the remaining requirement of \$3.0 million for training and instrumentation. We will continue to develop our range capabilities to ensure readiness now and for the future.

(2) *Force Protection*—The events of September 11 have caused us to re-evaluate every aspect of our force protection program. The most significant lesson learned was that a high number of personnel must be committed to maintaining an increased force protection posture. At increased force protection levels, 20 percent of our force is committed. The environment in Korea presents several unique chal-

lenges for the protection of our members. Although we assess the terrorist threat in Korea to be generally low, our vulnerability to such an attack remains high. While we have taken significant steps to improve our security posture, many of the solutions require long-term programmatic changes, which cannot wait for a specific threat to appear.

Our force protection challenges here in Korea are centered on the following systemic issues: *lack of standoff and our off-post personnel and activities*. Compounding these challenges is the impact of the 1-year tour on the majority of service members.

Our most difficult and “resource intensive” challenge is the lack of standoff. Urban encroachment at our facilities, and the lack of available real estate for force protection requirements contribute to this vulnerability. As a result, our installations will have virtually no early warning of a hostile action, whether by vehicle or a personnel infiltration. This challenge is intensified by the fact that USFK has 85 manned installations, many quite small, spread across the theater. We have organized these installations into 12 “base clusters”, which operate as our major “hubs”. While not ideal, since many of these bases lack the ability to plan or respond to terrorism, this is the best balance of our manpower and resources. However, many of these base clusters still lack resources necessary for basic force protection. Large portions of our personnel reside in *off-post lodging*. Because of the lack of on-base housing, many of our service members, civilians and family members must live in the local civilian community, with little security.

Our challenges are numerous. We have several initiatives underway to improve our force protection posture. On-going initiatives, which we will describe in detail later, will reduce the number of installations and eliminate many of the smaller facilities. This will have multiple payoffs for force protection: eliminating our smallest and most difficult to defend installations, thus reducing the manpower burden of defending them; creating standoff at our enduring installations; and allowing us to position our security and terrorist incident response forces for maximum benefit. USFK is also a test bed for the use of Biometrics for our access control systems. This technology has DOD wide application; it allows central management of who is authorized on our bases, and also dramatically reduces the risk of counterfeit ID Cards and passes. Starting last year, we began aggressively exercising our security systems through the use of Red Teams and terrorist incident response exercises. These initiatives are part of our on going force protection strategy review.

We have developed a force protection strategy that addresses immediate concerns as well as long-term requirements. We brought in a team to assist our base clusters in updating their antiterrorism plans, identifying vulnerabilities and mitigation procedures and determining resource requirements. The next phase is to address the physical security shortfalls at our “enduring” installations. This will involve placing perimeter intrusion detection and monitoring systems at our major bases to partially compensate for the lack of standoff. Additionally, we will restructure our access gates to more easily support increased security postures. Currently this posture requires large manpower commitments and creates major difficulties in maintaining base operations. The final phase will be to fully integrate force protection as we consolidate our forces on enduring installations. During the execution of this consolidation and base re-alignment, we plan to carefully balance the location our security forces and incident response forces.

In addition, as part of our force protection review, we concluded an anthrax policy study, which consolidated requirements and re-evaluated our posture versus chemical and biological terrorism. The events of September 11 were a call to re-evaluate all threats and the damage they can do. We re-energized a vigorous education program to ensure our USFK personnel and their families are aware of current threats and appropriate preventive and deterrent measures. We have coordinated our efforts with the ROK Ministry of National Defense to ensure that both we and the ROK are prepared to meet this threat. We will continue to make force protection our top priority.

(3) *Modernization Efforts*—The ROK continues to develop defense policy changes. They are committed to a post-unification presence for the U.S. and an enhanced regional role for the ROK. The ROK has begun a subtle but definite shift in their security focus from a unidirectional North Korean view to a multidirectional Northeast Asian and world-view. Indicative of this shift is their interest in coalition support for the “war on terrorism” and their shift in defense spending away from an infantry-heavy army and to transform into a high-tech, agile, information age military. As a result, the ROK Ministry of National Defense has supported budget shifts that now favor more development and growth in air and naval forces. Together with regional diplomatic and world economic activity, this military shift indicates a ROK desire to increase their role in East Asian security and world stability.

The ROK paper entitled *Defense Outlays Preparing For The Future 2001*, published by the ROK Ministry of National Defense (MND), emphasizes aggressive modernization goals for South Korean forces based on the near-term North Korea threat and an uncertain regional security environment. United States Forces Korea wholeheartedly supports these efforts. South Korean force modernization improvements continue in many key areas through indigenous production, co-production, direct commercial sales and procurement through Foreign Military Sales. The ROK armed forces continue to demonstrate a very strong preference for U.S. military equipment. South Korean military purchases from the U.S. as a percentage of total foreign procurement has ranged from 59.2 percent to 98.9 percent in the last 10 years. The decade average is 78.6 percent.

Last year South Korea addressed counter-fire shortfalls by fielding indigenously produced K-9 155mm self-propelled artillery systems. Significant automated shooter-to-sensor challenges remain, but the K-9 fielding coupled with this year's procurement of a second battalion of U.S. multiple launched rocket systems (MLRS) and the purchase of the Army Tactical Missile System Block 1A (ATACMS) set the stage for an improved counter-fire capability, which was previously addressed as a serious shortfall.

The events of September 11 have alerted the world to the dangers of terrorism. In Korea, MND is reviewing the possibility of a new Anti-terrorism command to develop force protection policy and apply it to current and potential regional threats. Additionally, the current chemical, biological and radiological defense command will be reinforced, reorganized, and placed under the ROK Joint Chiefs of Staff for Homeland Defense in preparation for the World Cup and Asian Games in 2002.

All of Northeast Asia is currently experiencing a slowing of the economic growth that was projected earlier in 2001. In the ROK, this economic downturn has forced purchase delays of major weapon systems that were planned for 2002—including the future fighter, the Patriot (SAM-X) missile system, an airborne warning and control system (AWACS), and cancellation of attack helicopter modernization initiatives. The military remains committed to improving South Korea's military capabilities as the economy improves. South Korea plans to sign a contract to procure 40 future fighters in 2002. Negotiations on the purchase of two Patriot Battalions for the 2002–2004 time period are ongoing. In addition, the ROK plans to initiate negotiations to procure three Aegis type destroyers. When procured, these acquisitions will significantly address South Korea's air defense problems. The ROK Navy also plans to procure eight additional P-3C anti-sub/anti-surface aircraft from the U.S. and completely refurbish them.

It is essential that these systems be interoperable with U.S. systems. This will ensure that military might can be brought to bear quickly and decisively as required. Not only will these systems improve today's ROK-U.S. combat power, they will also contribute to future regional security in Northeast Asia.

Three areas remain where the Republic of Korea must acquire capabilities to support our combined combat readiness: (1) Command, control, communications, computers, and intelligence (C⁴I) interoperability; (2) Chemical and biological defense capabilities; and (3) Preferred munitions necessary for the early stages of the war plan. USFK is working closely with the ROK on C⁴I interoperability. As a result of the September 11 terrorist attack, the ROK is also placing more emphasis on chemical and biological detection. While the ROK has procured preferred munitions, more are needed. To accomplish this we must maintain close coordination as we analyze, research, develop and test the best systems for our combined alliance. We are working hard to ensure that both U.S. and ROK modernization and transformation progress is synchronized and complimentary. A cornerstone of this is the on-going OSD/MND Future Study of the Alliance. In 2001, we completed the Joint Study of the Alliance analyzing the future role of USFK in the next 20 years. The study addressed Confidence Building Measures that potentially could be implemented in efforts reduce military tensions in support of Korean reconciliation. This year we are studying both ROK and U.S. increasing regional roles and our combined modernization efforts.

A key element of our U.S. modernization efforts would be to acquire an Army *Interim Brigade Combat Team (IBCT)* in Korea to replace one existing brigade. This will provide the maneuverability and combat power necessary to operate in the mountainous and increasingly urbanized terrain of Korea. The IBCT will add a new component in USFK's deterrence capability to counter a North Korean threat or provocation. It will also prepare us to refocus the Army's forward deployed forces in Korea for a regional role. The IBCT provides a rapidly deployable ground force to complement Air Force Aerospace Expeditionary Forces, Marine Expeditionary Forces, and Navy Amphibious Ready Groups and Carrier Battle Groups as U.S. Forces Korea's role transitions to regional security.

USFK must continue to improve our support capability to insure our wartime fighting readiness. Headquarters accounts continue to be squeezed and our UNC/CFC/USFK/8th U.S. Army Command Headquarters Support and Air Force Base Support account is no exception. We need our full requirements recognized if we are to repair critical infrastructure, replace aged systems and train our combined team.

Defense Burden-sharing and Special Measures Agreement Update: The current ROK Defense Ministry continues its long-standing reputation of support. It demonstrates daily a commitment to honoring its host nation responsibility for defense cost sharing. The military budget for the Republic of Korea (CY 2002), recently passed the National Assembly is \$12.5 billion (16.3 trillion won). ROK defense spending, as a percentage of Gross Domestic Product, will increase to 2.8 percent for 2002, which remains below the 3.0 percent minimum level identified in the ROK modernization plan. If this trend continues this could reduce their ability to modernize.

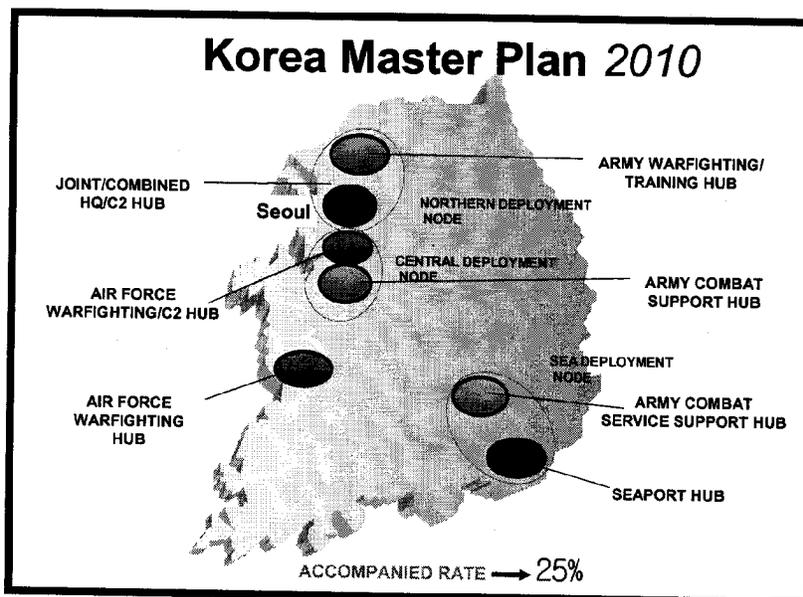
The 2001 Report to Congress on Allied Contributions to the Common Defense identifies four burden-sharing categories—Multinational Military Activities, Defense Spending as percentage of Gross Domestic Product, Foreign Assistance and Cost Sharing. Of those four categories, South Korea met the congressional goal in two, namely Multinational Military Activities and Foreign Assistance. However, at a defense budget of 2.7 percent GDP in 2000, the ROK did not match the U.S. defense budget of 3 percent GDP. The ROK has contributed soldiers to U.N. peacekeeping operations (PKOs) since 1993. The ROK continues to maintain a peacekeeping battalion on in East Timor. It provides military observers to India/Pakistan, Georgia and the Western Sahara for a total contribution in 2001 of 474 soldiers. Also, it is worthy to note that the first ROK general officer was selected to command a U.N. PKO. Lieutenant General Hwang, Jin-ha (a former military attaché to the U.S.) will command the U.N. peacekeeping force in Cyprus in 2002. The ROK met the Foreign Assistance goals in 2001. In the cost-sharing category, although significant progress has been made, the Republic of Korea has not yet offset 75 percent of U.S. stationing costs. The U.S. and ROK Special Measures Agreement (SMA 99-01) outlines the cost-sharing contributions of both nations. Contributions are made in both cash and in-kind support—71 percent of the program is in cash and the remaining 29 percent is in-kind. In accordance with the SMA Implementation Agreement (IA), USFK and the ROK MND jointly calculated and agreed the SMA contribution for 2001 is roughly \$425 million. This contribution reflects an 8 percent growth adjustment from the 2000 contribution.

This year, the Koreans agreed to a new Special Measures Agreement for 2002–2004 (SMA 02-04) pledging \$490 million for 2002, an increase of 15 percent from the \$425 million in 2001. The Koreans have steadily increased their share of non-personnel stationing costs rising from 36 percent in the 2001 burden-sharing report to 41 in the 2002 report. Their contributions over the next 3 years will push them over 50 percent. The total contribution rose 15 percent, the biggest single increase in SMA in 8 years. In addition, 2003–2004 contributions will be increased by 8.8 percent plus inflation protection in the form of Gross Domestic Product Deflator as determined by the Korean National Statistics Office. The 2002–2004 SMA demonstrates the “*real and meaningful growth*” we are seeking for USFK Non-Personnel Stationing Costs.

V. VISION FOR THE FUTURE

As President Bush has said, “Power is defined by mobility and swiftness, influence is measured in information, safety is gained in stealth, and force is projected on the long-arc of precision-guided weapons. This revolution perfectly matches the skills of our country, our people and the superiority of our technology. The best way to keep the peace is to redefine war on our terms.” I would add that our strength is also measured in our personnel readiness and the values we teach to our military forces. The real lesson learned in Afghanistan is that our soldiers, sailors, airmen and marines are the best quality force in the world. In Korea, we want to blend our strengths with that of a great ally who is determined to improve their capabilities and whose courage and loyalty is unmatched. We are faced with a two-fold challenge to modernize and move to a capabilities-based force while ensuring that our near-term readiness is unmatched and that we are ready to fight and win tonight.

We must modernize our forces, improve our capabilities and fix long-term problems with a comprehensive plan. Our strategy to modernize and transform is based on our ability to build a capabilities-based organization and enhanced warfighting structure centered on key hubs. The key to this organizational change is the transition to organizational hubs as part of our Korean Master Plan for 2010. The picture below illustrates this plan.

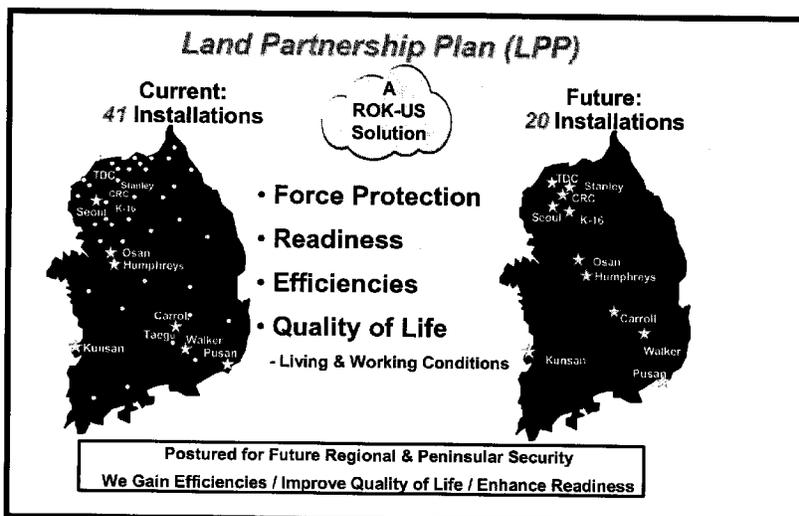


A great example of our future capability is our proposed Northeast Asia Regional Simulation Center (centered at our C² hub). We are on a path to have a “Center of Excellence” capability for Joint and Combined simulations and exercises by 2008. This will become the cornerstone for merging ROK/U.S. doctrine in the near-term. It has the inherent growth potential to provide a multi-lateral focus as both USFK’s and the ROK’s power projection capability evolves to meet the future. The simulation center also provides the means to work difficult coalition integration issues as we build a more effective combined doctrine.

The key feature of our strategic facilities vision is the Land Partnership Plan (LPP), which will allow us to move from 85 scattered bases into the centralized hubs I have described above. We will divest ourselves from 41 major bases to 20 enduring installations. This will improve near-term readiness, enhance force protection, reduce stationing costs, reduce our footprint and return valuable land to the second most densely populated country in the world.

The LPP is our vision for the future and it has now been incorporated into the Overseas Basing Requirements Study. It gives us a comprehensive approach to ensure that USFK is the best manager of precious Korean land. We are happy to report significant progress from last year.

Our combined efforts with the ROK have produced an agreement which we are confident will be ratified by the ROK National Assembly. This long-term effort is fully funded and will require no additional support from Congress, however, it is fully dependent on stable MILCON funding. The picture below illustrates this plan.



LPP seeks to improve the combined forces readiness posture, enhance public safety, stop training range encroachment, improve force protection and advance quality of life for U.S. forces. This initiative will also reconfigure and protect training areas and consolidate our forces around enduring installations. LPP potentially returns about 32,000 acres of valuable commercial and agricultural land to South Korea. This will provide a long-term cost savings for USFK by allowing the command to invest in and sustain our reduced infrastructure at the enduring installations. In exchange, the command seeks the acquisition of about 612 acres of additional land adjacent to enduring U.S. installations where we plan to relocate units and activities. The ROK will also grant USFK joint use of its own military training areas on a very efficient limited time-share basis. This will enable us to improve training and preserve readiness. Installations returned to the ROK will be transferred in accordance with the Status of Forces Agreement (SOFA) and current DOD guidance. The plan does not add any requirement for USFK to meet stricter environmental standards than those already required under the current DOD policy or the SOFA. However, being good stewards of the environment in our host country is critical to our mission and the alliance. We urge you to support LPP, which we feel is a key to positioning USFK forces to meet security requirements well into the future. It will provide "irreversible momentum" to our efforts to fix significant command problems brought on by years of neglect. We expect to have a signed agreement by 15 March 2002.

The congressional funding that you provided last year has been of enormous help, and we are extremely grateful for your demonstrated concern. Change is in the air, and on-going construction on USFK installations is a common site today. Family housing improvements, barracks renovations, workplace upgrades and new utilities are currently being developed. Our vision is beginning to be realized in USFK. But in order to ensure that our "first-class military" is provided with "first-rate facilities," it is important to sustain this encouraging progress. Continued investment-your investment-is critical to provide the force protection and basic quality of life each service member deserves. Your involvement will enhance our military readiness and preserve and protect the environment of our South Korean ally, while providing enhanced regional stability.

VI. COMMAND PRIORITIES

I would now like to discuss the status of programs and areas in which we have resource allocation concerns. My intent is to discuss possible problem areas as they now appear. However, these program areas and their associated funding levels may change as a result of the strategy and defense review, which will guide future decisions on military spending. For fiscal year 2002, the President's budget includes funding to cover our most pressing priorities. I ask that you consider my comments

in that light. Achieving our vision and accomplishing our missions requires us to prioritize scarce resources. Our command priorities are: (1) *Command, Control, Communications and Computers, Intelligence, Surveillance, and Reconnaissance (C⁴ISR) Functionality*; (2) *Precision Engagement*; (3) *Support toward Reconciliation Efforts*; and (4) *Improve Quality of Life*.

(1) *C⁴I Functionality*—United States Forces in Korea are working very hard toward achieving the vision articulated in the Department of Defense's Quadrennial Defense Review—to attain and maintain the asymmetric advantage afforded with network-centric warfare systems. We are in the process of modernizing these systems, and with your help, we will maximize our technological lead to ensure victory on the battlefield.

The Korean theater poses special problems in attaining and sustaining information superiority. The destructive effects resulting from the lethality of modern weapons compressed into such a small geographical area overwhelm the imagination. It not only increases the potential for high casualties and collateral damage, but due to exposed and vulnerable C⁴I facilities and infrastructure, may significantly affect our ability to command and control forces and execute the war plan. It is this reality that sets Korea apart from all other theaters. It mandates C⁴ISR that is survivable, interoperable, and secure in a joint and combined environment.

We have developed a strategy to address both our short-term needs and our long-range requirements. This strategy is made up of three objectives: (1) Developing a theater-wide C⁴I vision that supports the operational needs of the operator while facilitating process change; (2) Aligning and institutionalizing the Program Objective Memorandum (POM) with operational requirements to resource and sustain the vision; and (3) Fielding C⁴I capabilities that support current readiness and enhance our ability to "fight tonight." We have made tremendous progress in each of these areas. The power of information and information technology is the catalyst for several comprehensive changes we are making to our command and control structure as well as operational concepts and warfighting processes.

Common Operational Understanding (COU) is the organizing mechanism for this transformation. COU is a process that transforms situational awareness into knowledge-based decisions. It ensures U.S. and ROK field commanders dispersed throughout the theater not only have the same view of the common operating picture (COP), but have the same level of understanding on what the COP means. This consensus can best be achieved with C⁴I functionality that provides real-time, interactive collaboration capabilities. In an environment where the fleeting nature of targets compresses the planning, decision and execution cycle from days and hours, to minutes and seconds, achieving COU is paramount to success, and in more direct terms, is the essence of decision superiority.

Survivable theater intelligence systems are a critical part of the common operating picture and essential to successful combat operations. We want to express our deep gratitude for the funding support you have provided to our C⁴I infrastructure with regard to the intelligence automation and communications segment, called the Pacific Command Automated Data Processing Server Site Korea (PASS-K). Our current intelligence funding level is addressed in this year's Program Objective Memorandum (POM) is adequately funded through the General Defense Intelligence Program (GDIP). This stable funding is essential to ensure that the planned enhancements necessary to maintain information dominance in collaboration with national and theater systems become a reality.

The progress we have achieved with your help, with programs such as PASS-K, is a success story, but taking full advantage of the emerging technologies has been a constant challenge for this command due to years of C⁴ISR funding shortfalls. In the past, un-funded C⁴I requirements have had a significant impact on our ability to maintain an adequate infrastructure needed to support the increased bandwidth, network redundancy, and the modern decision and collaboration tools required by my unit commanders. This has forced local units to divert money from other operations and maintenance accounts in order to maintain our C⁴ISR capability. We have the technical expertise in place to fully utilize these technologies but have lacked the acquisition authority and consistent funding stream to fully put these technologies to work. Such funding would help sustain our C² systems, as well as the progress we made in areas such as C⁴ infrastructure and information assurance. More importantly, it provides some momentum as we look toward the additional plus-ups provided in the fiscal year 2003–2007 budget.

However, the C⁴I funding provided to Korea over the next 5 years with implementation of Program Budget Decision 725 is absolutely critical to addressing our shortfalls. This new funding, starting with \$67 million in fiscal year 2003, will not only allow us to make up the lost ground that occurred over the years, but will serve to facilitate the advances we need to implement our vision. *I strongly urge your con-*

tinued support of this funding increase over the duration of the Future Years Defense Plan (FYDP). Failure to achieve this will result in a serious risk to our ability to execute existing warplans.

(2) *Precision Engagement*—Precision Guided Munitions, or PGMs, are a critical enabler for our Korean warfighting strategy. These state-of-the-art munitions are an important part of what we need to be ready to win decisively. Since North Korea continues to shelter forces in underground facilities and hardened bunkers, we must be able to overcome these defenses with key penetrating weapons. The complexities of Korean climate drive up our need for Joint Direct Attack Munition (JDAM) weapons—our fight demands their accuracy in any kind of weather. We are studying the lessons from Operation Enduring Freedom to apply in our theater. Just like Afghanistan and Kosovo, precision strike is needed to avoid collateral damage on the highly populated Korean peninsula. On the other hand, unlike Afghanistan, we face an adversary with thousands of mechanized targets and prepared defenses—one who has been preparing to fight us as a modernized force for the past 50 years. Worldwide, readily available stocks of precision-guided munitions are mandatory for our “warfight” and our inventories that have been diminished by Operation Enduring Freedom must be replenished quickly. Since Operation Desert Storm, the American public has become accustomed to watching video clips on the nightly news where enemy vehicles or bunkers, seen targeted in cross hairs, instantly erupt in explosions. That capability does not come cheap, but the cost to not pursue PGMs is higher. When we fall back to “dumb bombs” to destroy enemy targets, historical examples illustrate that the final total cost is actually higher. Many more “dumb bombs” are required to destroy the same target that one PGM has a high probability of hitting. Additionally, we increase the risk of collateral damage and civilian casualties. PGMs must be addressed by both the ROK and the U.S. We need a solid inventory readily available on the peninsula.

(3) *Support Reconciliation Efforts*—Although there has been no formal change in ROK defense policy toward the North Korean threat, early last year it was obvious that a perception of peace had emerged within the South Korean public. However, recent failures in talks have once again led to a change in how the ROK public regards the reality of a heavily armed North Korea. The ROK government has historically given much in terms of economic aid and assistance to North Korea, in the hope of developing better, more peaceful relations. All talks have now stalled, and no tension reduction measures of any sort have been agreed to or employed. Even the execution of planned family reunions between family members in North and South Korea, have now been postponed indefinitely.

The United Nations Command (UNC) will continue to fully support President Kim Dae-jung’s reconciliation process and the development of a road/rail transportation corridor through the Demilitarized Zone. President Kim Dae-jung has termed this railroad, spanning Asia and Europe, as the new “Iron Silk Road.” As the vision of the Korean railroad begins to take shape, Korea could benefit immensely from its central geographic location. The promise of opportunity and economic commerce that these lines could generate is substantial. Any development of this Inter-Korean railroad, and the security implications involved, will be a significant source of careful planning, negotiation and bilateral inter-agency coordination. However, the transportation corridor is fully complete on the South side, while on the North side we see no progress whatsoever.

The 1953 Armistice Agreement authorizes the Commander In Chief, United Nations Command (CINC UNC) jurisdiction authority over the Southern portion of the Demilitarized Zone. To facilitate work on the transportation corridor, acting as the CINC UNC, I have delegated administrative oversight to the South Korean Ministry of Defense. Close cooperation between United Nations Command and the South Korean Ministry of National Defense has guaranteed a powerful defense is active and in place, and will continue to ensure sufficient levels of security in the DMZ during de-mining, corridor construction and future operation. As we work closely with North Korea over issues concerning access and commerce in this corridor, we will continue to insist that all actions, and all confidence-building measures (CBMs) are both *reciprocal and transparent*. I am proud to report that our year-long Confidence Building Measures study has strengthened our alliance and has produced verifiable options to reduce tension if North Korea will only take the same steps. This is exactly the type of armistice issue that the UNC seeks to resolve carefully with all our UNC allies and coalition partners.

(4) *Improve Quality of Life*—As stated in President Bush’s statement A Blueprint for New Beginnings “. . . , we cannot honor our servicemen and women and yet allow substandard housing levels to endure.” The Korean peninsula faces significant shortfalls in both family housing and barracks and has identified substandard living and working conditions in most areas. Our facilities are old—32 percent of all build-

ings in the command are between 25 and 50 years old and 32 percent are classified as temporary buildings. The investment philosophy of “50 years of presence in Korea . . . 1 year at a time,” without a continuous and sustained commitment, has taken a severe toll on our housing, infrastructure, and morale.

Our goal is a quality of life that is comparable to other overseas assignments. We want to make a tour of duty in Korea an “*assignment of choice*” by providing the best quality of life possible. A Korea assignment today involves some of the poorest living and working conditions of any permanent change of station (PCS) assignment in the military. According to current studies, “Army assignment experts report that Korea is their only problematic assignment location for both officers and enlisted personnel . . . the Army must nominate many enlisted members to fill a single vacancy in Korea . . . the Army must contact several officers in order to fill one officer vacancy in Korea.” While no confirmation data was provided by the Air Force, “assignment policy experts opined that Korea and Turkey are the least desirable locations in their overseas assignment inventory.” We must improve both the housing and barracks living conditions for our personnel and their families to reach our “assignment of choice” and “quality of life” goals. We appreciate Congress’s assistance in helping improve the grim conditions regarding housing throughout this command. *Yet over 95 percent of the currently assigned and accompanied service members and their families live in inadequate and substandard quarters.* Furthermore, over 50 percent of the unaccompanied service members in U.S. Forces Korea live in inadequate quarters. Overcrowded facilities force us to billet many unaccompanied personnel outside our installations in dense urban areas, creating force protection concerns and imposing a high financial burden on them from out-of-pocket living expenses. Investment in USFK facilities has declined as a result of constrained defense budgets and competing requirements. Now we see growth in the backlog of work necessary to maintain the readiness edge we established in past years. We must balance overseas funding among the priorities of people, readiness, modernization, and infrastructure. Because of past funding shortfalls, we are at a breaking point. We cannot continue to mortgage this aspect of our force readiness without significant long-term effects. Accordingly, we are finalizing a budget that will meet this challenge. Meanwhile, the expectations of our commanders, our people, and our families remain high as they urge us to balance direct mission support and quality-of-life efforts in the face of aging infrastructure and very constrained budgets.

We recognize that quality-of-life and readiness also extends into the workplace environment. Deteriorating work facilities impair readiness, reduce the efficiency of uniformed and civilian workers, and lowers retention rates of highly qualified and otherwise motivated people. Our *Sustainment, Restoration, and Modernization (SRM)* funding levels have only allowed us to provide day-to-day critical maintenance of our work facilities and infrastructure and does not allow us to address our SRM backlog. To illustrate the hardship this causes, let’s look at an airman whose job is to maintain an F-15 engine, a soldier maintaining an Apache attack helicopter and a mechanic fixing a fighting vehicle. They may work in a hangar where the roof leaks or they may repair vehicles in the freezing cold. In these conditions they are often distracted from fixing the F-15 engine, the Apache helicopter or the fighting vehicle. This has both a quality-of-life implication as well as a readiness impact. When our service members are distracted from accomplishing their primary mission, our readiness suffers. Our Soldiers and Airmen see this as quality-of-life issue, and they are frustrated that they have to spend an increasing amount of time on non-productive efforts. They assume that their leaders do not care! The Department of Defense spends millions of dollars training these young men and women to work on sophisticated equipment, yet they are required to work many non-productive hours tending to their run-down workplaces. I think we’re losing the battle to maintain the high standards our people have come to expect. Aging facilities are more costly to maintain. Continued disrepair exacerbates an already serious problem and impacts readiness, especially when coupled with a high operational tempo and harsh conditions, such as we experience daily in Korea.

With the high operational tempo and the increasing number of married members, we recognize an integral link between family readiness and total force readiness. A key element of our quality of life initiative is our goal to provide safe, adequate housing for our personnel and their families. We firmly believe providing quality accommodations improves our members’ quality of life, increases their satisfaction with military service and ultimately leads to increased readiness and retention. Indeed, Korea’s uniqueness as a yearlong unaccompanied tour has been purchased at a great price. We provide government owned and leased housing for only 1,979 personnel—less than 10 percent of our married service members serving in Korea—compared to more than 70 percent in Europe and Japan.

Our goal is to increase the command-sponsored rate for Korea and to house at least 25 percent of our married military members and their families by 2010. This initiative will require additional resources and support. If we were to address this shortfall, and meet this increased demand for housing with traditional military construction alone, it would cost the U.S. taxpayer \$900 million. Under our comprehensive LPP, utilizing Host Nation Funded Construction and cost savings achieved with base consolidation, we can cut this cost in half. In order to obtain the remaining capital investment required, we plan to use existing build-to-lease authority, and leverage the Korean private sector to obtain an additional 2,000 units. If we can get help to raise the existing statutory per/unit cost limitation from \$25,000 to \$35,000 per/unit for overseas leased family housing, we will develop these 2,000 units at no additional cost to the U.S. taxpayer! With your help, we will realize our vision for improving the housing situation in Korea, and we will minimize the financial burden on the U.S. Congress.

We will also improve the quality of our *existing housing* in fiscal year 2003 by continuing our phased renovation and conversion of housing units located in Hannam Village in Seoul. We began last year with your support and the results have been outstanding. The enthusiasm of the occupants over these improvements is spreading across the Korean peninsula. They see first hand our efforts to make a difference.

Unaccompanied Housing Improvements also remain a critical priority. Our objective is to provide enlisted service members with quality housing by the Department of Defense mandated date of 2008. We have two long-range planning tools to guide our investments: The Air Force Dormitory Master Plan and Army Barracks Upgrade and Buyout Plan. These planning tools have and will continue to guide us in providing quality living conditions for our unaccompanied service members allowing us to use our limited funds where they are needed the most and at the same time keeping our good units good. On-going renovations will continue to ensure we provide quality living facilities, however based on our plans we still short of our total requirement. The current upgrade plans do not cover senior enlisted soldiers. Adequate housing for unaccompanied senior enlisted soldiers (E7—E9) and officers is urgently needed as well. Unlike CONUS Army units, all Second Infantry Division soldiers, including senior enlisted and officers, are required to live on post. Eighth Army's shortfall for senior enlisted and officers housing is 3,100 quarters for E7—E9 and 2,800 for officers. Adequate housing for these service-members has been neglected for too long. We urgently need to continue our efforts and Congress can help to support this responsibility by funding the \$81 million MILCON requirement beginning in fiscal year 2003.

Infrastructure Maintenance and Repair is required immediately. Funding increases in MILCON for infrastructure upgrades have helped USFK to improve conditions not only in our barracks and dormitories, but also in other traditional quality-of-life facilities such as physical fitness centers. We greatly appreciate your support. However, we still have a lot of work to do. The master plans mentioned earlier, addressing family housing, barracks and dormitories, respectively, have been extremely valuable tools in helping to focus and guide our actions. Accordingly, we have just added to our arsenal a Physical Fitness Center Master Plan and a Maintenance Facility Master Plan. Together, these plans guide us toward wise investments in our most urgent quality of life requirements. We need to replace or upgrade 52 maintenance facilities and 17 physical fitness centers. To begin buying out this requirement in fiscal year 2003, we intend to use \$21 million from the Host Nation Funded Construction program for the maintenance facilities. To correct other quality of life and infrastructure deficiencies, we need to further address military construction. The funding Congress provided in fiscal year 2002 will enable us improve infrastructure, facilities and barracks across the peninsula. We will continue this effort by applying the remaining \$171 million of Host Nation Funded Construction money against this improvement effort.

As part of this comprehensive plan, USFK must demonstrate its unwavering commitment to protecting the health of Korean and U.S. personnel, while preserving the environment everyday. USFK continues to wrestle with environmental protection and problem mitigation programs given the age and poor condition of our infrastructure. The number of environmental incidents is on the rise in the past year due to failed infrastructure and lack of maintenance. Our most immediate environmental concern is with the command's aging underground storage and heating oil tanks. The cost to remove and replace these tanks will be \$133 million, but it will be spread over several years.

Although we have a solid, attainable, and comprehensive self-help plan to make service in Korea an assignment of choice for our service members, it will take 10 or more years to complete. In the interim, we must provide fair incentives to those

who serve in the inadequate working and living conditions to close the quality of life gap that exists today between military service in Korea and service in either the continental United States or other overseas locations. To do this, we ask that you increase the pay and allowances of military members that serve in the Republic of Korea. We have an essential requirement to recruit and retain skilled military personnel. We need to continue the effort to adequately compensate our people for their service. Unlike most American businesses, we financially penalize our military members for Korean service. While our service members are motivated by much more than money, *pay and morale* are nonetheless linked. Service members want and deserve equal pay for substantially equal work under the same general conditions. In addition to an average cost of \$3,000 to \$5,000 of out-of-pocket “hidden 2nd household” expenses for a 1 year unaccompanied tour in Korea, our forces see a basic pay inequity between their deployment here and equally harsh, but shorter tours to southwest Asia and the Balkans. For example, an Army Sergeant (E5) serving only a 6-month tour in Bosnia receives approximately \$500 per month more than an E5 in Korea who is separated from his family for 12 months. The difference results from tax relief and separate rations benefits received by those who faithfully serve in the Balkans—entitlements that do not now apply to a typical Korean tour of duty. We need your help to level the playing field by providing compensation such as a Balkans or Kuwaiti tour provides.

CONCLUSION—THE ROAD AHEAD

The ROK–U.S. Alliance is built on the principle of Katchi-Kapshida—“We Go Together!” Simply put, we have fought a war and kept the peace for over 50 years as a combined team. As we prepare for the future, both USFK and the ROK military are reviewing their modernization plans and transforming our militaries into a capabilities-based force. We are looking at new organizational structures that will increase our effectiveness, improve our combined doctrine and take advantage of new equipment. As we modernize together, we must identify complimentary capabilities that support regional security and one that helps both the American and Korean militaries to focus critical resources on the most cost effective capability.

Despite the unprecedented June 2000 summit between North and South Korea, there is still no “peace dividend.” This posture statement reflects our efforts to optimize USFK’s presence in the most efficient manner to meet both current and future missions. For many years, our funding requirement statements have merely reflected OMA incremental increases over a baseline. Candidly, as a result, we have looked at Korea “one year at a time.” The result is that we still have substandard living and working conditions for our service members that are having an adverse effect on the readiness and a significant impact on long-term retention. As a commander, I am ashamed of how I ask our service members to live and work.

In conclusion, we would like to leave you with six thoughts:

First, we want to emphasize that the support of Congress and the American people is vitally important to our future in Korea. We thank you for all you have done. However, we must also ensure that our resolve is consistent and visible so that North Korea, or any other potential adversary, cannot misinterpret it. We urge committee members to come to Korea and see first-hand the importance of the American military presence and the strength and vitality of the United States—Republic of Korea alliance.

Second, the North Korean military continues to adapt its non-conventional threat and conduct large-scale training exercises in spite of severe economic problems and a perception of a thawing relationship between North and South Korea. North Korea’s continued growth in military capability and their implied intent amounts to a continued significant threat. Now, more than ever, the strength of the Republic of Korea—United States alliance, built on a foundation of teamwork and combined training, provides both nations with a powerful deterrent as well as the readiness to fight and win. The North Korean threat to peace and stability in Northeast Asia will not fundamentally diminish until the North engages in tangible military confidence building measures that are reciprocal and transparent.

Third, now and in the future, the U.S. and Northeast Asian nations cannot secure their interests and economic prosperity without credible air/land/sea forces in Korea. Presence is essential to security, commitment to long-standing friends, and access into the region. As the only presence on the mainland of East Asia, U.S. forces in Korea will likely play a vital role in the future peace and stability of the region. The U.S. forces in Korea require a continued investment in basic readiness and quality of life, even if our role shifts from North Korea to a regional focus.

Fourth, achieving our vision and accomplishing our missions requires us to prioritize scarce resources. For U.S. Forces serving in Korea, the number one com-

mand priority remains improving C⁴I functionality. We urgently need your help in order to *achieve the information age advantage that network-centric warfare systems will provide*. Second, we need a solid inventory of readily available *precision-guided munitions* on the peninsula. Lastly, now and in the future, if we are to sustain our Combat Readiness it must be balanced and tempered with a *quality-of-life* that is commensurate with other duty locations throughout the world. *A First Class Military requires First Rate Facilities*. As the only presence on the mainland of East Asia, U.S. forces in Korea will likely play a vital role in the future peace and stability of the region. *The U.S. forces in Korea require critical investment in basic readiness and quality-of-life now*. The Land Partnership Plan, that we hope to have ratified by both governments by 15 March, 2002, will put us on the proper course to improve the Quality-of-Life for U.S. Forces in Korea and their families.

Fifth, this is the third year of commemorations recognizing the significance of the 50th Anniversary of the Korean War, viewed by many of our veterans as the "forgotten war." We are committed to honoring the brave veterans, living and dead, and hope you can join us in Korea for these commemorations to remember their sacrifice.

Finally, you can be justifiably proud of all the exceptional things the soldiers, sailors, airmen, marines, and Defense Department civilians continue to do with great spirit and conviction. They remain our most valuable asset. They sacrifice for our Nation every day. This is why we remain so firm that we owe all those who faithfully serve proper resources for training, an adequate quality of life, and a quality infrastructure. Again, thank you for this opportunity to share our thoughts with you.

Senator REED. Thank you, General Schwartz.
General Speer.

STATEMENT OF MAJ. GEN. GARY D. SPEER, USA, ACTING COMMANDER IN CHIEF, UNITED STATES SOUTHERN COMMAND

General SPEER. Senator Warner, distinguished members of the committee: Thank you for the opportunity to allow me to represent United States Southern Command here today and provide for you the command's posture. A special thanks to Senator Nelson, Senator Inhofe, and Senator Sessions for your recent trip to Guantanamo Bay, Cuba, to see first-hand the great work of the men and women of Joint Task Force 160 in the difficult circumstances of our detainee operations.

But also, thanks to all the members of the committee for your unwavering support of United States Southern Command, and today a special thanks for your support of the men and women in uniform around the world.

Latin America and the Caribbean make up a very important region for the United States. It is a region of growing importance and significance, based on demographics, trade, natural resources such as oil, and, if nothing else, its proximity to the United States at large.

The last quarter century represents tremendous progress in this region, a progress aimed toward building a hemisphere composed of a community of democratic nations. Much of the credit is due to the men and women of the U.S. military who have served in the region during that time. What they have done through day-to-day interaction, (joint training, exercises, and the opportunities for professional military education in the United States for foreign officers and noncommissioned officers) is to provide a role model for the proper conduct of a military in a democratic society, one that respects the rule of law, understands human rights, and is subordinate to civil authority.

All of that set the conditions for the transformation which today marks 31 of 32 countries in the area of operations that have demo-

cratically elected governments. But many of those democracies are still fragile. There are challenges that we see stemming from instability and corruption, as a result of drugs and arms trafficking, illegal migration, organized crime, terrorism, and other transnational threats.

Since 11 September we too at SOUTHCOM have been focused on the global war on terrorism. While I cannot tell you that there are any confirmed links to al Qaeda originating from Latin America, I can tell you that in the tri-border area of Brazil, Paraguay, and Argentina there are individuals who have links to Hamas, Hezbollah, and al Gama'at. They are terrorist supporters in that they provide the resources and funnel funds back to those organizations.

Elsewhere in the theater, there are several domestic groups which exact terror on the population through extortion, kidnapping, and other acts of violence. Certainly as we look to Colombia, I am proud to tell you that we are doing a great job in executing the Department of Defense's role in supporting Plan Colombia. But certainly, as mentioned earlier, President Pastrana's elimination of the Despeje on 20 February changes the landscape in that country.

The Colombian military has done a good job protecting civilians as they move to reoccupy the population centers of the Despeje. But as we look to the future, the Colombian military and the Colombian police lack the resources to fully reestablish a safe and secure environment throughout the countryside.

As we continue to look at these challenges at United States Southern Command, we will continue with a very comprehensive security cooperation plan aimed at every country in the AOR. But some of the regional militaries and security forces lack the capabilities to fully safeguard their borders against these trans-national threats, much less to be full participants in regional security cooperation.

For example, over the last decade security assistance through foreign military financing has been insufficient to even satisfy the sustainment requirements for the aircraft and the equipment that the United States has provided, much less to address legitimate modernization needs throughout the region and new initiatives that respond to changing challenges.

The United States Southern Command has some shortfalls operationally. Even with the assistance of the Department of Defense and the Joint Staff, Intelligence, Surveillance, and Reconnaissance (ISR) allocations for Southern Command are insufficient to meet the intelligence requirements that we have for the missions assigned and for anticipated contingencies. To a certain degree, many of those ISR assets that are assigned to us are restricted by the source of the funding or the locations from which they operate, further limiting their effectiveness at meeting the intelligence requirements throughout the region.

In summary, Latin America and the Caribbean is a growing important region for the United States, but it is a region with some serious challenges. I thank the members of the committee for your continued support of United States Southern Command as we try to address the challenges and preserve the gains of the past 25 years. Thank you again for the opportunity to be here today. I look forward to your questions.

[The prepared statement of Major General Speer follows:]

PREPARED STATEMENT BY MAJ. GEN. GARY D. SPEER, USA

Mr. Chairman, Senator Warner, and members of the committee, I am honored to appear before you today to present United States Southern Command's current posture, role in the global war on terrorism, and long-term strategic objectives. On behalf of the men and women deployed to the Naval Base at Guantanamo Bay, I extend a personal thanks to Senators Nelson, Inhofe, and Sessions for your recent trip to observe the efforts of your Armed Forces as they ensure maximum security and humane treatment for the detainees. To all Members of the committee, thank you for your unwavering support to United States Southern Command.

I have served as the acting Commander in Chief since October 1, 2001 when General Pace assumed the position of Vice Chairman of the Joint Chiefs of Staff. I welcome the opportunity to provide my assessment of this outstanding command to the United States Congress.

During the past 25 years, nations of our hemisphere have made substantial progress toward achieving peace through democratically elected governments, economic development, and the subordination of the military to civilian authority. However, nations in Latin America and the Caribbean are currently struggling with economic and political instability, corruption, institutional weakness, high unemployment and crime, while simultaneously facing the challenges of terrorism, drug trafficking, and other illicit transnational activities. We must remain active in assisting these countries to maintain stability, promote prosperity, and enhance regional cooperation in this area of significant strategic importance to the United States while we execute the global war on terrorism.

STRATEGIC IMPORTANCE AND ASSESSMENT

The Southern Command area of responsibility encompasses one sixth of the world's landmass and includes 32 countries and 14 protectorates throughout Latin America and the Caribbean. The United States has strong economic, strategic, cultural, and security ties to Latin America and the Caribbean, which are of significant importance to our national security.

Today, more than 40 percent of our trade is conducted within the Western Hemisphere, and 49 cents out of every dollar spent on imports in the region goes to the purchase of United States goods and services. By 2010, trade within the hemisphere is expected to exceed our trade with Europe and Japan combined.

An area rich in natural resources, 35 percent of United States oil comes from Latin America and the Caribbean, more than all Middle Eastern countries combined. Latin America is critical to the global environment as the Amazon Basin produces 20 percent of the world's freshwater runoff and 25 percent of the world's oxygen. Also, 25 percent of United States pharmaceuticals are derived from sources in this same area.

In addition to strong economic and strategic ties to the region, we have increasingly important cultural ties. United States citizens of Hispanic descent are now the largest and fastest growing minority in our country and constitute the world's fifth largest Spanish-speaking population. These new immigrants from Latin America and the Caribbean maintain strong cultural ties to their families in their countries of origin. If present trends continue, by 2047, one out of every four United States residents will be of Hispanic descent.

Contrary to the common perception, this is not a homogeneous region, united by a common language or culture. Instead, it is a region of very diverse populations, economies, languages, cultures, histories, and traditions. We must recognize this diversity and foster security cooperation with every country to minimize the increasing possibility of creating security voids that may be filled by other countries, or exploited by transnational threats.

SECURITY ENVIRONMENT

Without a clear or imminent external threat, Latin American and Caribbean nations are essentially at peace with their neighbors. All countries, except for Cuba, have democratically elected governments. However, many of these democratic institutions remain fragile, and economic development in some countries is in danger. The transnational threats of terrorism, drug and arms trafficking, illegal migration, and international organized crime constitute the greatest challenge to security and stability in the region. Governments are feeling the strain of weak economies, rampant corruption, ineffective judicial systems, and growing discontent of the people as democratic and economic reforms fall short of expectations.

Transnational threats in the region are increasingly linked as they share common infrastructure, transit patterns, corrupting means, and illicit mechanisms. As President Bush recently stated, “it’s so important for Americans to know that the traffic in drugs finances the work of terror, sustaining terrorists—that terrorists use drug profits to fund their cells to commit acts of murder.”

Terrorism

Southern Command recognized a viable terrorist threat in Latin America long before September 11. If not further exposed and removed, that threat poses a serious potential risk to our own national security as well as to our hemispheric neighbors. Domestic terrorist organizations threaten security and stability in the region with a demonstrated capability to execute bombings, kidnappings, extortion, and assassinations. Additionally, individuals within the region have been linked to transnational terrorist organizations including Hizballah, HAMAS, Islamyya al Gama’at (IG), the Irish Republican Army (IRA) and the Basque Fatherland and Liberty (ETA). At Southern Command, we have been monitoring terrorist activities for years with such incidents as the bombing of the Israeli Embassy in 1992 and Jewish-Argentine Cultural Center in Argentina in 1994 attributed to Hizballah, the capture of the Japanese Ambassador’s residence by the Tupac Amaru Revolutionary Movements (MRTA) in Peru in 1996, and the pattern of narco-terrorism in Colombia.

In recent years, international terrorist groups have turned to some Latin American countries as safe havens for support bases that sustain worldwide operations. As an example, the tri-border area of Argentina, Brazil, and Paraguay serves as a base of support for Islamic Radical Groups, such as Hizballah, HAMAS, and Islamaya al Gama’at. These organizations generate revenue in the tri-border area through illicit activities that include drugs and arms trafficking, counterfeiting, money laundering, forged travel documents, and even software and music piracy. Additionally, these organizations provide safe havens and assistance to other terrorists that transit the region.

The Revolutionary Armed Forces of Colombia (FARC), the National Liberation Army of Colombia (ELN) and the United Self Defense Group of Colombia (AUC) are all on the State Department’s list of Foreign Terrorist Organizations. The FARC has been implicated in kidnappings and attacks against United States citizens and interests, to include the murder of three U.S. citizens in 1998. Notwithstanding the Government of Colombia’s eleventh hour extension of the FARC’s “safe haven” in January, the FARC recently initiated a national terror campaign with more than 85 attacks since January 20 against the Nation’s infrastructure, security forces, and cities. These attacks ultimately prompted President Pastrana to suspend the “safe haven,” and initiate operations to occupy the area.

The FARC and ELN are also active in carrying out attacks against Colombia’s energy infrastructure. Attacks on the Cano Limon-Covenas pipeline cost the Government of Colombia more than \$40 million per month in revenues when the pipeline is not operational. During 2001, the pipeline was offline for more than 266 days.

Other domestic terrorist groups pose similar local threats, elsewhere in the hemisphere, such as the Sendero Luminoso (Shining Path) and Tupac Amaru Revolutionary Movement (MRTA) in Peru and the Jama’at al Muslimeen (JAM) in Trinidad and Tobago.

Illegal Migration

Latin America and the Caribbean are major avenues for worldwide illegal migration. This migration creates economic and social imbalances that strain the effective rule of governments in the region. Illegal migration and human smuggling operations are linked to drugs and arms trafficking, corruption, organized crime, and the possibility for the movement of members of terrorist organizations.

According to the Census Bureau’s latest figures, more than eight million illegal immigrants reside in the United States; 2 million of them are from this hemisphere. The United States Immigration and Naturalization Service estimates more than 300,000 illegal immigrants annually originate in, or transit through Central American countries destined for the United States. Also, many Chinese illegal immigrants destined for the U.S. transit through Suriname. Human trafficking is highly profitable and provides revenue of more than \$1 billion annually to smuggling organizations within the region. Further, human trafficking provides the means of entry into the U.S. for potentially dangerous individuals.

Arms Trafficking

Although Latin America and the Caribbean spend less than any other region on legal arms purchases, illegal arms sales pose a significant threat to the stability of the region. Of particular concern is the rising trend in which Drug Trafficking Orga-

nizations exchange drugs for arms, which are then provided to terrorist organizations such as the FARC, ELN, and AUC in Colombia. Illegal arms originate from throughout the world and transit through the porous borders of many of Colombia's neighbors. Arms traffickers use a variety of land, maritime, and air routes that often mirror drug and human trafficking networks.

Drug Trafficking

Illegal drugs inflict an enormous toll on the people and economy of the United States and our hemispheric neighbors, and appropriately, have often been characterized as a weapon of mass destruction. According to the latest Office of National Drug Control Policy figures, drug abuse killed 19,227 Americans and accounted for \$143.4 billion in expenses and lost revenue (1998 figures). The majority of cocaine and heroin entering the United States is produced in the Andean Ridge.

Drug trafficking persists as a corrosive threat to the democracy, stability, and prosperity of nations within the region, especially in the Andean Ridge, adversely affecting societies and economies as scarce resources are diverted to rehabilitation, interdiction, and crime prevention efforts. Drug trafficking generates violence, fosters crime, and corrupts public institutions. Increasingly, terrorist organizations support themselves through drug trafficking. This trend is particularly troubling in Colombia where we find clear connections between drug trafficking, guerrillas, and terrorist activities.

Although we have seen some success in reducing production in the source zone and interdicting shipments in the transit zone, supply continues to exceed demand. Partner nations are willing to work with us to develop regional approaches to counter the production and trafficking of illegal drugs; but effective and sustainable counterdrug operations are beyond the capabilities of their thinly stretched security forces. United States counterdrug assistance to security forces helps Colombia and other nations in the region develop more effective counterdrug capabilities; however, drug trafficking organizations have shown considerable flexibility in adjusting their operations in reaction to counterdrug efforts. These small, efficient, and well-financed drug trafficking organizations will rapidly change the place of production, transport routes, points of transshipment, and markets when eradication or interdiction programs achieve success.

GLOBAL WAR ON TERRORISM

Global Campaign

Since September 11, our clear priority has been on the planning, coordination, and execution to support the global war on terrorism. Our objectives are to disrupt and destroy global terrorist organizations, eliminate havens for terrorists, prevent terrorist access to weapons of mass destruction, and assist partner nations in attaining the capability to prevent the resurgence of terrorist groups within the region. Prosecuting this campaign requires an attack on those very same threats that challenge the security and stability of the region. We forged an integrated effort with other United States Government agencies and partner nations to defeat terrorists and their supporters; interdict their means including drug trafficking, arms trafficking, money laundering, and financial backing; and eliminate their freedom of movement by arresting and prosecuting their corrupt officials, disrupting trade in false documents, and interdicting illegal migration. We center our efforts on working with our partner nations in information sharing, enhancing skills to combat terrorism through bilateral training, planning assistance, and equipping; and integrating the efforts of the interagency region-wide. Expanding on our pre-existing interagency relationships from counternarcotics, our coordination and cooperation with the interagency has been outstanding and is paramount to prosecuting a successful campaign.

Joint Task Forces 160 and 170 Operations

Although we are executing our campaign plan to combat terrorism throughout the area of responsibility, our most visible efforts are the detainee operations executed by Joint Task Force 160 (JTF-160) and Joint Task Force 170 (JTF-170) at Guantanamo Bay, Cuba. On January 4, 2002, we received the execute order to take custody of designated detainees within the United States Central Command area of responsibility, and to escort and hold the detainees at Guantanamo Bay for further disposition. The commander of JTF-160 and elements of his staff began arriving on January 6 with the first detainees arriving on January 11. Currently, 300 detainees are being held at Guantanamo Bay.

With the requirement to begin housing detainees within 96 hours of the execute order, JTF-160 immediately began to upgrade existing facilities to a total of 320 short-term detention units at a temporary holding facility designated Camp X-Ray.

Camp X-Ray also has facilities for interrogation, security forces, administration, and medical care. On February 13, the Secretary of Defense notified Congress of our intent to expend \$20.6 million for the design and construction of an interim, modular, detention facility of 408 units. We expect the construction to begin in March and anticipate completion by mid-April.

JTF-160 is currently manned by a multi-service organization augmented by various interagency representatives. In addition to holding the detainees, the Secretary of Defense directed Southern Command on January 21 to implement a Department of Defense/Interagency interrogation effort. As a result, Southern Command established the Joint Interagency Interrogation Facility (JIIF) on January 22 and immediately began interrogations focused on intelligence collection, force protection, and planned terrorist activities. This interrogation effort also supports law enforcement agencies, and tribunal efforts. On February 16, Southern Command received an execute order and stood up JTF-170 to coordinate U.S. military and government agency interrogation efforts in support of Operation Enduring Freedom.

As a group, the detainees pose an unprecedented security risk to those responsible for guarding them as well as to each other, evidenced by detainee uprisings at Mazir-i-Sharif and at the Pakistani border. As your colleagues have seen first-hand, within necessary security measures, the detainees are treated humanely, consistent with the provisions of the Geneva Convention. All detainees are provided three meals daily that meet Muslim dietary laws, medical care, clothing, shelter, showers, soap and toilet articles, foam sleeping pads and sheets, towels, prayer mats, and washcloths. They have the opportunity to worship, are provided correspondence materials and have the ability to send mail. The U.S. Navy deployed a fleet hospital with a capacity to care for 20 inpatient detainees. The hospital has a pharmacy and laboratory and is capable of providing intensive care, x-rays, surgery, and post-operative treatment. To date, the medical staff has performed thirty-four surgical procedures for the detainees.

Staff members of the International Committee of the Red Cross (ICRC) have been at Guantanamo Bay since January 18. They will continue to visit the detainees privately and submit comments and suggestions to the Commander of JTF-160. We view continuous ICRC access to the detainees as a necessary and helpful measure. The ICRC is the only International Organization or Non-Governmental Organization authorized to have direct contact with the detainees.

SECURITY COOPERATION

Given the increased importance and geographic proximity of the region, our theater security cooperation focuses on activities conducted with friendly nations that advance mutual defense or security arrangements, build capabilities for self-defense, and enable coalition operations while affording our forces greater access, if needed, during crisis response. Southern Command security cooperation seeks to expand United States influence and to reassure our friends while dissuading and deterring potential adversaries. At the same time, Southern Command remains focused on the development of strategic partnerships that will promote security and stability in Latin America and the Caribbean.

The strategic goals we seek to achieve within the area of operations are to develop multilateral regional cooperation that creates and sustains the positive trends toward democracy, stability, and economic prosperity that marked the past quarter century. Historically, our engagement focused on democratization through the professionalism of the armed forces, national security, humanitarian assistance and disaster preparedness, peacekeeping, transnational threats and counterdrug operations. Continued engagement in these areas lays the foundation for expanded cooperation in countering terrorism and enhancing regional cooperation.

Southern Command works to foster respect for the rule of law, human rights, civilian control of the military, and support for democratic ideals through a robust legal engagement program. We annually coordinate and direct more than 30 military-to-military legal engagement activities. Specific goals include the creation of a military legal corps, reform of military justice codes and procedures, human rights and law of war education, and the inclusion of military lawyers in the planning and execution of military operations.

Similar initiatives for professionalization of the military and security forces and regional cooperation exists in other disciplines such as medical, public affairs, civil affairs, engineers activities, and information sharing.

The most visible successes in our security cooperation program are engineer and medical projects executed during New Horizons exercise deployments under our Humanitarian and Civic Assistance (HCA) program. These projects routinely include school and clinic construction; water well drilling; and medical, dental, and veteri-

nary outreach to local citizens. In addition to providing substantial training benefit to U.S. forces by deploying, training, and operating in foreign and austere environments, these exercises establish strong relationships with the region's militaries and engender goodwill toward the United States. Last year, our HCA effort numbered 109 projects in fifteen countries.

In a region often plagued by natural disasters, our security cooperation program also aims at improving partner nation disaster response capabilities. We use Exercise Fuerzas Aliadas (FA) or Allied Forces Humanitarian to focus on disaster preparedness and military support to civilian authorities when disaster strikes. This makes partner nations less dependent on the United States during times of response, precluding the necessity to deploy our troops and resources. The commendable reaction by the Armed Forces of El Salvador to last year's devastating earthquakes is a testament to the success of this program and justifies maintaining it as a priority. Further, as an example of regional cooperation, the militaries of Nicaragua, Honduras, and Guatemala deployed troops to assist El Salvador, executing in actual crisis response the scenarios played out in our exercise program.

Southern Command executes separate service deployments throughout the area of responsibility. This year, we will have 193 deployments that will include combating terrorism and counterdrug training; small unit exchanges; air combat and tactical airlift; and search and rescue operations. These activities enhance the readiness and proficiency of our forces, build military-to-military relationships, improve host nation capabilities, and provide access for our forces should a need arise.

A significant part of our security cooperation efforts go to exercises and training aimed at enhancing our partner nation's counterdrug capabilities. Our instrument for executing counterdrug operations is Southern Command's Joint Interagency Task Force East (JIATF-E), at Key West, Florida.

JIATF-E is a full time interagency coordinator of maritime and air interdiction operations while exercising tactical control of all detection and monitoring assets in the region. During the past year, JIATF-E achieved continued success with counterdrug operations in the transit zone. Despite a significant reduction in assets after September 11, JIATF-E continues to provide planning and tactical command for more than 30 concentrated counterdrug operations annually. In 2001, JIATF-E supported cocaine seizures increased by more than 50 percent over 2000 levels. This year, JIATF-E is again experiencing record cocaine seizures, particularly in the eastern Pacific. During a 2-day period in February, 14.5 metric tons of cocaine, worth \$174.4 million in Miami street value, was seized in the eastern Pacific. Additionally, during a recent combined counterdrug operation with Guatemala, 2.4 metric tons of cocaine was seized in the eastern Pacific, and over 200,000 marijuana plants eradicated.

Andean Ridge

No other region is suffering the destabilizing effects of transnational threats more than the Andean Ridge countries. Southern Command's efforts in this region are aimed at counterdrug operations, sustaining democracy, professionalizing militaries (to include legal reform within the Colombian military), and combating transnational threats. We are cooperating with security forces of each Andean Ridge nation to build more effective counternarcotics capabilities.

The violence in Colombia remains a significant threat to the region as the nexus of guerrillas, terrorists, drug-traffickers, and illegal self-defense forces has severely stressed the government's ability to exercise sovereignty and maintain security. We have seen movements by illegal defense forces and insurgents into neighboring countries including Panama, Ecuador, and Venezuela. In addition, neighboring countries remain transshipment points for arms and drugs entering and exiting Colombia.

From a military perspective, President Pastrana's decision on February 23 to suspend the FARC's "safe haven" and reoccupy the area was the right move. The FARC was using the "safe haven" as an area to support their drug trafficking operations, launch terrorist attacks, and recruit and train their forces. The Colombian military has aggressively initiated operations to occupy the area. We have also received increased requests of support from the Government of Colombia.

We continue to execute the Department of Defense's support to Plan Colombia, President Pastrana's long-term national security plan. Our efforts in Colombia are a fight to save democracy in that country. Additionally, our efforts mitigate destabilizing effects to other countries at risk within the region.

We are beginning to see positive results from our support. We have witnessed a steady improvement in the professionalism and respect for human rights by the Colombian military, accompanied by increased effectiveness in counterdrug operations. Our legal assistance projects in Colombia, which include developing a Judge Advo-

cate General (JAG) school and legal and human rights reform, continue on track. The initial JAG school courses began last month for 60 judge advocates and clerks in temporary facilities. Additionally, we recently held a Human Rights Seminar with 60 Colombian media and international representatives and began bimonthly Human Rights roundtables. Twenty students from the Armed Forces, National Police, Ministry of Defense, and Commanding General's office are currently receiving specialty degrees in International Humanitarian Law. In a short period of time, the Colombian military has emerged as one of the most respected and trusted organizations in Colombian society. Less than 3 percent of complaints of human rights abuses last year were attributed to the Colombian Security Forces, down from a high of 60 percent just a few years ago. The Colombian Military have also aggressively stepped up operations against the AUC. This progress reflects a strong and principled leadership and the genuine desire of the Colombian military to honor and promote democratic principles in their country.

The United States trained Counterdrug Brigade (CD Brigade) headquarters and its three battalions are now fully trained and equipped. The CD Brigade, the best trained unit in the Colombian Army, has made impressive gains during drug interdiction operations by destroying coca processing labs, providing security to eradication operations, and seizing chemical precursors and coca leaf. Since operations began in December 2000, 866 drug labs have been destroyed, 119 people detained, and the CD Brigade has provided security to the spraying of 50,000 hectares of coca. There have been no allegations of human rights abuses against the CD Brigade. We appreciate the support of the United States Congress in providing us the necessary resources to effectively train and equip the CD Brigade. Based on the success of the initial CD Brigade, the administration is supporting Colombia's request to train and equip a second CD Brigade in fiscal year 2003 for employment elsewhere within the country.

All fourteen Plan Colombia UH-60 Blackhawk helicopters have been delivered. Based on the current production delivery schedule, we expect the Huey II helicopters to be in-country by the end of August 2002. We are now training Colombian pilots and maintenance personnel to operationally field the Blackhawk and Huey II helicopters.

Colombia engineer projects continue to progress. The riverine base at El Encanto and the riverine maintenance facility at Nuevo Antioquia are complete. At Tres Esquinas, the runway extension, A-37 Ramp, and Schweitzer hangar are in progress with completions scheduled this year. The Tres Esquinas riverine facilities are scheduled to be complete in March 2002. The UH-60 facilities in Larandia are under construction with completion expected in December 2002. The airfield runway improvements at Marandua remain unfunded; this airfield will be critical to supporting operations in Eastern Colombia.

In addition to counterdrug assistance, the administration has proposed to Congress \$98 million to help Colombia to enhance the training and equipping of units to protect the Caño Limon-Covenas oil pipeline, one of the most vulnerable elements of their economic infrastructure. If approved, this training will assist the Colombians to mitigate the debilitating economic and financial effects of constant attacks on critical infrastructure.

We continue to improve our infrastructure at the Forward Operating Location (FOL) in Manta, Ecuador. Last year, operations at the FOL ceased for 6 months while we made runway improvements. The current construction for living quarters and maintenance facilities will be completed in June 2002. The Manta FOL is critical to our source zone counterdrug operations and provides coverage in the eastern Pacific where we have seen the greatest increase in drug smuggling activity.

We support reinstating the Air Bridge Denial Program in Colombia and Peru as an effective means to interdict the flow of drugs, arms, and contraband. By incorporating the recommendations of the Beers and Busby reports, we can safely resume United States support to air bridge denial operations and reinforce our counterdrug commitment to partner nations.

Ecuador remains the country most vulnerable to any spillover effects from the narcoterrorism in Colombia. As such, we sponsored a senior-level crisis response exercise with United States and Ecuadorian civil and military leaders. Participants worked through a realistic, terrorist-oriented, weapons of mass destruction (WMD) consequence management scenario. The exercise produced a better understanding of how both countries would respond to a terrorist-related crisis, and improved the capability of Ecuador to respond to a consequence management crisis. This fiscal year, three additional seminars are being coordinated in other countries to replicate the success of this event.

In Venezuela, we seek to maintain military-to-military contacts where we can. There are more Venezuelan military students in United States schools than from

any other country; this is extremely important since they will be the future leaders of the Venezuelan Armed Forces.

In Peru, the government institutions are slowly recovering from the Fujimori experience. In spite of the prevailing terrorist and drug threats within the country, the military force structure and budget have been significantly reduced. Likewise, Bolivia faces similar challenges, in part stemming from their success in curbing coca cultivation and the resulting dissatisfaction from the cocalers (coca producers).

We are validating requirements for partner nation militaries to assist the State Department as it begins executing the Andean Ridge Initiative program to address the potential regional production, processing, and spillover resulting from successful Plan Colombia execution. In each case, we are seeking to sustain the military contacts focused on professionalization of the armed forces and the specific challenges and needs within resources available.

Caribbean

Like their neighbors in Latin America, some Caribbean democracies remain fragile, and corruption within governments still exists. The security forces are small and under-resourced. Economies in this region are heavily dependent upon tourism, and the attacks of September 11 had a devastating effect on the tourist industry, which will reduce resources available for the security forces. Our security cooperation in the Caribbean focuses on combating transnational threats and counterdrug operations, disaster preparedness, and humanitarian assistance. Cuba and Haiti remain the two major concerns in the Caribbean. Cuba continues its efforts to exert influence within the region, usually at the expense of the United States. Haiti's economy is in shambles and its government institutions, to include its security forces, still do not function; however, the Haitian Coast Guard shows promise.

Tradewinds, our annual exercise to strengthen the capabilities and cooperation of partner nations, includes most countries of the Caribbean with a focus on disaster response, maritime interdiction operations, and basic military skills. Tradewinds develops increased professionalism of the military forces in the region and greater regional capability to respond to natural disasters, illegal migration and narcotics trafficking. Stronger security force relationships are enhanced as well. From the Tradewinds experience, the Caribbean Island Nations formed the composite battalion task force under CARICOM that participated with the United States in Operation Uphold Democracy in Haiti in 1994–1995.

In a region of scarce resources, New Horizons engineering and medical exercises have significantly benefited the people of the Caribbean, while enhancing the capabilities of our Armed Forces to deploy and train in foreign environments. During 2001, Southern Command conducted three New Horizons exercises in the Caribbean area—Bahamas, St. Vincent, and St. Lucia. Fiscal year 2002 will see three more New Horizons exercises in Barbados, Dominica, and Jamaica.

Central America

Natural disasters, weak political systems and economies, illegal migration, and illicit trafficking plague the Central American countries. Military forces range from none to capable. Costa Rica and Panama do not have militaries, rather internal security forces; in fact, Panama lacks the capability to control its border with Colombia. Our security cooperation in Central America focuses on peacekeeping operations, disaster response, humanitarian and civic assistance, and counterdrug coordination.

This year we are conducting Peacekeeping Operations—North 2002 in El Salvador, an annual exercise focusing on peacekeeping operations procedures while providing a forum for regional cooperation among participating nations. The Conference of Central American Armies (Nicaragua, El Salvador, Honduras, and Guatemala) indicated a desire to form a composite peacekeeping force for international operations. Guatemala demonstrated its capability as a peace operations partner as part of the United States-led multinational forces in Haiti. Additionally, we conduct New Horizons exercises annually in Central America. During fiscal year 2001, Honduras and Guatemala hosted New Horizons exercises while El Salvador and Nicaragua are currently engaged in New Horizons exercises.

Central America is an important focus of our counterdrug efforts, which include regional counterdrug operations to enhance capabilities and foster coordination and cooperation within the region. The Forward Operating Location in Comalapa, El Salvador, provides the capability for coverage throughout Central America, the eastern Pacific, and western Caribbean. In addition to its counterdrug mission, Comalapa served as an instrumental logistics center in the aftermath of last year's earthquakes in El Salvador. Comalapa is a valuable operating location and we will continue to pursue infrastructure improvements this year.

Southern Cone

Within the Southern Cone, we focus our attention on interoperability, combating terrorism, peacekeeping operations, regional cooperation, and professionalizing militaries. Our military-to-military contacts within this region are strong, as evidenced by increased defense cooperation as potential coalition partners with the United States worldwide, dialogue, and multilateral training exercises. Although resource limitations remain an impediment, the military modernization within Chile and Brazil continues to progress.

Chile recently committed to purchase 10 F-16 fighter aircraft and associated equipment after conducting a thorough, open, and transparent competition. This purchase opens the door for even more cooperation and bilateral training with an eye toward increased interoperability and coalition operations. Chile is also exploring the possibilities of a naval modernization program.

Brazil is actively pursuing a larger advanced fighter aircraft purchase with the F-16 as one of the final competitors. As in the case of Chile, the purchase of the F-16 by Brazil would lead to long-term regional and bilateral cooperation. Brazil's Navy is upgrading its carrier air operations with increased training in the United States on the A-4 aircraft, directly related to the development of a naval fixed-wing aviation force.

Argentina is in the midst of a serious economic crisis. Throughout this difficult period, the Argentine military has remained loyal to the constitution and has been a voice of restraint and respect for the democratic process.

Before the financial crisis, Argentina petitioned to join the multinational peace force for Afghanistan. Likewise, Uruguay has volunteered to participate in the Multinational Force and Observer Mission in the Sinai as a measure to free United States troops for other missions.

We are pleased with the cooperation we have received from Southern Cone countries in sharing information and tracking suspected terrorist organizations in the tri-border area. We are working with security forces to enhance combating terrorist capabilities. Paraguay has been particularly aggressive in searching out, disrupting, and detaining terrorist suspects and their supporters.

Professional Military Education

One of the cornerstones of our security cooperation strategy is to provide the opportunity for professional military education in the United States for students from the area of responsibility. Our professional military education institutions dedicated to the region provide those opportunities and serve as vital tools in achieving United States strategic objectives in Latin America and the Caribbean.

The National Defense University's Center for Hemispheric Defense Studies (CHDS) at Fort McNair, Washington DC, supports the development of civilian specialists from Latin American and the Caribbean in defense and military matters by providing programs in defense policy planning, resource management, and political and civil-military relations. CHDS significantly enhances the concept of military subordination to civilian authority by training a core of civilian defense specialists who serve in the region's defense ministries and legislatures.

The Interamerican Defense College (IADC) provides senior service level professional military education for senior officers, including officers from the United States.

The Western Hemisphere Institute for Security Cooperation (WHINSEC) at Fort Benning, Georgia, offers instruction that promotes democratic values, respect for human rights, and regional cooperation. WHINSEC provides an opportunity for regional military and police leaders to receive, in Spanish or English, the same instruction we provide our own Armed Forces. The capstone course at WHINSEC is the year-long resident Command and Staff Course, which includes approximately 40 percent United States officers from all services. Concepts and values taught at WHINSEC are continually reaffirmed, as our hemisphere's militaries are increasingly supportive of democratic values and the subordination of the military to civilian control.

The Inter-American Air Force Academy (IAAFA) at Lackland AFB, Texas, and Naval Small Craft Instruction and Technical Training School (NAVSCIATTS) at Stennis, Mississippi provide specialized technical and tactical training on aircraft maintenance and small boat operations to the region's militaries. This training enhances the interoperability and increases the life cycle of U.S. equipment used by countries in the region.

For some of these courses and other military schooling, the International Military Education and Training (IMET) Program are critical. We appreciate the continued support of this valuable program. However, in order to reach the future military leaders for Guatemala, we need to remove the prohibitions on junior and field grade

officer's attendance of the same professional military training as their U.S. counterparts such as command and staff college and advanced courses.

These schools produce graduates who make positive contributions to their countries through distinguished military and public service. In many cases, the interpersonal relationships forged during a common educational experience serve as valuable tools for security cooperation while promoting regional stability

REQUIREMENTS

Command, Control, Communications, and Computers (C⁴)

We are enhancing our C⁴ for fixed and mobile operations throughout the region. Because most of the countries in this theater are still maturing their C⁴ infrastructure, satellite communications are vitally important to our deployed forces, especially in times of crises. However, current satellite communications provide limited bandwidth. We continue to expand the Cooperating Nations Information Exchange System (CNIES) and the Counter-narcotics Command and Management System (CNCMS). These programs have proven instrumental in the prosecution of our counterdrug mission and have helped optimize the available satellite bandwidth. Since existing military systems alone have not proven sufficient in meeting the demand, we are partnering with the Defense Information Systems Agency and the Department of State's Diplomatic Telecommunications Service Program Office to explore commercial alternatives such as fiber optic communication links. This effort shows promise for improving C⁴ effectiveness throughout our area of responsibility.

Intelligence, Surveillance and Reconnaissance (ISR)

Our global war on terrorism continues to reinforce the critical role that a comprehensive ISR posture plays in any operational environment, whether home-based or abroad. Secretary Rumsfeld noted in the 2001 Quadrennial Defense Review that: "We cannot and will not know precisely where and when America's interests will be threatened. . . ." His observation is particularly applicable to the Southern Command area of responsibility, where threats take many forms and are often ambiguous. These threats present a range of intelligence challenges—from tracking terrorist groups and drug trafficking organizations of the Andean Ridge to monitoring international criminal and terrorist activities throughout Latin America and the Caribbean. To mitigate these threats, we depend heavily upon multi-disciplined intelligence collection and sophisticated all-source analysis backed by secure, interoperable systems. However, even with Department of Defense and the Joint Staff's assistance in this area, our current ISR capabilities fall short of meeting our requirements, particularly where we need to be proactive rather than reactive in crucial mission areas such as combating terrorism, force protection, counterdrug support, and anticipating crisis.

Essential to these efforts is sound intelligence and sufficiently financed intelligence operations. With this in mind, we fully support National Security Agency's (NSA) ongoing transformation efforts. It is essential that NSA remain a relevant provider of signals intelligence and information assurance products and services. Competing realities of existing and expanding mission requirements and budgetary constraints, will force NSA to reach difficult decisions about resources, which could further impact intelligence collection for Latin America and the Caribbean.

The limited availability of national sensors, airborne reconnaissance platforms, and tactical military intelligence—meets only a small percentage of our priority intelligence requirements and is inadequate for maintaining a comprehensive intelligence operating picture. United States Southern Command's mixture of new and old technology systems presents unique challenges that have and will continually test our resourcefulness until we acquire more organic and reliable capabilities as noted in our Joint Monthly Readiness Review and Integrated Priority List.

The National Security Agency's responsibilities related to protecting the Nation and supporting the global war against terrorism fall among the highest priorities for budget decisions if signals intelligence and information assurance initiatives are to continue to preserve our Nation's security and support the unique intelligence needs for our area of responsibility.

The restrictions placed on the use of certain collection assets exacerbate the constraints inherent to the limited availability of intelligence resources in our area of responsibility. Today, many of the intelligence assets allocated to Southern Command are funded from counterdrug appropriations. Therefore, the employment of these scarce assets is further restricted to supporting only counterdrug operations or force protection.

Our ability to execute effective operations—especially those associated with the global war on terrorism—is further hampered by restrictions on sharing data with

our partner nations. We need to streamline sharing procedures that are currently used for time sensitive intelligence information. Like other unified commands, we are developing information-sharing networks that will allow us to combat asymmetric and other specific threats in our region more effectively. The South American Net, the Caribbean Information Sharing Network, and the Cooperating Nations Information Exchange System are all prime examples of initiatives that enable us to share certain types of information expeditiously; but we must do more.

We also continue to experience shortages of intelligence personnel, qualified human intelligence collectors, linguists, and signal intelligence experts. A fully resourced Regional Security Operating Center at Medina, Texas is essential to supporting operations within the area of responsibility. Our ISR capabilities must provide predictive and actionable intelligence to preclude strategic, operational, and tactical surprise. Even with potential for improvements in the near future, the reality is, we need additional and advanced ISR support today.

Anti-Terrorism and Force Protection

The security of our forces in-theater is our first priority. Southern Command continues to commit resources to address its force protection requirements and provide the best protection measures to our forces. We have intensified ongoing efforts to identify potential threats through the use of Joint Service Integrated Vulnerability Assessments throughout the region, most notably at the forward operating locations, Guantanamo Bay, and the Southern Command headquarters. Additionally, we use force protection response groups to determine if our operating locations are under surveillance and to identify critical vulnerabilities to attack scenarios. The Colombian forward operating sites have been assessed to properly address force protection for our military personnel.

The global war on terrorism has heightened our awareness of threats and provided a new sense of urgency to our force protection efforts. We continue to make progress in securing our headquarters, bases, and FOLs. Where we are unable to mitigate threats through physical or structural enhancements, we address the risk with procedural modifications for our personnel.

Foreign Military Financing

Foreign Military Financing (FMF) is an important element of the U.S. national security strategy that fosters and supports cooperative security arrangements. Although military expenditures in the region are the lowest in the world, Latin American and Caribbean militaries do have legitimate defense sustainment and modernization requirements. As we incorporate the assistance of partner nations in fighting terrorism and other transnational threats, FMF is the primary source of equipment and training for resource strapped countries. Additionally, much of the military equipment and capability throughout the region requires modernization.

Against these requirements, Latin America and the Caribbean received less than 0.1 percent of the annual worldwide FMF program, which although an increase over last year, was just \$8.7 million. This allocation is not sufficient to cover the sustainment of the aircraft and other equipment previously provided to our regional partners. It also limits our ability to influence the direction and scope of regional military modernization and enlist the full cooperation of partner nations. Further, it limits the capabilities of the militaries within the region to assume a more active role in security cooperation against transnational threats, disaster response, and peacekeeping. We continue to work with the Department of State in support of the FMF program.

Maturation of Headquarters

In 1999, Southern Command and its components completed an unprecedented transformation. We satisfied treaty requirements and withdrew from Panama, relocating our headquarters operations and component commands. Through this endeavor we remained focused on properly supporting the Command's strategic requirements.

In 1997, Southern Command's headquarters relocated to Miami, an international city with strong political, economic, and cultural ties to the region. This location complements our mission requirements, providing Southern Command direct access to United States government officials and foreign political and military leaders transiting to and from the area of responsibility. Access to members of the local academic community, as well as the tremendous coordination opportunities with regional offices of other Federal agencies and the international diplomatic community with the large number of consulates, further enhances our efficiency and effectiveness. Operationally, from the perspective of executing the mission, Miami is the best location for the Southern Command headquarters.

The current lease for the main headquarters' building expires February 2008 and does not include provisions for extension. We are working with the Deputy Under Secretary of Defense for Installations and Environment and the Army to develop a plan to mature our headquarters in an efficient and effective manner. Our planning tenets focus on support of our mission, operational effectiveness, and prudent use of taxpayer resources. Imbedded in the planning are force protection requirements and the ability to adequately support military personnel and their families. These plans will include reasonable flexibility for future requirements. Including these plans for headquarters maturation in the fiscal year 2004 budget is necessary to ensure time for implementation.

WAY AHEAD

Southern Command will continue to execute operations and activities to enhance the region's militaries, advance democracy, promote regional security, support hemispheric cooperation, foster economic opportunities, promote peace, sustain freedom, and encourage prosperity. Further, we will prioritize these activities in areas that offer the greatest leverage for protecting and advancing United States regional and global interests. Our primary vehicle for accomplishing these goals remains the professionalization of the region's militaries through military-to-military contacts. Southern Command will continue to conduct disaster relief, humanitarian assistance, crisis response, and counterdrug activities. Also, we are adapting our plans to assure our allies, dissuade foreign military competition, deter potential adversaries, and if this fails, defeat our adversaries, whether terrorists or nations.

CONCLUSION

In summary, Mr. Chairman, the Latin American and Caribbean countries are of growing strategic importance to the United States. The economic, cultural and security ties within our own hemisphere are critical to safeguarding the security of the United States and its citizens. During the last 25 years, the region has been a success story for the United States National Security Strategy as the countries within our area of responsibility have made a clear transition toward democracy and subordination of military forces to civilian authority. This is due in large part to a carefully planned and robust engagement program of professional military education, training, and exercises that emphasize respect for democratic values, regional cooperation, human rights, and the role of the Armed Forces in a democratic society.

Our vision for the hemisphere continues to be a community of democratic, stable and prosperous nations dedicated to countering terrorism, illicit drug activities, and other transnational threats. Our goal is to ensure these nations are served by professional, modernized, interoperable security forces that embrace democratic principles, demonstrate respect for human rights, are subordinate to civil authority, and capable of multilateral responses to challenges.

Today, however, we also recognize the insidious nature of hostile activities that threaten the stability, security, and economic development of many of these nations. We clearly recognize the existence of a terrorist threat within our hemisphere as profits from illicit drug trafficking fuel terrorist activity that can ultimately have national security implications for the United States. United States Southern Command will continue to seek every opportunity to resource, plan, and combat terrorism within the region to ensure for our national security and win this war.

We are confident that continued support from you and your colleagues on the committee and in Congress will provide the resources to ensure that the hard-earned gains of the last 25 years are not reversed, and to enhance regional partner nation capabilities that build and maintain support for the global war on terrorism. Thank you again for providing me the opportunity to discuss the superb work performed by the soldiers, sailors, airmen, marines, coastguardsmen, and civilian personnel of Southern Command in Latin America and the Caribbean.

Chairman LEVIN. Thank you, General Speer.

We will proceed as usual under the early bird rule. Let us have an 8-minute first round.

Admiral Blair, first on the Special Operations mission in the Philippines. In your written testimony you stated that the Special Operations teams will train their Philippine counterparts "potentially down through the company level." But General Myers told us just a few weeks ago that the training would be limited to the battalion level. Now, is it planned that the training will go below bat-

talion level and what criteria will be used to determine whether or not it does?

Admiral BLAIR. Yes, sir, Mr. Chairman. I will answer that question. I would like also to reach back to the question you asked in your opening statement, with its very justified concern about expansion of the mission of our forces there. Certainly no officer of my generation who went to Vietnam can not be worried about starting out as advisers and then eventually creeping into missions much greater than originally anticipated.

Our operations in the Philippines I think have four ways that they are limited to ensure that they meet the objectives we seek. The first limit is the leading role of the Armed Forces of the Philippines. It is absolutely clear that President Arroyo, her Armed Forces, and all of the Armed Forces of the Philippines recognize that this is their fight, their country, their sovereignty. They are going to be the ones who conduct it. They only want assistance, not replacements in this fight. That is factor number one.

Factor number two, it is limited in role. We have instructed our troops and I have instructed my commanders that we will advise our Philippine counterparts. We will not be doing the fighting for them. So right now we have 12-person A teams deployed at the battalion level. A battalion is about 600 in the Philippines these days. They are in the battalion headquarters. Their role, their explicit role, is to provide covered communications and intelligence information to their Philippine commanders and commanders' staffs whom they provide. In the battalion garrisons they provide training to those 600 people, whether it be squad leader patrol planning, or whether it be lane training or marksmanship. So it is limited that way, in role.

It is limited in space to the southern Philippines. It is limited in time. The 6 months that is specified in the Terms of Reference is a time limit on the initial phase of activity that we are involved in now. We may agree that there would be some particular training modules that will be separate and might have longer tails than that. We may agree that there would be some civil affairs engineering projects that might take longer than that. But there is a 6-month limit on the operation that we are now involved in.

Finally, it is also controlled, I would say, by a very careful awareness on our part of the different factions who are involved in the southern Philippines. You mentioned the Moro Islamic Liberation Front (MILF). The MILF and the Moro National Liberation Front (MNLF) are both political entities which are primarily dealing with the Philippine government in a political way. There are some fighters at the lower level who go back and forth between and among these groups and we may—the Armed Forces of the Philippines may encounter somebody in the field who was an MILF fighter yesterday and now he is an Abu Sayyaf Group fighter.

But the main dealings with the MILF and the MNLF are through the political process and we know who they are and how they work and we can keep it separate.

On your question regarding the level of the training, Mr. Chairman, right now our teams, as I mentioned, are down to battalion level. It would be a separate decision to take them any lower than that and would depend on the recommendation of our commander

there, whether he thought our basic tasks would be enhanced by moving down that one level.

Even if they were to move down to the company level, I need to emphasize that they are advising the commander of a company, beside the company commander, who is typically an O-3, a captain in the Armed Forces of the Philippines. We are not talking about American special forces going out on point in patrols engaging the enemy directly.

Chairman LEVIN. Thank you. Given the statements of both yourself and General Myers, we would assume that there would be notice to the committee prior to any change in that mission.

Admiral BLAIR. Yes, sir, I will make sure that happens.

Chairman LEVIN. Thank you.

General Schwartz, on the Agreed Framework question with ourselves and North Korea. That Agreed Framework is in effect. Former Secretary of Defense Perry told this committee that if North Korea completed the other nuclear reactors that it previously had under construction, they could produce enough plutonium for tens of nuclear weapons by now and many more in the future.

I have a number of questions on the Agreed Framework. First, do you believe that it is in our security interest that the Agreed Framework be maintained and be complied with by both sides? Has North Korea complied with the Agreed Framework up to this point of time?

On the missile testing issue of North Korea, they have publicly committed to a missile testing moratorium as long as the U.S. continued the dialogue with North Korea on their missile and nuclear programs. Has North Korea kept their commitment not to test a missile?

General SCHWARTZ. Yes, sir, thank you very much. First of all, I would say this, Mr. Chairman, that the Agreed Framework is viable. The great work of Dr. Perry, as you said, Senator Warner, in your recent conversation with him, I think set the foundation for the future. It is the road map to the future in my opinion.

As far as whether it is in the best security interest of the United States, and vital interest of that area, absolutely. It serves that purpose and is serving us well at this time.

I would say this about it. It stopped their nuclear development, there is no doubt about it. We got in there, we looked at their two reactor facilities, we shut them down as a result of the Agreed Framework. It gave us a continual presence. The International Atomic Energy Agency (IAEA) is in there at those facilities continuously monitoring. So it gave us a monitoring capability that we want to have.

But I also think, Mr. Chairman, that while it is not part of the Agreed Framework, it is a stepping stone to the flight missile moratorium.

As far as the missile moratorium, we are very confident that they have not tested any missiles since the agreement. We have a tremendous capability to monitor that and they have not violated it. So I think the Agreed Framework has served us well. It is in our best interest and it is the stepping stone to redundant negotiations in the future.

Chairman LEVIN. Thank you.

Admiral BLAIR. May I add something? The Agreed Framework, Mr. Chairman, also poses some responsibilities on the North Koreans in terms of coming into full compliance before we pass on these reactors. We need to see North Korea pulling its part of the Agreed Framework as well as what we have agreed to do.

Chairman LEVIN. Of course. But that compliance will be assured prior to those reactors being supplied, is that correct?

Admiral BLAIR. That is the way the agreement is written.

Chairman LEVIN. We are not at that point yet where we are ready to supply those reactors.

Admiral BLAIR. Yes, sir.

General SCHWARTZ. Sir, the light water reactor components we are talking about are projected to be supplied to North Korea in 2003. There are a lot of people who refer to the crisis of 2003 and what they are talking about is the ability of the North Koreans to open themselves up to the inspections necessary before we provide those light water reactor components. So it is a very important time. Admiral Blair is absolutely correct.

Chairman LEVIN. Thank you very much.

Senator Warner.

Senator WARNER. Thank you. I think that is an important point, Mr. Chairman.

What about the movements of Kim Jong Il, the leader of North Korea? Is he still trying to make some contacts with the outside world? For a while he traveled a bit, but lately I have not heard much about him. I think it is helpful if he engages other nations and perhaps those nations can in some way reinforce the efforts of both South Korea and the United States towards a reconciliation of differences.

General SCHWARTZ. Yes, sir. We watch their diplomatic contacts carefully. Over the last 18 months they have had about 150 diplomatic initiatives. They have established relationships with 17 countries. So in that sense are they making an effort to open up or to reach out from a diplomatic perspective? At least more so than ever before. There is goodness in that.

But as far as Kim Jong Il is concerned, we share your opinion, Senator. North Korea seems to be very quiet as of late, particularly as of September 11, and we are watching them carefully to see if they are participating in any kind of terrorist activities that would support terrorism around the world. I can report to you that we have had no indicators they are doing that.

But they are still, they are quiet, and I think they are studying who is next, where do they stand on this list of terrorism, what do they need to do to get themselves off. They are looking at this, but they are not proclaiming to anybody exactly what they are doing. They are very quiet.

Senator WARNER. What about their export of weapons? They have been a significant exporter worldwide.

General SCHWARTZ. They are the number one proliferator of missiles and also of conventional weapons. That is where they get their money. That is how they have kept their economy alive. They are actively pursuing those interests around the world.

Senator WARNER. Is the intensity on the increase or has it leveled off?

General SCHWARTZ. Sir, actually just as of late, the last couple of months, it has increased. It died for a while, but I would say it is in a steady state. If they do not keep it going, they die on the vine.

Senator WARNER. I am glad you made reference to Secretary Perry. I commend you for that. I really feel very strongly on that issue. You and I have talked privately about the personnel situation over there, and I am going to try and spend some additional time on that. But I would hope in your consultations, perhaps on this visit to the Pentagon, that you address this with General Shinseki. I am going to bring it up with him when he appears before us on Thursday. In the Secretariat, perhaps you could talk to Under Secretary Brownlee, who was on this committee staff for many years and has the confidence of the committee.

I would like to see the Secretary, whether it is White or Brownlee, and Shinseki come forward to this committee with a specific package of recommendations as to how to correct this problem, which you have made known to Congress I think in a very courageous and forthright manner. What is the corrective action? We cannot tolerate three lieutenant colonels being assigned to your command, respectfully saying to you that they are forced, together with their families, to make a choice to accept that command or retire from the United States Army. I find that unacceptable.

General SCHWARTZ. Yes, sir. I thank you very much, sir. I have spoken to those people that you mentioned. I will speak to them again in a follow-up as per your direction.

Senator WARNER. You have done your job. You have brought it to our attention.

Admiral Blair carried a very interesting article this morning on the Chinese defense budget. I remember last year when you were here about this time they raised it a significant amount. This year 17 percent. What sort of a signal is that sending? Are those 17 percent real dollars or is the accounting a little fuzzy, and is it something that we should take into consideration as you look at your overall responsibilities in the region?

Admiral BLAIR. Yes, sir. That is a development we need to look hard at. I think if you look at our interaction with China over the last year since I was before this committee, it really illustrates the full range of our interactions with that country. The EP-3 incident, of course, dominated the first part of last year. In reply to your question, following that incident we did have one meeting with the Chinese in which we stated our position that we had the right and indeed the obligation to fly our aircraft in international air space, as did other nations, and that it was the responsibility of countries who are sending airplanes to intercept other aircraft to conduct themselves in a professional manner that did not hazard either airplane.

Senator WARNER. But my dump-out from one source on that meeting was that it was somewhat perfunctory. It seems to me, with the United States being the superpower, and China seeking recognition among the councils of military professionals worldwide, that they would want to accept perhaps an overture from us to elevate these talks to a level like we had with the former Soviet Union and have an "Incidents at Sea Agreement." We are putting

at risk our aviators and others in that AOR and we don't want to see a foolish lack of professionalism, as was exhibited I think in the last incident, by either side. I am not here to point fingers.

Admiral BLAIR. Oh, I am pointing fingers. It was our side.

Senator WARNER. On that incident it was, but we had a very tragic incident with a submarine right there off Hawaii. Mistakes are made. No matter what degree of professionalism, mistakes are made.

I just think there is a high risk to our people, perhaps a risk to their people. So we ought to step up to the table and see if that cannot be initiated. That might be one of the things you can do as you conclude your distinguished watch and you might encourage others. I will do it back here at home, because I think putting our people at risk in those situations is not a wise thing to do.

On the homeland defense of the United States, Mr. Chairman, you have heard me say that is the highest priority right now of our President and Congress. I know you have some concerns about the new CINCNORTH. Can you tell us, is that moving along to your satisfaction? Does there appear to be a reconciliation of views on that? I would hate to have another incident happen to the United States and we still do not have in place a command and control structure that could have stepped in to perhaps deter or certainly respond very quickly.

Admiral BLAIR. Yes, sir, I have been involved in the Department's negotiations and examination of that issue. I am very much in favor of the establishment of Northern Command, a commander whose responsibility it is to bring together all of the responsibilities for both defending this country and supporting civil authorities if there is an incident.

Where that command's responsibilities overlap with mine are in Alaska, in Hawaii, and the West Coast forces currently assigned to the Pacific Command. So my primary concerns relate to making sure that Northern Command can carry out his overall responsibilities, ensuring that our forces in Alaska, Hawaii, California, Oregon, and Washington are able to fit smoothly into that structure, and yet to be able to keep our focus on Asia and the jobs that most of our forces have, which have to do with deterrence of North Korea, keeping an eye on the Taiwan Straits, and the many other things we do.

So we are working our way through that and I believe we are approaching satisfactory arrangements on that having to do with clarity of who does what and how quickly you can do it. I will tell you that after September 11 the work in Hawaii, as Senator Akaka knows, was done by those of us who live in Hawaii. We did not have a lot of contact or direction from folks back here, who had other things to do. I was also talking to Alaska a lot in order for General Schwartz up there to get our defenses in Alaska in shape. As I think was reported in the press, there was an airplane that was flying over from Asia that was showing the wrong signals, that we thought might be another hijacking situation, which was being worked very, very hard.

Our forces of the Third Fleet in San Diego and the First Marine Expeditionary Force and the Third Corps in Washington are very much part of our plans and our theater security cooperation in

Asia, and we need to keep that focus for them, keeping them assigned to Pacific Command while they support their homeland defense responsibilities, which will take a relatively small part of their forces.

So I support Northern Command, but I believe we need to keep our focus on Asia while we are doing it, and I believe that those forces that point towards Asia should continue to be assigned to Asia, assigned to the Pacific Command.

Senator WARNER. Well, I think it is imperative that this Nation move out as quickly as possible to establish that command and I hope that your contribution can work towards a reconciliation of what differences remain.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you.

Senator Reed.

Senator REED. Thank you, Mr. Chairman.

Admiral Blair, you discussed our operations that are ongoing in the Philippines. One impression is that we are conducting generally small unit training. Could you comment on any intelligence operations and intelligence sharing that is ongoing with the forces in the southern Philippines?

Admiral BLAIR. Yes, sir. We are integrating an element of our task force into the operations and intelligence center that the Southern Command has set up in the Philippines. Consistent with protecting sources and methods, we will provide intelligence from U.S. sources of all types—air-breather, overhead, human intelligence. In fact, one of the keys is merging that with the intelligence the Philippines have, which is by and large human intelligence. We can build an intelligence picture of the battlefield and then help the Philippines use the combination of intelligence and operations in order to whip the Abu Sayyaf Group (ASG). So we will be providing intelligence of all types consistent with protecting them.

Senator REED. Now, in response to the Chairman you indicated that this operation would have a limit of 6 months. But I assume, given the relationship we are developing with the Armed Forces of the Philippines, that we have to look much longer than that, perhaps not this specific operation, but an ongoing relationship with the Armed Forces of the Philippines. Is that longer perspective being planned for and anticipated?

Admiral BLAIR. We are in consultation with the Philippines, working out the particular modules of training, some of which will undoubtedly have tails longer than 6 months: the parts of the civil affairs-engineering support to military operations and the longer-term economic development of that region, which will be primarily non-military but may have some military pieces to it, and also any sorts of follow-on sustainment training and advice, I would say, are modules that may be needed.

So certainly this intense phase will be limited at 6 months. The war itself will go on for a longer time than that. I think various forms of U.S. assistance to the Philippines in fighting that war will go on for months, but not really for years.

Senator REED. Thank you very much, Admiral.

General Schwartz, one of the key dilemmas when you look north is to determine what the intentions are of the North Korean government and their Armed Forces. As you have told the Chairman, they are maintaining a moratorium on long-range missile flights. They have accepted International Atomic Energy inspectors. You have looked closely and found no links to ongoing terrorism around the world. You suggest that a lot of their proliferation is driven by economics, not by ideology—they just need the money, which might suggest that there is a real opening for a political-diplomatic dialogue.

Yet, we are not initiating that. We are saying we are ready to talk to you. But what is your view in terms of initiating a dialogue, taking the first step and trying to move the situation forward?

General SCHWARTZ. Sir, the President in his visit set the stage, in my opinion, by the talks that he gave while he was there to open that dialogue. He was very clear: We want a dialogue. He repeatedly asked North Korea to meet us in dialogue with no preconditions. So, from the President of the United States, I think it is absolutely clear.

I think the ball is in North Korea's court. They have done the things you indicated and I have talked about. I think the conditions are right for this dialogue. Secretary Powell was there with the President. He repeated several times that we are initiating efforts to initiate that dialogue. So I do not have all the details of that, but I am very confident that we are doing everything, from my understanding at least, to get the dialogue open and to initiate an effort to try to bring peace to that peninsula.

Senator REED. Thank you, General Schwartz.

General Speer, the situation in Colombia has deteriorated rapidly in the last few weeks. In your assessment, from a military standpoint, do the various insurgent groups, particularly the FARC, have the capability of destabilizing the government of Colombia in the sense that it could stop effectively functioning and protecting its people and open up Colombia to exploitation by international forces or other non-Colombians?

General SPEER. Thank you, Senator. I would submit that the activities of the FARC, the ELN, and the illegal paramilitaries have already created an environment of seriously instability. I mean, the fact is that in Colombia today you often hear people cite statistics that the FARC controls so much of the countryside. Well, the real issue is that the government of Colombia, through its security forces, the police and the military, do not control portions of the country, and in the areas where they are not present and do not have control, there is a lack of a safe and secure environment, which basically undermines everything to do with governance in Colombia.

Senator REED. Also with respect to Colombia, it is a fairly substantial piece of territory. Does the current Colombian army have sufficient end strength, manpower, to effectively exert control over large parts of the country?

General SPEER. It is my assessment that the current force structure and the resources available to the Colombian military are inadequate to establish a safe and secure environment.

Senator REED. So there are things that Colombia must do and so then what is your recommendation with respect to the United States' participation?

General SPEER. Well, first of all, still in terms of the authorities that we have, our interaction with the Colombian military is still only in support of counterdrug operations. The administration has proposed to Congress two follow-on initiatives. One would be to create a second counterdrug brigade in pattern of the success of the first counterdrug brigade in the south, but it would still be counterdrug support.

The second initiative is to provide training and equipping assistance to infrastructure security units centered around Aravca, which is the heart of the pipeline area. This would be a break and a step beyond support in a counterdrug- only context.

As a minimum, the Colombian military needs additional resources. Whether that is provided through security assistance—and I would submit that if you look at the first counterdrug brigade, it is probably the best-trained and equipped brigade in the Colombian army. It is a model that can be applied elsewhere.

Senator REED. Thank you very much.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Reed.

Senator Roberts.

Senator ROBERTS. Thank you, Mr. Chairman.

Admiral Blair, I have sort of an unfair question for you. The Chairman has indicated his concern—which I think we all share—about our involvement in the Philippines and whether or not the training and the intelligence is limited to a company level or a platoon level or, for that matter, a squad level.

But the American hostages that are being held in the Philippines are from Wichita, Kansas, and I am very concerned about the Burnhams and their welfare. I guess my comment would be that, in terms of their capture and their imprisonment and their treatment, it has not been very limited. As a matter of fact, one of the individuals that was captured along with them was beheaded. That is not very limited action, to say the least.

Can you give me some light on the state of play of the Philippines, more specifically in regards to the status of Mr. and Mrs. Burnham? I understand they are on that island still, Basilan Island, where the Abu Sayyaf terrorists reside under a triple canopy of jungle.

Admiral BLAIR. Yes, sir. We worry about the Burnhams a lot. All of us have read the letters and seen the videotapes, which rip your heart out, frankly. They are being pulled around from place to place. They are not being fed enough, they are subject to diseases, and they are in pretty rough shape according to our best information.

You are right, the third American hostage who was captured with them was beheaded fairly early on in the event in a brutal way.

From our military point of view, we think the best thing we can do to help the Burnhams is to keep the military pressure on the Abu Sayyaf Group by making the Armed Forces of the Phil-

ippines—and they are the ones that have the 6,000 troops there on this island—more effective. We think that everything—

Senator ROBERTS. We have about 160 military personnel on the ground, right?

Admiral BLAIR. Right.

We think that everything we do to make them effective in terms of intelligence, communications support, equipment support and training will make them better able to rescue the Burnhams. We have made it clear that that is the top priority. We trained a light reaction company a year ago—after the first American hostage was taken—whose job it is to go in and rescue a hostage in a standoff situation, and we think that they are competent of doing that.

So, Senator Roberts, we are keeping the pressure on, and I think this is the best chance we have of getting the Burnhams back safely. I think that we stand a good chance of doing that.

Senator ROBERTS. I hope and pray that is the case. I would hope any talk of a time limit would not give any credence to the terrorists' belief that if they just wait this thing out we will just give up.

General Speer, you responded to a very good question by my colleague Senator Reed regarding the proposal for the United States to provide military training to a brigade of Colombians to defend their infrastructure, such as dams and bridges and pipelines, and that this would be a shift from the current assistance program we have. What are we talking about, including the number of U.S. personnel you believe would be required to provide this kind of training? Then I think in connection with that, could you talk about the possibility of a growing terrorist threat in regards to the instability that we see in that country, and would that apply to the pipeline and obviously to the infrastructure?

General SPEER. Thank you, Senator. The current proposal is only for protection of that specific pipeline that centers on Aravca. We anticipate that the training requirements for the Fifth Mobile Brigade and the Eighteenth Brigade, which have responsibility for the pipeline—in this case it is a matter of enhancing the training of existing units, unlike the situation with the first counternarcotics brigade, which was basically building a unit from scratch, forming a unit and taking it from, if you will, basic training all the way up to an operational capability.

We think that the resources required in terms of manpower to do those tasks would be no greater than it was in the first counterdrug brigade. So in other words, no significant increase to the footprint and we will probably stay within the mandated numbers, even though this is not a counterdrug mission.

Senator ROBERTS. If you can in the short time we are allotted, could you give me just a capsule comment on Venezuela and Argentina? I might preface that by saying when I had the opportunity with Senator Akaka and Senator Baucus to meet with Fidel Castro in Havana, something we call Saturday Night Live with Fidel, it went on for 16, 18 hours, and we asked him about Venezuela and Mr. Chavez and asked, is he the next Castro? He indicated, well, if he is that would certainly be good for Venezuela. I do not think that is the case. I do not agree with that.

But it is his oil minister that turned the spigot in regards to the production on OPEC that caused some of the price spike we went

through here about 6 months ago that got everybody upset. Could you give me just a capsule comment on how you feel, where we are both with Argentina, which is going through some real tough economic times, and also Venezuela?

General SPEER. Senator, let me start with Argentina. You are well aware that they are experiencing a financial crisis. There will be some effects not only in Argentina, but certainly in Uruguay and Paraguay, because of the trade intra-region. As a result of the financial crisis, certainly there is an amount of social unrest and at least uncertainty. At this point I am happy to report the military certainly is staying within its constitutional role and I see absolutely no indication that the military would take any actions outside of the constitution to become involved in that particular crisis.

What I think we will see is the military assume some of the border security mission away from the gendarmerie, to free the gendarmerie to again do more traditional police functions. But in the case of Argentina certainly the military is supporting the constitutional process.

In Venezuela I guess I like to say that anybody's guess as to where Mr. Chavez is taking Venezuela is as good as the next. Certainly there is cause for concern based on the company that he has been keeping and the places that he has been visiting. What we have seen in Venezuela is that the FARC moves with ease across the border into Venezuela, as it does northern Ecuador to some extent and Panama. We have seen weapons shipments arriving to the FARC and the ELN that originated in Venezuela. We still do not have any evidence at least where we can tie in official government involvement in any of those weapons shipments or the support to the FARC, but there are certainly some implications that it could be there.

Senator ROBERTS. My time has expired, but I am going to do something that most do. I have one real short question if I might, Mr. Chairman.

Chairman LEVIN. How long is the answer? [Laughter.]

Senator ROBERTS. It is going to be about 15 seconds if it works out.

It is to General Schwartz. Just a few years ago, Senator Stevens took a CODEL to North Korea, the first delegation allowed in there. We got a briefing in South Korea that should an attack occur the missiles would be about 18 minutes or less away from Osan Air Force Base. In keeping with Senator Warner's question in regard to some real problems with battalion commanders signing up for duty in Korea, would it be helpful if we just had a 12-month tour there, similar to other combat zones we have had, as opposed to the 2-year tour, with families who are 18 minutes away? If Kim Jong Il pulls the trigger, they are at risk.

I could never really figure that out when we went through the quality of life issues at various bases, where we were improving officer clubs and football teams and other things, why we were doing that when we were so close to possible attack and putting people at great risk.

Is that a reasonable suggestion, that if you had only a 12-month tour we might solve two problems there?

General SCHWARTZ. Senator, thank you very much, sir. It is an approach. I do not happen to agree with it because the thrust of what I am trying to do is going just about in the opposite direction. We have about 10 percent of our command that is eligible to be command-sponsored on the peninsula. It equates to about 1,900 command-sponsored families. The thing about it is 96 percent of all those that serve in Korea are on a 1-year tour. It does not provide for the continuity that a warfighter needs in terms of command structure, command and control, and the ability to orchestrate that very difficult fight.

So we want to get an element of that command stabilized. Two years is reasonable, and if you are there 2 years we would like to bring the families. We have deterred war for 50 years. We think, as the President said, we can do it for 50 more. I believe, as a CINC warfighter, it is a reasonable risk to bring some of the families in there, provide them the quality of life, and allow them to be together with continuity for the warfighter we need to fight and win.

So that is my perspective on it and I am actually going a little different direction from you, Senator.

Senator ROBERTS. I appreciate that. Thank you.

Chairman LEVIN. Thank you.

Senator Akaka.

Senator AKAKA. Thank you very much, Mr. Chairman. I join other members of this committee in welcoming our distinguished guests to this hearing this morning.

Admiral Blair, I have enjoyed working with you and I want to commend you for work well done as Commander in Chief of the Pacific Command. On behalf of the people of Hawaii, I want to thank you for the security you provide, not only for Hawaii, but for our great country.

General Schwartz, I want to thank you for taking the time to visit me and to discuss your command and some of the challenges that you face.

General Speer, I am looking forward to working with you. It is good to hear about your command and the challenges that you face.

To all of you, I want to say that I remain committed to working with you to ensure the readiness of our Armed Forces, as we all work together to defend our great Nation.

Admiral Blair, some of the forces that would be under your command in the event of a contingency are currently supporting our efforts in Operation Enduring Freedom. What is your assessment of the impact of this diversion on your missions in the Pacific theater both in the short-term and, if this situation persists, for a long period of time?

Admiral BLAIR. Sir, in the short-term I think it runs an acceptable risk. The primary way we measure it is support to General Schwartz. For example, when we sent the *Kitty Hawk* Battle Group to the North Arabian Sea that took away a lot of the early air power that would be needed in a Korean contingency and so we deployed a squadron of Air Force land-based aircraft from Alaska to Korea during that period and we were able to mitigate the risk.

That is doable in the short-term. Over the long-term, however, a sustained commitment of force in the Central Command region

at the levels that we have held for the last 6 months would require that we beef up our forces in the Pacific in some other way. You can do that by deploying naval forces more quickly, with less time back in home station. You can do it by activating Reserves. There are a number of ways you can do it.

But we would have to over the long-term, I think, compensate for a sustained presence in Central Command at the levels we have had.

Senator AKAKA. Admiral Blair and General Schwartz, like many people I am concerned that we remedy shortfalls in munitions and in particular precision-guided munitions. However, I understand that our storage facilities are already at near capacity. As we attempt to increase and upgrade our munitions stocks, do we have adequate storage to protect and maintain them? If not, what is being done to remedy these problems?

Admiral BLAIR. Yes, sir. I will leave the particular Korea situation to General Schwartz. That is his responsibility. But I can tell you that elsewhere in the region it is primarily an Air Force and Navy problem you are talking about, and we have a ways to go before we would max out our storage capacity right now. I will get you the exact numbers, but we have places to put more weapons which we need to build quickly before we need to build more facilities. I will provide some exact numbers to you in a classified response.

[The information referred to follows:]

Admiral BLAIR. We have the capacity to store additional Precision Guided Munitions (PGMs) throughout the U.S. Pacific Command (USPACOM) Area of Responsibility (AOR), however, many facilities require upgrade to improve storage and handling efficiency. These older facilities, including WWII-type igloo magazines, [deleted], and require labor intensive work-arounds for moving assets in and out of storage facilities. The ordnance infrastructure has been underfunded for many years and subsequently storage facilities have not been upgraded for optimal handling efficiency. Storage site security is sound, even under increased Force Protection following 11 September.

With respect to the Air Force within the USPACOM AOR, [deleted]. Currently PACAF has an unfunded requirement to upgrade munitions facilities of \$105 million. There are several projects currently being implemented to rectify some of the shortfalls. The [deleted] project to replace the munitions control facility and build 30 magazines is underway, costing \$14.5 million. [Deleted] costing \$4.7 million. These construction projects are for reducing outside storage and for increasing the service life of munitions and containers in which they are housed. Under the Afloat Pre-Positioned Force (APF), USAF currently stores munitions on three Military Sealift Command (MSC) leased container ships; [deleted]. A fourth ship will be added in late fiscal year 2002 for handling new production, depot stocks and the current fleet. [Deleted].

With respect to the Army within the USPACOM AOR, Army munitions on the [deleted]. This storage problem is compounded by a \$115 million shortfall for the Army Ammunition Operations and Maintenance account. This shortfall funding has stopped the Army's effort to initiate a retrograde program [deleted] of unserviceable U.S. munitions back to the United States. Retrograde and demilitarization of these munitions would alleviate the storage shortfall problems that exist [deleted]. [Deleted].

With respect to the Navy and Marine Corps within the USPACOM AOR, the Navy is currently utilizing [deleted] of their storage capacity. This does not include [deleted] (reduced operating status) and [deleted]. Modernization of the Navy's ordnance storage and handling facilities is not keeping pace with weapons upgrades within the fleet, the ordnance stockpile, or transportation technology. The Navy is using breakbulk for transporting ordnance vice containerized shipping. Commander in Chief, U.S. Pacific Fleet (CINCPACFLT) is developing an Ordnance Infrastructure Plan for improving its ordnance capabilities in both handling and storage.

Their priority sites for improvements include [deleted] with a projected cost of \$188 million.

In conclusion, storage is not an issue. The respective Services within the USPACOM AOR can store additional PGMs. However, storage area upgrades are required to improve storage and handling efficiency. Additionally, older and obsolete munitions need to be funded for retrograde and demilitarization to free-up storage space for more modern and preferred munitions within the USPACOM AOR.

Senator AKAKA. Thank you.

General SCHWARTZ. Sir, we have adequate facilities on the peninsula to store the munitions we need to fight and win, no doubt about it. But we have a challenge and the challenge is to retrograde some of the outdated ammunition that currently exists in those facilities so we can bring new and updated ammunition on board.

We have started an initiative to do that. We have full cooperation all the way up through the chain of command and we are in the process of doing that now. It will take a little time, but it is in progress.

Senator AKAKA. General Speer, have any of the assets that would normally support SOUTHCOM missions been diverted to participate in Operation Enduring Freedom? If so, what is your assessment of the impact of this on your ability to command current or future missions in SOUTHCOM?

General SPEER. Yes, Senator. A significant number of the assets that we would normally be allocated under the counterdrug executive order have been diverted for both Operation Enduring Freedom and Noble Eagle. Having said that, we still are able to maintain a presence in each of the counterdrug threat areas and we are able to maintain the critical ISR taskings for Colombia and the immediate area. But collectively it is insufficient to do the full job.

What it has forced us to do is be smarter in using the assets we have. I am happy to report that as we look to the operations from Joint Interagency Task Force-East (JIATF-East), our functional counterdrug command focused on both the transit and the source zone. Already this year seizures are ahead of the pace of last year, even with the reduced assets. That is really as a result of better use of the intelligence available.

Senator AKAKA. General Speer, there is an interest in this. When will we make a decision on whether the headquarters of U.S. Army South (USARSO) will be relocated from Puerto Rico to "to be announced"?

General SPEER. Sir, regarding the components in Puerto Rico, I know that each of the services are going through their courses of action within the service as to what should be the appropriate follow-on location. I do not know when, in the case of U.S. Army South, the Army will announce a decision if it intends to move USARSO or not.

From my perspective, both United States Army South and Navy South as component headquarters could do their job from CONUS as well as they can do their job from Puerto Rico, because fundamentally they are coordinating headquarters focused on the AOR and there are no real assigned troops. We have a different challenge with our Special Operations Command.

Senator AKAKA. Thank you very much, Mr. Chairman. My time has expired.

Chairman LEVIN. Thank you, Senator Akaka.
Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman. Good morning, gentlemen, and thank you for your service to our Nation.

General Schwartz, this morning you aptly described North Korea as the number one proliferator. Indeed, there are many examples of North Korea providing technical assistance and weapons to adversaries of the United States. For example, North Korea has been the key source of missile-related technology expertise and equipment for the Iranians since the early 1990s. Due to this extensive equipment and technical assistance from North Korea, Iran can now produce Scud missiles.

Which technologies do you suspect that North Korea is providing to other major adversaries and which regimes do you believe are actively seeking that kind of assistance from North Korea?

General SCHWARTZ. Thank you very much, Senator. They are active, as I testified. I have a list here I could provide to you later of all the countries and exactly what they have provided since the last several years. It is quite extensive.

But primarily it is missile technology and missiles, it is artillery and tank systems, submarines. They are the number one producer of submarines in the world—a small country—not high tech submarines on any kind of equity with what we have, but nevertheless they have a capability there and they are exporting it.

I guess the other area is ammunition. They are supplying numerous countries with ammunition, and I can provide the list of those countries and the details if you would like.

Senator COLLINS. I would. I ask that you provide that for the record.

[The information referred to follows:]

[Deleted.]

Senator COLLINS. An article today that appeared in the *Korean Herald* indicates that U.S. military officials are having increased discussions with South Korea to try to have South Korea take a stronger and broader role, a more active role, if you will, in addressing the concerns about the North's nuclear, chemical, and biological weapons. Could you comment on those discussions?

General SCHWARTZ. The President had extensive discussions on this subject with President Kim. But as a follow-up to that, there was an emergency meeting in South Korea about the road ahead. The dialogue there was what can we do together, ROK-U.S., to address the entire challenge, not just weapons of mass destruction, but also the conventional issue that exists on the peninsula.

So I think there was an agreement to move together on both issues and not then have single lanes, the U.S. leading one, ROK leading the other, but that we move forward together. This is my understanding and I think this will produce the kind of dialogue and progress that we need for the future. I think that is the center of the comment that you were talking about or at least read about in the paper.

Senator COLLINS. Are there other actions that we should be taking to try to put more pressure on North Korea to stop the proliferation activities?

General SCHWARTZ. I think right now as far as I am concerned as a warfighter the actions we are taking, the initiatives the President articulated so well when he visited, are right on target. The initiative with the Agreed Framework, the follow-up in 2003 as we reach that point, and some major decisions we have to make, are in the right direction. The confidence-building measures that I talked about earlier in my opening statement are the right way to go. This is a good road map to dialogue and to peace on the peninsula.

So I think we have the right initiatives now to move forward.

Senator COLLINS. General Schwartz, when I visited the peninsula, I think it was 2 or 3 years ago, and we went to the DMZ, I was appalled at the conditions of the barracks that our young soldiers were living in. Has progress been made in that specific area?

General SCHWARTZ. Yes, there has been progress. Believe me, Congress has been very generous and has been attentive to our needs. I have tried to articulate them to the House side as well as the Senate. We have had many visitors like you, as well as literally hundreds of others, and we are making gains.

There is a lot to do. It is part of that story of trying to help our young men and women from a personal perspective, but it is also the MILCON, the quality of life issues that are extremely important. 50 percent of the facilities we have on the Korean peninsula were built in the early fifties. They are almost 40 to 50 years old. They need attention, and this has been part of my campaign plan to improve the quality of life of the men and women who sacrifice so much and come to serve their Nation in this great alliance.

Senator COLLINS. You have been a tremendous advocate in that regard. I recall our discussions when I was in Korea. I just want to pledge my continued support to improving the quality of life for our soldiers serving there.

Admiral Blair, I was in Pakistan in January and met with President Musharraf. Our delegation talked with him about the rising tensions with India, which had massed its troops all along the common border. Could you give us your assessment of the state of tensions between these two nuclear powers?

Admiral BLAIR. I think the state of tension remains too high for anybody's comfort, Senator Collins. The forces of both countries are highly mobilized, are forward, and it would be a matter of days before conflict, high level conflict could break out, based on the sheer military preparations made on both sides.

So it really brings you back to the political negotiations. I think that from the Indian point of view—and I am more familiar with the Indian views than the Pakistani views because only India is in Pacific Command's AOR—they are looking at the indicators of infiltration across the border. They are certainly looking at any sorts of terrorist incidents, like the attack on their parliament, like the attack on their government buildings in Srinigar of last year, as being events which might trigger action by them.

I believe that the way forward there has to be for those of us outside of the region to simply put pressure on both sides to reach the solution that they both see is in their interests. Then the words have to be backed up with demonstrations of actual achievements which the two sides can point to. They can then go back to where

they were, because their goals as far as terrorism goes are similar. Their goals for Kashmir, of course, are completely different, but those are goals they both agree should be reached peacefully.

Senator COLLINS. It is of great concern. I personally think that General Musharraf has shown great courage in cracking down on the Islamic extremist groups within Pakistan. But it is a daunting task and it still remains just a tinderbox that is of great concern to me.

Admiral BLAIR. A tinderbox with nuclear implications.

Senator COLLINS. Exactly.

Admiral BLAIR. Which is even more dangerous than the three times they fought in the past.

Senator COLLINS. You mentioned in passing last year's incident with the EP-3. Can you comment on recent patterns of activity by China with regard to operations that our aircraft have been conducting since that time? Is China being more careful as far as the aggressiveness of its pilots?

Admiral BLAIR. Yes, Senator. The recent intercepts for identification of our military aircraft flying off the coast of China have been conducted at about the same rate they were previously, but with more professionalism. That is a military buzzword. They have done it safely. They are doing it safely now, and the pattern that we saw before the EP-3 incident of this flat-hatting—more military jargon—of these dangerous maneuvers has stopped and they are conducting their identification runs in a safe way.

Senator COLLINS. Thank you, Admiral.

My time has expired.

Chairman LEVIN. Thank you very much, Senator Collins.

Senator Sessions.

Senator SESSIONS. Thank you, Mr. Chairman.

Admiral Blair, I had a very fine visit to Korea and Japan in January. It was a good learning experience for me. One of the things we discussed, and I would like your brief thoughts on it as ranking member of the Seapower Subcommittee, was the decline in our number of Navy ships. We know that the *Kitty Hawk* is due to be decommissioned at some point. It performed very well as a forward staging base in this move from Japan over to the Afghanistan area.

What do you see with regard to that ship in particular and is it something we could preserve and maintain for maybe not every purpose other carriers can perform, but does it have a unique role and should we think in terms of keeping it rather than letting it go? When is it due to be decommissioned?

Admiral BLAIR. Senator, we were glad for your visit and I had very good reports of it. I myself visited the *Kitty Hawk* after you were there and in the interest of full disclosure I must tell you that she used to be my flagship, so as far as I am concerned she can do everything. So you are not talking to an impartial witness here.

But the combination of the crew of the *Kitty Hawk* and the superb repair facilities provided by the ship repair facility in Japan, which I am sure they told you about, is keeping that ship in good condition. A carrier is such a big box of steel that you can change out pieces from turbines—a turbine is a huge piece of gear bigger than this table, weighing several tons, which I saw being replaced

while I was there—through the electronics, which can be upgraded. So she has a lot of life left in her.

The official decommission date that we are projecting for the *Kitty Hawk* is in 2007 or 2008, but there is a certain amount of flexibility in that. I can tell you that I do not have an abundance of aircraft carriers in the Pacific Command such that I feel I have extras lying around. So I am for making sure that we have enough to do the job in the Pacific, especially as we send them, as we talked earlier, to other theaters where they also do good work.

Senator SESSIONS. I am hoping that we can look at that pretty hard. I think Senator Kennedy and I will be asking some of those questions on the Seapower Subcommittee. We visited the *Spruance*-class *O'Brien* that is also due to be decommissioned. It performed well. We are having such a hard time building sufficient new ships to keep our fleet at the size we need it to be that perhaps one solution would be to maintain some of our older ones, even though they may not be quite as productive as the new ones.

General Schwartz, it is good to see you. I am glad to hear you talk about the housing situation in Korea. I visited the bases there, several of them. I personally went in a number of the housing units at those bases, and was frankly saddened by them. They are just not places you would want to take your family. The story of one wife breaking into tears going into one of the housing units was poignant to me.

I also visited some senior enlisted men's quarters that are 50 years old. They were not built for permanent quarters. We have been there 50 years. We do not seem to see an ending date to get out.

Tell us your plan of consolidation and improving quarters. Can we not do that? I believe you would have support in Congress to accomplish it.

General SCHWARTZ. Sir, I think we can. I think we have laid out a vision for the future. I think it is a good one. It centers around this thing called the Land Partnership Plan (LPP), the BRAC-Korea that I mentioned initially in my opening statement. It is a 10-year vision. It consolidates the footprint. It saves a lot of money. It provides for readiness. It increases the quality of life and enhances training.

I think it is a good plan. We are ready to sign it on the 15th of March. It will definitely be a monumental step forward in improving that. What we ask of Congress to coincide with that effort is to sustain the military construction. Incumbent upon progress will be a sustained MILCON so that we can ensure that the barracks as well as the housing moves along with the LPP plan. So we would ask Congress to sustain MILCON or increase it as the case may be. I think if we keep those two azimuths together we will realize the progress we need and we will do right by our men and women who serve there.

Senator SESSIONS. What do you have, 30 or more base camps and housing areas along the DMZ?

General SCHWARTZ. Yes, sir. We have 41 major installations. We are going to consolidate to 20, creating these hubs of efficiency.

Senator SESSIONS. We will have more security with a lesser number and better quality of life in a lesser number.

General SCHWARTZ. Senator, that is exactly right.

Senator SESSIONS. It makes sense to me and I congratulate you for it. I want to thank you for the quality of your staff, General Zanin and Lance Smith and all, Colonel Sinclair and his wife. They were very hospitable to us as we visited there.

With regard to Korea, I came away from my visit somewhat troubled and a bit concerned. We heard talks about North Korea moderating and opening up a bit, but when South Korea built the railroad that was supposed to be extended into North Korea, North Korea refused to complete their end of it. There were going to be family exchanges, but North Korea blocked that as well.

The word I am hearing is that Kim Jong Il recognizes that his power is based on nothing more than military power and does not want more openness to the rest of the world because more people would know just how oppressive this regime is, and it is absolutely one of the most oppressive regimes in the world. People in South Korea have a huge world class economy, make automobiles, buildings are going up everywhere, and they are starving to death right across the DMZ. There is no reason for that to happen except his brutality, his evil regime that is causing people to starve to death.

I am troubled about how to deal with him. I am not sure just being nice is always going to do the trick. How do you feel about that?

General SCHWARTZ. Senator, I agree with you. I think the world is troubled about this man. Our President was clear when he was there, saying that he has trouble with the man and his leadership. He has tremendous empathy and sympathy for the North Korean people. But the leadership is oppressive. It is doing things to people, making them suffer and starve while he and those that surround him personally benefits.

We have problems with that. The South Koreans, to their credit, since the summit, have initiated so many things to try to open the dialogue and to try to open the flow of peace and prosperity on the whole peninsula. But the fact of the matter is North Korea has done nothing.

Senator SESSIONS. That is what I believe is accurate and it is a sad thing.

General Speer, I would say just in closing that I think we have to change our focus in Colombia. I have never felt that the focus solely on narcotics was a wise policy. I believe President Pastrana has now given peace every possible chance. He has now made a decision I think we need to support. He has to take back his country.

I do not know how we can ever expect Colombia to stop the importation of narcotics into the United States if they do not control their territory. Once Colombia is reunited and is a healthy country, I think we can demand some things with regard to narcotics that we cannot do now.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Sessions.

There has been a great deal of discussion about North Korea's missile and missile technology exports, and properly so. There has been an effort to try to get North Korea to stop exporting ballistic missiles and technology, and also to stop the long-range missile program. We made some progress on the testing, at least. I think

everybody would concede that it is in our interest to try to get North Korea to give up their long-range missile program and to stop exporting missiles.

My question relates to China, because China also, according to unclassified sources, supplies missile technologies to two of the missile proliferators that are of greatest concern to us. We have a great deal of concern about North Korea and Iran as proliferators. It is my understanding from unclassified sources that China supplies missiles or missile technologies or other WMD technologies to Iran and North Korea.

Is that accurate, Admiral?

Admiral BLAIR. Mr. Chairman, I would rather provide that in closed session if I could, because sometimes I do not know if I am looking at a top secret document or something in a newspaper, and I do not want to give you the wrong information. I can tell you, though, that I am worried about the missiles China builds for its own purposes, which threaten Taiwan, and I am concerned about the missiles North Korea builds for its own purposes, which threaten South Korea and Japan.

Unfortunately, those programs continue apace and they threaten our allies in Japan and Korea. They threaten our forces in Korea, and of course they threaten Taiwan and in case of conflict would cause a lot of damage there.

In that regard, the recent cancellation of the Navy Area Missile System built on the Aegis technology I think is a blow in terms of our plans to be able to deploy sea-based forces quickly to the vicinity of Japan, to the vicinity of Taiwan, if ordered, to be able to handle those missiles that threaten those two locations. I certainly hope we can put that program back together so we can provide that sort of assurance and actual protection to our forces and citizens of other countries that might be threatened in the near-term.

Chairman LEVIN. According to unclassified sources, let me just state that China has been an exporter of missile technology to Iran, North Korea, and Libya, among other countries. We would ask you then for the record, for this open record, to tell us whether or not that is accurate and if so give us the same kind of list relative to those technologies that General Schwartz is providing for the record for Senator Collins relative to North Korea.

Admiral BLAIR. Yes, sir, I will do that.

[The information referred to follows:]

China is now one of the leading exporters of equipment, materials, and technology used to develop surface-to-surface ballistic missiles. Beijing has made numerous nonproliferation pledges, and has sought to abide by a very limited interpretation of the Missile Technology Control Regime (MTCR). The Chinese pledged, in 1994 and 1997, not to export surface-to-surface missiles that violated MTCR limitations of a 300km range and/or 500kg payload. In 2000, following U.S. sanctions applied because of Chinese assistance to Pakistan's ballistic missile program, Beijing specifically declared it would "not help states develop ballistic missile programs that can be used to deliver nuclear weapons."

Despite these promises, we have detected continued Chinese exports of missile technology. This is directly related to Beijing's refusal to recognize the MTCR's key technology annex. China objects to limitations on its technology and product exports, arguing that there are no similar controls applicable to manned aircraft, which can deliver weapons of mass destruction over significant distances. Because of this, [deleted].

IranWMD Weapons Technology

[DELETED]

[DELETED]

Surface-to-Surface Missiles and Technology

[DELETED]

[DELETED]

North KoreaWMD Weapons Technology

[DELETED]

Surface-to-Surface Missile Technology

[DELETED]

LibyaWMD Weapons Technology

[DELETED]

Surface-to-Surface Missile Technology

[DELETED]

PakistanWMD Weapons Technology

[DELETED]

Surface-to-Surface Missile Technology

[DELETED]

Other CountriesSurface-to-Surface Missile Technology

[DELETED]

Chairman LEVIN. General Speer, there has been some discussion here this morning about Colombia and I want to ask a couple of related questions. The Colombian government reported last week that the amount of coca under cultivation had been reduced as a result of Plan Colombia and its eradication campaign. But according to some media accounts, the CIA estimates that coca cultivation is either stable or slightly greater than last year.

Can you give us your assessment of how effective Plan Colombia's Eradication Campaign has been over the last year?

General SPEER. Thank you, Mr. Chairman. What I am not really prepared to do is enter the debate as to whether the government of Colombia's figures, the Counternarcotics Center's figures, or the embassy's figures are the right figures on whether it is more or less than last year, because frankly, I just do not know.

But what I can tell you is we have seen great progress in terms of DOD support to Plan Colombia. Since the time that you visited Colombia—I believe it was February of last year—we have completed the training and equipping of the entire Counternarcotics

Brigade. At that time, two battalions had been trained and the third battalion completed training in May of last year.

They have been operational since December of 2000. So in essence, in terms of operational results from Plan Colombia we are just into the fourteenth month of what was designed as a 6-year plan. The Counterdrug Brigade has been very successful. Again, they are focused on the Putamayo and Cacaca regions of southern Colombia. They have destroyed in excess of 860 labs, most of those being base labs as opposed to HCl labs. The forces of the Counterdrug Brigade have provided the ground security, which has allowed the Department of State aerial eradication operations to basically cover 59,000 hectares in southern Colombia.

So with that snapshot, which was the focus of phase one of Plan Colombia, I think we have had some successes.

Chairman LEVIN. From a purely military perspective, do the limitations on our aid to counternarcotics activity make sense in a country whose government is under the kind of pressure that it is under from insurgencies and terrorist tactics? Or have you recommended that that aid be broadened? I know Senator Sessions and others have made reference to this, but I am not sure I heard a clear answer. There may have been one, but I am not sure I heard it.

General SPEER. Again, to review the bidding, Mr. Chairman, policy-wise my authorities have not changed and what I can do is counterdrug-related only.

Chairman LEVIN. Have you recommended, though, that it be broadened?

General SPEER. Sir, my assessment is that the current level of support to the Colombian military is insufficient for the Colombian security forces to reestablish a safe and secure environment. As you pointed out, for all of Plan Colombia to work, all of those non-military elements—judicial reform, social development, alternative development, all the elements of governance to be re-established—up front you have got to have a safe and secure environment and the current level of support would not do that.

Chairman LEVIN. Does that mean you have taken the next step and made a recommendation that our aid restrictions be lifted so that we can have a broader target for the assistance?

General SPEER. Sir, I have provided courses of action that would address both continued support within the current restrictions as well as what we could do beyond the current restrictions.

Chairman LEVIN. Thank you.

Senator Nelson, I am going to recognize you next if you are ready because you have not had a first round.

Senator BILL NELSON. Yes, sir. I am ready, but I am certainly willing to defer to my great chairman and my great former chairman.

Chairman LEVIN. We have all had a round.

Senator WARNER. Go right ahead.

Chairman LEVIN. Senator Nelson.

Senator BILL NELSON. Mr. Chairman, a few weeks ago we had General Peter Pace here, and before that we had the Secretary of Defense. I asked when we were going to get a four-star CINC for SOUTHCOM to replace General Pace, who came up here. He said

it would happen momentarily. So I am just wondering; if you have another couple stars around, we could just go pin them on General Speer here?

Do you have any idea?

General SPEER. Sir, the answer to that question is above my pay grade.

Senator BILL NELSON. Yes, I understand.

Senator WARNER. That is a very good answer. [Laughter.]

Senator BILL NELSON. Well, if I had them I would put them on you.

General SPEER. Thank you, sir.

Senator BILL NELSON. But now having raised the issue, it is important that we have a four-star CINC there and I am going to start being a thorn in the side of the Defense Department until we do. I think I have been patient enough now. General Pace assured me that was the case. He was a terrific CINC, by the way. He was just so well accepted in the Miami community. Everybody just loved General Pace down there. So I want to see that they follow through on this.

It is my understanding that in earlier commentary here there was reference made to moving the Army and the Navy Southern Commands out of Puerto Rico. What in your professional military judgment would be some of the priorities that we consider in the site selection if they are moved out of Puerto Rico?

General SPEER. Senator, from the Southern Command perspective I think the Army and Navy component headquarters can do their job within CONUS as well as they can within Puerto Rico. Candidly, time and distance-wise, most of their coordination within the area of responsibility, with the exception of the northern Caribbean, is done by commercial air. The first stop is Miami, which is 2 hours away. So access to a major airport hub really is all we need for those components to do their job.

But I think the services have plenty of options to deal with, considering the service infrastructure available.

Senator BILL NELSON. Would that be applicable to the Navy command as well?

General SPEER. Yes, sir, but let me make a distinction in terms of the environment in Puerto Rico. There are really three separate issues as we look at U.S. military forces in Puerto Rico. The first and the one that has occupied the news certainly in the last few years has been the question of training in Vieques. That is a question of Navy and Marine Corps training readiness and the Navy certainly has the lead in terms of determining the alternatives for the way ahead as it pertains to Vieques or post-Vieques.

The second issue in terms of forces, the one we are concerned about, is the fact that we have an Army, Navy, and Special Operations component located in Puerto Rico that belongs to Southern Command. Since our Army and Navy component headquarters are predominantly just that, headquarters that coordinate activities for their service within the region, as I stated, their duties can be executed from CONUS as well as from Puerto Rico.

In terms of our Special Operations Command, it is the only command that has a joint task force readily available to respond to a crisis throughout the region. If they are moved from Puerto Rico

there would have to be special consideration to maintaining that capability.

The third issue is the strategic value of Naval Station Roosevelt Roads in terms of the airfield and port. That platform in terms of the airfield and port are critical to the execution of our day to day operations in the AOR, both in terms of logistics or in terms of just a base for aircraft operations. As we look to the future and look to the realm of all the things that could happen, other than Guantanamo Bay, Naval Station Roosevelt Roads is the only other U.S. territorial airfield. We do have access to a C-5 capable airfield in Honduras, but again one that we own, Naval Station Roosevelt Roads is pretty significant.

Senator BILL NELSON. I want to compliment you on the way that you accommodated so quickly all of those detainees coming into Guantanamo. All of the press attention was over whether or not they were being humanely treated, which of course we knew they were. After Jeff Sessions, Jim Inhofe, and I visited the base, we were able to say that to the press.

But my concern was that we were not getting the information out of them quickly enough. At the time we were still taking them to a tent to do the—there is another word that you all used for “questioning.”

Chairman LEVIN. “Interrogation”?

Senator BILL NELSON. No, I used the word “interrogation,” but they have another. “Screening,” that was the word.

There did not seem to be a lot of information forthcoming. But the marines were just finishing the building of those screening facilities. Can you give us some idea about your observation of the progress of the screening activity since we were there?

General SPEER. Senator, as I probably mentioned to you that day, or if I did not General Lehnert probably did, Guantanamo has been a work in progress in terms of that whole operation. I would be happy to give you a little bit more detail, but I would prefer we do it in a closed session if possible, sir.

Senator BILL NELSON. OK. It also looks like you are moving ahead pretty well now on the building of the new facilities and that is certainly going to make your life a lot easier.

General Schwartz, I was one of those Senators that have been to Korea and I compliment you on the kind of relationship that you have with the Korean government. That is a real success story. Admiral Blair, it was my pleasure to visit with you en route to Japan and Korea with Senator Shelby, and you certainly had your hands full out there. I thank you very much for your service, all three of you, to our country.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Nelson.

Senator WARNER.

Senator WARNER. Thank you, Mr. Chairman.

That is a very good line of questioning you had, Senator Nelson. I recall your trip with Senator Sessions. It was very timely on behalf of the committee. I was not able to personally make it at that time or otherwise I would have joined you.

General Speer, I think we always carefully cover at our hearings with Southern Command the subject of the Panama Canal. I think an update for this record would be helpful. Would you kindly do so?

General SPEER. Sir, I know that, in terms of the canal itself, there was a lot of anxiety in terms of what would happen post-2000.

Senator WARNER. Particularly the interest expressed by China, I suppose indirectly by virtue of a certain Chinese or affiliate company, in obtaining at both ends of the canal some facilities which ostensibly are for civilian commercial trade.

General SPEER. Yes, sir. First of all, or the canal itself, canal operations are going very well. Frankly, as long as the canal administration is kept separate and distinct from the government of Panama, I think there is every prospect that they will continue to operate in a manner sufficient for the demands.

Senator WARNER. What is the annual transit now of U.S. Navy vessels and then our commercial vessels?

General SPEER. Sir, I am not sure. I will have to get back to you on that.

[The information referred to follows:]

During fiscal year 2001, 75 U.S. Navy vessels and 369 U.S.-flagged commercial ships transited the Panama Canal.

You expressed concern about the Hutchison Whampoa, which is the Chinese-owned shipping company that does run the container ports at each end of the canal, both on Colon and in Balboa. Again, there is no evidence to indicate anything other than a commercial venture. Obviously, just the presence of a Chinese company as opposed to a U.S. company causes concern. Of note, that same company has a similar interest in the Bahamas and has just bid on a similar interest in the port of Manta in Ecuador.

Senator WARNER. What about drug trafficking and the ability of the government to try and effectively handle that?

General SPEER. Sir, I would tell you that the security forces in Panama are improving. I would also tell you that they are not at a level where they can adequately control their borders, whether you are talking about the FARC operating at will, moving across from Colombia into the Darien province or any of the possibilities of transit of weapons, drugs, or any other contraband through Panama.

Senator WARNER. Admiral, I think you and General Schwartz carefully discussed here today the very necessary chopping of your naval assets from the AOR of Korea and the AOR of the Pacific to CENTCOM's AOR, where you said they performed brilliantly. Having visited the *Nimitz* with my distinguished chairman over Thanksgiving, we can testify to their professional efficiency and the really extraordinary performance of our naval forces deployed in that area.

But has it in any way brought about a concern in either you, Admiral Blair or General Schwartz, as to the chopping of those forces into the Afghan AOR?

Admiral BLAIR. In the short-term, Senator Warner, we have been able to take compensating measures which have maintained deterrence within adequate levels of risk. In the long-term, we would need to make some adjustments if we are to keep at this level of

Navy and Marine Corps commitment to the Central Command region, which, as you know better than anybody, puts tremendous strain on the base of naval forces to maintain them at that distance for that period of time.

Senator WARNER. General Schwartz.

General SCHWARTZ. Sir, I would echo what Admiral Blair said. We did some exceptionally good things in terms of mitigation that were articulated earlier. I think that needs to be done because part of this whole deterrence is the message of resolve. When we do that, clearly we indicate a strong resolve on the peninsula. I think in the long-term we just need to watch our assets that need to come to that peninsula and if we have war, we must have a careful eye that we do not overextend ourselves, as indicated by Admiral Blair.

Senator WARNER. Admiral Blair, Indonesia is a very important part of your AOR. Do you have any comments on Indonesia's stability or instability level and our commitment there? We have a very small force, but I think an important force, still dealing with some elements of that instability, am I not correct?

Admiral BLAIR. Yes, sir. The picture in Indonesia—and I have visited there during the last 6 months—continues to be mixed. We see elements of greater competence of the Indonesian Armed Forces in dealing with the insurgencies really at both ends of the country and the sectarian violence in the center. But there still are shortfalls in terms of ability to handle those tough tasks.

The Indonesian Armed Forces are stretched too thin to be able to perform basic functions like containing piracy on their northern coast toward the coast of Malacca or being able to contain illegal migration that goes through their country down to Australia.

Senator WARNER. What evidence is in the open with regard to any connections with al Qaeda or any elements in that archipelago?

Admiral BLAIR. The Indonesian officials themselves have given conflicting statements, some saying that there are al Qaeda elements and ties to Indonesia, some saying that there are not. There is certainly evidence that Indonesian groups are in touch with al Qaeda groups. The one example I can give you that has been talked about freely in the papers is an Indonesian citizen who went into Singapore to assist in plotting attacks against U.S. embassies and U.S. ships. When the Singaporeans made a bunch of arrests, this man, whose name is Fathur Rahman al-Ghozi, fled to the Philippines, where he was captured by the Philippine police. He is an Indonesian citizen.

So there are Indonesians who are connected with this group that is centered in Singapore, Malaysia, and the Philippines. In addition, the Indonesians themselves tell me that this difficulty of controlling their borders as tightly as they would like to makes them vulnerable to those who would move into Indonesia in order to continue their work. So it is a concern and frankly Indonesia is not having the success that Malaysia and Singapore are having in terms of identifying, pursuing, and arresting terrorists.

Senator WARNER. Does Indonesia have a potential of being faced with the problems of having training camps established, perhaps not on the proportion of Afghanistan, but some lower level?

Admiral BLAIR. 17,000 islands, a 3,000-mile breadth. There is certainly the potential for establishing that sort of a camp.

Senator WARNER. I recognize that. 17,000 islands in that nation's archipelago.

Admiral BLAIR. Yes, sir, and plenty of opportunity for mischief of that type.

Senator WARNER. Mr. Chairman, with Admiral Blair's forthcoming departure from active duty, it is my understanding you are going to come to Virginia; is that correct?

Admiral BLAIR. Yes, sir. As we mentioned, instead of working for you, you are going to be working for me. I am going to be a Virginia voter.

Chairman LEVIN. How quickly is this going to happen? [Laughter.]

Now, under a very technical interpretation of the early bird rule, Senator Nelson would actually be next. But I think he understands why I am going to use a more common sense approach to the early bird rule and call on Senator Sessions. We have checked that out and he agrees that common sense dictates we go to you next, Senator Sessions.

Senator SESSIONS. Thank you, Mr. Chairman. You are always fair and run a great committee hearing.

General Speer, just to follow up a little bit on perspective on where we are, you are familiar with the history of instability and the attempts at the peace process. Even the radical chic Europeans have all tried to deal with the FARC and tried to bring them to the peace table and make progress. Are you aware now, considering the decision that President Pastrana has made to take back the territory and go to war, of any diplomatic or political reasons that that is a mistake? Is it not a good decision that he has reluctantly made?

General SPEER. Certainly, Senator, as I stated in my written statement, from a military perspective it was the right thing to do. We have seen in the open press just over the weekend an interview with one of the FARC commanders—I am sorry, I do not recall the name. In essence, it was kind of an admission that the FARC had used the peace process as nothing more than an effort to buy time to restock their forces, to provide for training, rest and recuperation, and basically to prepare to take the campaign back against the people of Colombia, and in essence admitted that there never were any real negotiations in terms of negotiating in good faith on the part of the FARC.

Senator SESSIONS. That is what it has appeared to be. I appreciate that. Is it not classical military-political theory that under these circumstances the only real hope for a legitimate peace process is to get the other side on the defensive militarily? Generally, if you have peace negotiations, is that not when it occurs?

General SPEER. Yes, sir, I think that as long as the FARC enjoyed the protection of the Despeje, in other words the safe haven, an area that both the Colombian military and the Colombian police were denied access, the FARC had free rein. As long as they could string that out, they had no real reason to resolve it.

What we have also seen—and this gets back to some of the reporting coming out on the coca cultivation, there is general consen-

sus that the coca cultivation inside the safe haven drastically increased over the last year.

Senator SESSIONS. I think that is the grim truth of it. We wish it were not so. We wish we could avoid taking this bitter pill. But the people of Colombia, 40 million people, they are a democracy. They have been allies of the United States. They are good trading partners with the United States. Would you not say that this situation now is at a critical stage, that President Pastrana and the leadership in Colombia have made a new and historic commitment to taking back their territory and unifying their country as a democracy?

General SPEER. Senator, certainly President Pastrana gambled his entire administration on this peace process. That is the campaign platform that he was elected on and everything that he had done up until the 20th of February had been aimed in that direction. But even after his eleventh hour extension of the Despeje on the 20th of January after the international community was involved in leveraging or at least brokering an extension in terms of an agreement, between the 30 days that followed and his ultimate decision to suspend the Despeje there were in excess of 100 terrorist acts by the FARC. So the FARC certainly had some very strange negotiating tactics in a peace process.

The fact is the Colombian security forces, as I stated, both the police and the military, lack the resources today to reestablish a safe and secure environment. Now, those resources, as alluded to, to some degree that is a responsibility of the government of Colombia, because the other thing that we have not seen is increases in terms of funding and support from the government of Colombia's own budget to the Colombian military even as a result of this latest action.

Senator SESSIONS. It does appear now, does it not, that the polls show a growing majority—what does it show for the support of the Colombian people for fighting the terrorists?

General SPEER. Senator, I am not aware of what the latest figures are, but there is an overwhelming majority, the trend line from January to this date, that support Pastrana's action to discontinue the Despeje. If you use the other measure, which is to take a look at the upcoming presidential election, the presidential candidate Arribe is the more hard-line candidate, in terms of the actions that he proposes to take against the FARC. Certainly in January his popularity pushed him to the lead of the campaign, and even since Pastrana's decision to discontinue the Despeje Arribe he has gained in popularity based on the polls. So this indicates that there is genuine public support for this action.

Senator SESSIONS. I assume part of his platform is to expand the defense budget and strengthen the military?

General SPEER. Sir, I am not conversant on what his actual campaign platform is.

Senator SESSIONS. I remember talking to President Pastrana several years ago and giving him my opinion, which I am sure he thought not worth much, that the peace process probably would not work and that ultimately he was going to have to be an Abraham Lincoln: He was going to have to unify his country through military

force. Lincoln was not prepared to do it the first year. It took him a long time, but he succeeded.

Should we not be helping the people of Colombia? They are a democracy. They have been patient. They have tried every possible peace process. They are good allies of ours. They are fighting against communists, they are fighting against kidnapers, terrorists, people who are drug dealers and furthering the drug industry that we oppose. Should we not be on the right side of this battle?

General SPEER. Sir, Colombia is important to the United States for all the reasons you just said. It is certainly the second oldest democracy in the hemisphere, second only to the United States. The criticality of Colombia is that it is the linchpin in the Andean Region. It is critical for the United States that Colombia survive as a democracy and re-establish its security, because without that it will only grow throughout the region. So Venezuela, Panama, and Ecuador are certainly at risk to some degree based on what happens in Colombia.

Senator SESSIONS. Well said. I think that is an important point to make and it really troubles me and causes me some concern. I remember about 2 or 3 years ago we had President Clinton's ambassador here, Ambassador Pickering, and he stated flatly our only emphasis in Colombia is anti-drugs. I said, "Sir, are we on the side of the democratic government of Colombia and against the communist insurgents or not?" He repeated: "Our only mission in Colombia is counternarcotics."

Has anything changed?

General SPEER. I am not sure of the exact words that Secretary Powell used, but I was with Under Secretary Grossman in Colombia the first of last month in the press conference that he gave following our meetings with President Pastrana, the foreign minister, the minister of defense, and the military leadership. Our support to Colombia at that time—now, this was pre-Pastrana's decision—was characterized as still focused on counterdrug, but the wording was not exclusive, because of the proposal for the pipeline security.

Senator SESSIONS. Well, I think it is time to switch. I think we need to support the government, help it re-establish its control over its territory, and then we can deal better with the narcotics problem under those circumstances.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Sessions.

Senator Nelson.

Senator BILL NELSON. General Speer, would you comment on your observations on Venezuela?

General SPEER. Unfortunately, you missed the other question on that topic. Let us see if I can recapture most of it. We are very concerned about President Chavez. Your guess as to what direction Chavez is taking Venezuela is as good as mine or anybody else's. What we do know is he is experiencing a severe deterioration in terms of popularity. His promises have not yielded deliveries.

I mentioned that the FARC operates at will across the border into Venezuela. There are arms shipments originating in Venezuela that get to the FARC and the ELN. We have been unable to firmly establish a link to the Chavez government, but it certainly causes us suspicions.

The company that Chavez keeps around the world, although under the guise of OPEC, certainly causes additional concerns as well.

Senator BILL NELSON. Mr. Chairman, I do not know if it is symbolic or symptomatic or what-not, but clearly the interest of the United States was served so well when all the countries of Latin America basically were democracies. Now we see a disturbing trend in a number of those countries that are moving away from democracy. So at some point it might be well for some of us to get together with maybe the Foreign Relations Committee and talk about the future of Latin America, and what more we should be doing to aid the drug fighting down there in order to shore up these additional democracies.

When you and I went to Colombia, we had a sobering sense of reality that if we were able to stamp out the coca growing in the south it could pop up right across the border in either one of those other countries, Ecuador or Brazil. So I would like to get my hands around that a little more as it involves the future interest of the United States.

Here we have, right across from Colombia, a problem in Venezuela. So I do not know the answers, but I am sure going to be asking some questions.

Chairman LEVIN. That is an important point, Senator Nelson, and I think we ought to talk to Senator Biden and see if there is some joint work that our committees can do. As you point out, the coca problem is not just because other places can grow it, but other places in Colombia apparently have grown it. You indicated the safe haven area has increased its production, which may have made up for the destruction in areas where we have sprayed. So without getting into the numbers or even knowing the exact numbers, I think we face that possibility, too, which reinforces the point about the importance of the government being strong enough to go after not just the counterinsurgencies, but also after the paramilitaries as well.

At any rate, I do not want to interrupt you, but I agree with your assessment.

Senator BILL NELSON. I appreciate it.

Admiral Blair, if we end up going after the terrorists in places like Indonesia and the Philippines, how do you handle the command structure there, since it would not be directly in General Franks' area of command?

Admiral BLAIR. Before I answer that, Senator, could I pile a little bit onto that previous discussion you had?

Senator BILL NELSON. Please, please.

Admiral BLAIR. At the working level, we find that as we attack these threats like terrorism and counternarcotics, which are threatening entire countries, and as we are building the ability for governments to control their borders, we trip across one of the traditional approaches that we have built up for very good and sufficient reasons in terms of our funding flows and how money is used. We often find as we try to put together a coherent program towards a country, to work with a country like the Philippines in my case or like Colombia in General Speer's case, that we have to almost deform our policies to get the job done that needs to be done because

of the type of money, the source of money, and the restrictions that it must be spent on, often based on other countries.

Now, you who give us the money need to know how we are spending it and what purpose it is for and that is absolutely right and proper and it keeps us very well on the right track. But I think we can have a richer dialogue in terms of getting at big problems involving all aspects of a country. Often a country that cannot control its terrorism cannot control its narcotics, cannot control the running of guns, does not control its financial affairs very well.

We have a term in our AOR called a "seam of lawlessness," which just brews up bad stuff in all sorts of ways, of which terrorism is the most damaging. If that discussion between the Armed Services Committee and the Foreign Affairs Committee comes up with approaches that we could make into really coherent, integrated approaches to assist countries to do work which is in our interest, and make the money available in a way that would match the country that we are dealing with, that would be a great help to us at the working end.

As I say, I do not argue that you ought to write us a check and leave us alone until we fix it. I think we ought to be fully accountable for what we are doing. But right now we kind of push against some of those funding restrictions as we try to do what we think is what both you in Congress and our bosses in the Executive Branch want us to do.

But as for the question on the command structure for the forces in our area of responsibility, Senator Nelson, in the Philippines we have established a joint task force. That is a very familiar form of command and control to us. The commander of that joint task force, General Wurster, works directly for me and he takes his direction from me. He coordinates with the ambassador as far as the country team goes. But we keep a very clean, two-level chain of command in that area.

It is more complicated in countries like Malaysia, Singapore, and Thailand, where there is not such a direct military element. In that case we work very much with the embassies and I, in fact, send officers into the embassies who are called counterterrorism liaison teams. They function as part of the ambassador's staff, but they have direct linkages with my staff that works on terrorism, so you get good linkage up at the level where you are making your plans and you are carrying it out, so that what we are doing with the other parts of our programs in these countries is well linked in with the military assistance that we provide.

So it is either the joint task force or else it is the counterterrorism liaison force working with the embassy. I think we have to invent, just as we do with the more flexible funding mechanisms. I think we on our side need to develop more integrated structures for these problems that cut across so many lines. Frankly, right now there is a little bit of coordination and mother may I and would it not be nice, rather than: This is the plan, here is the military piece, here is the diplomatic piece, here is the economic piece; go out and execute and make it happen.

So we are working our way towards new forms, but we are using the old categories, the both the funding and authorities, in order to do the job right now.

Senator BILL NELSON. If we were in a hot war in that part of the world, as we are now in Afghanistan, would the lines of authority be through the CINC of the Pacific Command?

Admiral BLAIR. Yes, sir, from the Secretary of Defense to me. If it were a war in Korea they would go straight from the Secretary of Defense to General Schwartz, and I support him. It is pretty clean in war. But as we have found in these sorts of wars that we get in these days, it is really not so clean. In Afghanistan, for example, as General Franks I am sure can tell you himself, the business of coordinating with the other parts of government that are concerned—the Department of State, the intelligence agencies, the law enforcement agencies like the FBI, international organizations—there still is a great deal of coordination that has to go on in order to get the common job done.

So although the military side is clean and everybody knows who has responsibility to shoot weapons and all, for the total integrated effort in a country, which involves much more than just military actions, we sort of invent that as we go.

Senator BILL NELSON. Well, that is in large part why I have such admiration for all of you. I am the most familiar with Southern Command and the CINC in Southern Command has to be a diplomat par excellence. So you all wear many hats and you wear them very well.

Thank you, Mr. Chairman.

Chairman LEVIN. Senator Nelson, thank you.

Just a couple questions, finally, from me. First, General Speer, the Colombian military's record with respect to human rights and collaboration with the paramilitary groups has been a major factor in Congress' attitude about assistance to the Colombian military. In your formal statement you said the following: "We have witnessed a steady improvement in the professionalism and respect for human rights by the Colombian military, accompanied by increased effectiveness in counterdrug operations."

You also stated that: "In a short period of time, the Colombian military has emerged as one of the most respected and trusted organizations in Colombian society. Less than 3 percent of complaints of human rights abuses last year were attributed to the Colombian security services, down from a high of 60 percent just a few years ago. The Colombian military," you said, "have also aggressively stepped up operations against the AUC," which are the paramilitaries. "This progress reflects a strong and principled leadership and the genuine desire of the Colombian military to honor and promote democratic principles in their country."

Finally: "There have been no allegations of human rights abuses against the Counterdrug Brigade."

I think if Congress is going to look at broadening the mandate in terms of our aid and its recipients in terms of our aid and purpose, it is essential that Congress, my colleagues, believe that testimony. So anything you can do to give examples to flesh out that testimony, to give support to your beliefs, I think will help in terms of whether or not we are going to continue to restrict aid just to the counterdrug effort or whether we are going to broaden it to try to support that democratic government down there, which is elect-

ed democratically, which has plenty of problems on its hands, which needs, and I believe, deserves our support.

So they are connected, is my point here, and the linkages between, for instance, the Colombian military and the paramilitary have been very destructive in terms of confidence of Congress in the military down in Colombia. On our visit I think we saw surely an effort on the part of the leadership at least of the Colombian military to break those linkages which exist at the grassroots level.

But at any rate, your testimony is very much on point and on target in that regard and it is essential again that Congress reach that conclusion, I think, if we are going to broaden the purpose of the aid.

That is not a question. It is just a comment to you. I welcome any reaction if you like.

General SPEER. Sir, just to amplify, I am convinced that the military leadership in Colombia is firmly committed to setting things straight in terms of taking action on any reports of wrongdoing. They have suspended officers and noncommissioned officers for acts of wrongdoing. They certainly have stepped up their operations against the illegal paramilitaries. In fact, General Tapias has told me that he views the paramilitaries as the long-term threat they have to deal with, more so than the FARC.

So their real challenge is that the government of Colombia and the Colombian military needs to tell the story about what they are doing and take credit for the accomplishments that they have attained. They have been unable to do that up to this point.

Chairman LEVIN. Thank you.

Finally, Admiral Blair, in your remarks in January in San Diego titled "Force Transformation in the Pacific" you said the following: "Over the past year I have become even more convinced that our current approach to transforming our Armed Forces must be changed, particularly in the way we acquire systems. If we do not change it, it will break us. I say that even though we are winning wars with the current system. The joint task forces of the Central Command have done very well in Afghanistan.

"However," you said, "we are wasting our money, missing opportunities, and, worst of all, not using our greatest resource in the job of transformation—the sailors in the fleet and the soldiers in the field."

Basically, you stated that our acquisition system is by service and our operations are joint. I am wondering if you would just tell us briefly about your views in that area, because we are in the middle of an effort to transform and I think your views are very important.

Admiral BLAIR. Yes, sir. I find that when we put a joint task force together the tactical service units are not able to plug in cleanly, pass a picture of the battlefield back and forth across component lines up to the joint task force commander headquarters in order to allow the sort of flexibility that will bring the enormous firepower the United States can bring to bear in any part of the world. We demonstrated that in Afghanistan, along with being able to move our maneuver forces about such a battlefield, in the most effective way.

In my experience, a large part of the reason for that is the Service origin of that equipment. I think the best way to fix it is through operations like Afghanistan, when smart sergeants and airmen get together and figure out how to put bombs on enemy forces, but also, when we do not have an operation going, through exercises to force actual events in the field to demonstrate whether we can or cannot interoperate in the joint task force and then to fix those problems.

To me that is a much faster cycle that addresses real problems than to send written requirements back to a systems command, have that systems command work out a system that on paper and in lab testing works, and then send it forward to the forces in the field for them to operate with. I think that turning cycle for information technology systems, which is the key to revolution in the near-term, has to be faster based on field exercises as well as field operations, and has to have a much higher component of joint requirement to the field rather than Services developing their capabilities in the service channels and then providing them to joint forces for use.

It does not work for tanks and planes and big pieces of gear that the Services have all of the expertise to develop, but it has to be different for the information systems on which joint warfighting depends. It just has to have a higher joint relevance and a faster speed to be effective. That is what I think we need to have a real revolution, Mr. Chairman.

Chairman LEVIN. Thank you all again for your service. Thanks for your testimony.

We will stand adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

THE PHILIPPINES

1. Senator LEVIN. Admiral Blair, assuming the Abu Sayyaf Group is eliminated, and given the fact that we want to keep the Philippines free of terrorists, will we expand the operation to fight the other terrorist groups operating in the Philippines?

Admiral BLAIR. To date, the Government of the Philippines (GOP) has not asked the United States Government (USG) to expand our operational efforts against other terrorist organizations. A GOP request that the USG expand efforts to fight other terrorist organizations would necessitate a new USG policy decision. At the conclusion of current operations, the current USG assistance to the GOP/Armed Forces of the Philippines (AFP) will provide their Armed Forces with the capability to respond effectively to other internal threats. Moreover, the Mutual Defense Board planning will provide additional assistance to the AFP to respond to further threats over the long-term.

2. Senator LEVIN. Admiral Blair, who will be authorized to issue commands to U.S. troops—will Philippine commanders have operational or tactical command over U.S. forces?

Admiral BLAIR. The Terms of Reference for Republic of the Philippines—United States (RP-US) Exercise Balikatan 02-1, paragraph 1, number 4, Policy Level, explicitly states: "In no instance will U.S. Forces operate independently during field training exercises (FTX). AFP (Armed Forces of the Philippines) and U.S. Unit Commanders will retain command over their respective forces under the overall authority of the Exercise Co-Directors. RP and U.S. participants shall comply with operational instructions of the AFP during the FTX."

COMBATING TERRORISM IN SOUTHEAST ASIA

3. Senator LEVIN. Admiral Blair, in your testimony, you mentioned the local Southeast Asian groups that have ties to al Qaeda. Do you intend to conduct any new operations in the future to reduce the threat from these groups or to prevent terrorists from using bases in the area?

Admiral BLAIR. I am working with other U.S. agencies and our friends across the region in an effort to ensure major counterterrorism (CT) operations are not required in our theater. I certainly do not anticipate any Afghanistans in the Asia-Pacific region. My theater CT campaign incorporates a wide range of theater security cooperation activities designed to help each nation in my area of responsibility develop the individual and collective will and skill to defeat current CT threats and deter future threats. These activities range from our current assistance program in the southern Philippines to combined exercises that incorporate CT themes to humanitarian assistance activities that dissuade the development of terrorist support bases and breeding grounds.

Military operations alone will not suffice to defeat terrorism. In U.S. Pacific Command (USPACOM), we are working hard to make the overall global CT effort as effective as possible by coordinating our military activities with the myriad of international interagency diplomatic, economic and information CT initiatives. As part of my CT campaign, I have stood up a Joint Interagency Coordination Group for Counterterrorism (JIACG/CT) in my headquarters to serve as the focal point to integrate the wide range of intelligence, planning and operations into a fused, synergized regional CT campaign.

One key function of this JIACG/CT organization is to operationalize incoming intelligence, working with my intelligence directorate and interagency intelligence elements, to "mine nuggets" of actionable intelligence from the huge volume of available information. We have found that non-military tools usually provide the most effective method to defeat or preempt the threats we have identified, and therefore it is critical to synchronize our efforts beyond Department of Defense assets. The successful disruption of planned Jemaah Islamiya attacks in Singapore is one recent example of highly productive international interagency cooperation.

I am working to ensure such cooperation is the norm in the Asia-Pacific region. Some countries have a way to go in developing the skill and/or will that I think they need to capably diminish and marginalize terrorism and its supporters within their borders. USPACOM is ready to act unilaterally, if required, to defeat any potential threat to the United States. My preference, however, is to help the regional nations to individually, cooperatively and successfully address the common threat.

NORTH KOREA

4. Senator LEVIN. General Schwartz, what is your assessment of the future of talks between North Korea and the U.S. and between North and South Korea?

General SCHWARTZ. I remain hopeful that North Korea will act on President Bush's invitation to negotiate in good faith with North Korea "any time any place." Thus far North Korea has been either unwilling or unable to significantly improve relations with the Republic of Korea (ROK) or U.S., despite numerous diplomatic, economic, and political overtures from the ROK government and President Kim Dae-jung and I do not see any indications this will change in the near-term. The North Korean regime has demonstrated that it is neither a reliable nor predictable partner. The North Korean threat to peace and stability in Northeast Asia will not fundamentally diminish until the North engages in tangible military confidence building measures that are verifiable and transparent. I do believe that we must follow our current policy of "anytime, anyplace" and continue to advocate that the North Koreans meet with the ROKs. I still believe, as I stated at the hearing, that we are doing everything we can to get the dialogue moving.

5. Senator LEVIN. General Schwartz, have you detected any change in military posture in North Korea since President Bush's visit? What conclusions do you draw from your observations?

General SCHWARTZ. We have detected no significant change in North Korea's military posture since President Bush's visit. The North Korean military remains a large, forward deployed force capable of inflicting great damage to South Korea and directly attacking Combined Forces Command's (CFC) United States and Republic of Korea Forces, with little notice.

They still pose a dangerous threat to the stability and security on the Korean peninsula, the region, and increasingly, the world. They continue to modernize systems that can marginalize specific U.S. military strengths. Their Winter Training

Cycle program was a little above average as was the output of their propaganda and rhetoric.

I believe it is too soon following President Bush's visits to draw meaningful conclusions. Change in North Korea rarely happens quickly. I believe that we must observe North Korean actions over a long period to determine if any meaningful change in their military posture will actually occur.

6. Senator LEVIN. General Schwartz, has North Korea kept its plutonium reprocessing program frozen, as required by the Agreed Framework, including the canning of spent reactor fuel that I observed from the Yongbyon reactor?

General SCHWARTZ. Although, the DPRK has, for the most part, lived up to the letter of the Agreed Framework and the agreement has achieved the near-term objective of shutting down the Yongbyon facilities, implementation of the Agreed Framework is progressing—although very slowly. To date, these graphite-moderated reactors remain frozen, and all known intact rods are canned, and under International Atomic Energy Agency (IAEA) seal.

The history/records of the DPRK's nuclear program need to be inspected so the IAEA can really analyze the extent of reprocessing of nuclear materials. I depend on the U.S. Intelligence Agency Report and IAEA reports as the basis for my assessment. The theater systems under my control do not enable me to independently verify North Korean compliance with the Agreed Framework.

7. Senator LEVIN. General Schwartz, in my opening comments, I asked whether the Framework Agreement is viable. What can we do to ensure that we stay on track? Do you believe North Korea will allow the inspections required in order for the U.S. to deliver the light water reactor components in 2003?

General SCHWARTZ. I believe the Agreed Framework is viable as long as the North Koreans fulfill the IAEA inspection requirements and we have a complete history of their nuclear program. President Bush's waiver vice certification this year placing North Korea on notice is one way to keep North Korea on track. I remain hopeful North Korea will allow the required IAEA inspections. While there has been some recent dialogue and visits with the IAEA, we have not seen any indications that North Korea is ready to accept the prerequisite level of transparency. When North Korea accepts and starts the IAEA inspection, it will take approximately 3 years for the inspection to be completed. Therefore, I would not anticipate key component delivery of the LWR prior to 2005.

NAVY AREA DEFENSE PROGRAM CANCELLATION

8. Senator LEVIN. Admiral Blair, last December the Defense Department canceled the Navy Area Defense Ballistic Missile Defense program because it had exceeded its planned costs by nearly 60 percent.

As the regional commander with operational responsibility for a large portion of the world's oceans and regions where ballistic missiles pose an existing threat to our forces, are you concerned by the cancellation of the Navy Area program, and the fact that it means we will no longer have that theater ballistic missile defense capability in the next few years, as we planned?

Admiral BLAIR. Yes, I am particularly concerned with the cancellation of the Navy Area Defense program. With the increase in ballistic missile defense development and proliferation of these technologies by potential adversaries, having a naval ballistic missile defense system is critical in the U.S. Pacific Command AOR. Since the Navy is forward stationed and can self-deploy, the sea-based missile defense (MD) platforms can be on station in a short amount of time. This allows strategic airlift assets to be utilized in other areas. The sea-based MD platforms can also remain in international waters, thereby posing fewer political ramifications than ground-based systems. The Navy Area Defense program was a critical program. The benefits of sea-based defense are enormous and something we need not only in my AOR but also around the globe.

NAVY THEATER WIDE DEFENSE AND UNITED STATES-JAPAN COOPERATION

9. Senator LEVIN. Admiral Blair, the United States and Japan have been discussing cooperation on what was previously known as the Navy Theater Wide Missile Defense System. The newly reorganized Ballistic Missile Defense program changes the previous theater missile defense focus of the Navy Theater Wide program to a system called Sea-based Midcourse that is intended to be able to defend against medium-range theater targets and long-range targets for national missile defense.

What impact do you think this change will have on the U.S.-Japan research and development program for sea-based theater missile defense?

Admiral BLAIR. Navy Theater Wide (NTW) Program has always been designed to provide an intercept capability against medium and long-range theater ballistic missiles. We have been working all along with the Japanese to cooperatively design a weapon suitable to meet these needs. Japan's level of financial commitment to the MD research remains strong. The recent successful test of the Sea-based Midcourse Defense Segment on 25 Jan 02 eased Japan's concerns that cooperative work is producing positive results. U.S.-Japan research and development for Sea-based MD remains a priority for Japan's security and should continue to receive support.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. AKAKA

LAND PARTNERSHIP PLAN—AIRCRAFT TRAINING

10. Senator AKAKA. General Schwartz, are you satisfied that the Land Partnership Plan (LPP) that the governments of the United States and the Republic of Korea expect to sign on March 15, 2002 will guarantee us the access we need to training ranges for our ground forces?

General SCHWARTZ. Yes. The LPP will provide substantial benefits for training over our current capabilities. The benefits of LPP are enormous. With the release of encroached training areas, subsequent consolidation of military facilities and areas on enduring land grants, our training base will provide quality-training support well into the future.

The LPP guarantees USFK ground forces access to critical Republic of Korea (ROK) military training facilities that, coupled with our enduring facilities, gives us an overall increase in training capacity and resolves long standing training issues in the southern region of the peninsula. Additionally, with the infusion of simulator and simulation technologies, the cumulative effect of LPP on training will be a significant and measurable increase in support for both operational and training missions designed to achieve increased force readiness and strategic combined defense objectives.

11. Senator AKAKA. General Schwartz, does this agreement provide similar guarantees for access to air-to-ground ranges for our tactical air forces? If not, what additional steps do we and the Republic of Korea need to take to ensure the availability of adequate training ranges for tactical aircraft?

General SCHWARTZ. The LPP did not include any of the U.S. Air Force air-to-air or air-to-ground training areas. We currently have adequate access to our ranges and will continue to work closely with the Republic of Korea to identify and remove encroachments that would have a detrimental impact on Air Force training.

The strength of the LPP is the close coordination that evolved with Koreans and Americans working together to solve problems, promote combined efficiencies in training, and working together to maximize limited use ground training ranges. This methodology is a recipe for success and as soon as the LPP is approved, we will begin work in the ROK-U.S. Joint Committee (responsibility for LPP success) of applying that model to airspace issues and training range issues.

BRINGING MORE FAMILIES TO KOREA

12. Senator AKAKA. General Schwartz, your testimony states that your goal is to increase the number of personnel in Korea on accompanied tours from 10 percent today to 25 percent by 2010 and that this initiative will require additional resources. I understand you wish to further increase that to 50 percent accompanied tours by 2020. Has your command estimated the additional requirements this would create not just for family housing, but also for increased medical and child care facilities and services and for force protection, and what the additional cost of those requirements would be? When would you seek to start funding this plan?

General SCHWARTZ. When we started to look at improving the quality of housing in Korea and increasing the accompanied rate, we brought all the stakeholders together to talk about the impacts one would have on the other. This group included senior people from within the community, from the Department of Defense Dependent Schools, the Army and Air Exchange Service, the Defense Commissary Agency, the Medical Command and the base agencies responsible for family support services.

As the CINC, I have the authority to establish command authorizations in Korea and I have currently established the ceiling at 3,000. The current acceptance rate for an accompanied assignment to Korea is 65 percent or about the number I can

really provide houses for. My real limitation is housing. I only have 1,979 units of government owned and leased housing. This is less than 10 percent of the married personnel as compared to more than 70 percent in Europe and Japan.

As we build new housing, more service members will be allowed accompanied tours to Korea. We anticipate that by 2006, we will have housing for the 3,000 authorizations already established. During the initial stages of our program, my initial goal is to concentrate on improving existing quarters, and bring more people currently living off post, on post. This will dramatically improve quality of life, force protection, and assist the command should we have to perform a Non-Combatant Evacuation Operation.

Most of the new housing will be funded from the Host Nation Construction Program. We will use approximately \$780 million Host Nation dollars over the next 10 years to build 1,066 units. As we move above the 3,000 authorizations and begin working towards our 25 percent goal, we have anticipated that we will need; 3 new Combined Activity Centers, 1 new elementary and middle school, expansion of 2 existing commissaries, 2 new child care centers, the expansion of 2 medical centers, 1 new exchange and the expansion of a second, 2 new youth centers and 2 new libraries. Some of these projects have been programmed in the current Military Construction Future Years Defense Plan process and others will be programmed as we move forward, but we will not reach the decision point to increase to the 25 percent accompanied rate until 2006. The estimated cost of these facilities is approximately \$140 million.

We plan to use existing "build-to-lease" authority, to leverage the Korean private sector and thereby obtain the remaining capital investment required to develop an additional 2,500 units in Korea. Our first effort to apply "build-to-lease" will be at Camp Humphreys. This project will accommodate 1,500 families and provide associated community support activities such as a Post Exchange, commissary, school, child development center, community activity center, gymnasium, and medical/dental clinic. We expect the first units to be ready in 2005. We are currently working with the Department of the Army to get the initial funding, \$12 million we need to get this initiative started.

Increasing the accompanied rate should not increase the force protection costs identified in the Long Range Housing Plan. All physical security requirements are embedded in the construction design of all new facilities so these costs are already accounted for.

BRINGING MORE FAMILIES TO KOREA

13. Senator AKAKA. General Schwartz, has the Republic of Korea agreed to finance any of this increase under the LPP, or is this a separate United States initiative? To what extent will the cost of these additional facilities be funded within current levels or as part of the Land Partnership Plan, and to what extent will additional U.S. funding be required?

General SCHWARTZ. The LPP and Long-Range Housing Plans are not directly tied to one another. None of our initiative to improve current housing conditions or to increase the number of is included in, nor funded from the Land Partnership Plan. We will; however, spend approximately \$780 million from the Host Nation Construction Program over the next 10 years to construct 1,066 units. Military Construction (MILCON), which is already in the programming channels, will construct approximately 440 units valued at \$220 million, and our build-to-lease initiative provide 2,000 units at approximately \$72 million per year.

UNFUNDED FACILITIES MAINTENANCE

14. Senator AKAKA. Admiral Blair, your testimony states that "unfunded backlog projects affect OPLAN execution in Korea, Guam, and Wake Island." Would you describe, in classified form if necessary, the current deficiencies, their impact on the execution of your war plans, and the estimated costs and current schedule for repairing these deficiencies?

Admiral BLAIR. Korea: *Current Deficiencies and impact on operations in support of war plans:*

[Deleted].

[Deleted].

It is critical for U.S. Forces Korea (USFK) to be able to rely on utility systems, and maintenance facilities and operational command and control facilities. Korea continues to be under funded by 45-50 percent each year and this exacerbates an

already serious problem and impacts readiness, especially when merged with a high operating tempo and harsh conditions, such as they experience daily in Korea.

Estimated costs and current schedule for repairing these deficiencies:

[Deleted].

Korea requires stable Sustainment, Restoration, and Modernization (SRM) funding of approximately \$260 million per year to prevent further decline. Current SRM funding levels have allowed USFK to provide day-to-day critical maintenance of their essential facilities, the Sustainment piece, but they are not able to get to the Restoration and Modernization piece with current funding levels. There is no easy fix for Korea. Under funding and the lack of Military Construction has taken its toll. USFK has articulated a vision in a comprehensive Fix Korea Business Plan, which incorporates training, infrastructure, and quality of life.

Guam: Current Deficiencies and impact on operations in support of war plans:

[Deleted].

The significant infrastructure deficiencies that affect operations include deteriorated piers, ordnance terminals and magazines, bulk fueling terminals, roads, and airfields. There are also unsafe helicopter maintenance hangars, unreliable utilities, and delayed harbor dredging.

Estimated costs and current schedule for repairing these deficiencies:

Commander Naval Forces Marianas has \$75 million in SRM backlog. The approximate annual SRM funding is between \$18–25 million. However, this SRM funding only sustains current requirements and does not address the \$75 million backlog.

Andersen Air Force Base has \$49.6 million in critical and degraded SRM requirements, which impact the base mission. These requirements repair projects on the airfield, munitions storage facilities, base water system, etc. The approximate annual SRM funding is \$6.4 million, which does address some of the \$49.6 million backlog. However, this annual funding is not enough to eliminate the backlog.

Wake Island: Current Deficiencies and impact on operations in support of war plans:

[Deleted].

Wake Island infrastructure is either in disrepair or nearing failure. Since 1993, neither SRM, nor Military Construction (MILCON) monies have been spent on Wake Island. Wake Island has deteriorated to the point where immediate repairs are required. The runway will be unusable for fighters by fiscal year 2003 and heavy lift by fiscal year 2005. Chief of Staff of the Air Force (CSAF) directed Wake Island be placed in a Very Limited Operations (VLO) status starting on 1 Oct 02. The runway is CLOSED for day-to-day operations except—or wartime requirements, emergency diverts and; contractor/tenant support.

Estimated costs and current schedule for repairing these deficiencies: Between fiscal years 2003–2007, operation and maintenance projects include facilities sustainment, environmental compliance, long haul communications, satellite communications, and air traffic control and landing systems. The funding profile is approximately \$12 million per year. MILCON funding during fiscal years 2003–2006 is approximately \$25 million per year for repair of sea access facilities airfield pavements, and island-wide infrastructure.

AIRCRAFT READINESS

15. Senator AKAKA. Admiral Blair, your testimony states that aircraft mission capable rates “continue to be major readiness concerns in USPACOM” despite increased funding for spare parts. Would you describe why you think problems remain despite increased funding levels, and the steps you believe are necessary to correct these problems?

Admiral BLAIR. While recent programming decisions address the shortage of spare parts, the age of aircraft systems, along with the pace of operations and deployments, continue to impact readiness.

Problems remain, despite increased funding levels, because many of our key aircraft systems are aging, and suffer from persistently high operating tempo (OPTEMPO) usage rates, often above programmed goals. Aging systems experience high failure rates and require more frequent repairs. These systems also experience incompatibility and interoperability problems, increased spare parts usage, time consuming workarounds, and require additional costs to operate.

Exacerbating the problem is the fact that for some systems, manufacturers have gone out of business or ceased production of spares. The loss of critical parts manufacturers limits spares inventories and dramatically increases cannibalization rates. Cannibalization further reduces readiness rates.

Merely procuring additional spare parts at the current rate will not solve the aging problem. Reversing this trend will take additional funding and a concerted recapitalization and modernization effort. Recapitalization and modernization of existing aircraft will reduce the number of legacy systems that require operational upgrades and service life extension program (SLEP) iterations. Further, resources must be provided to achieve full modernization since limited or partially modernized legacy systems are not compatible with modernized systems and require different training, material, and services.

QUESTIONS SUBMITTED BY SENATOR STROM THURMOND

THE PHILIPPINES

16. Senator THURMOND. Admiral Blair, the United States has had a long and historic relationship with the Republic of the Philippines. For that reason, it is important that we provide the necessary assistance to deal with the internal insurgency groups, like the Abu Sayyaf Group. Why did it take this long to provide the training and assistance for the Republic of the Philippines?

Admiral BLAIR. Not until the hostages were taken from Sipadan Island in 2000, did the Government of the Philippines (GOP) express any interest in U.S. support to address their internal security challenges. [Deleted] and Foreign Military Financing (FMF).

Indeed, the United States has had a long and historic relationship with the Republic of the Philippines, but after the "bases era" and until the Visiting Forces Agreement (VFA) was signed in 1998, the U.S. Pacific Command's (USPACOMs) security cooperation program was quite limited. After the signing of the VFA, we began to re-engage under the terms of the Mutual Defense Treaty (MDT) and developed programs designed primarily to assist the Philippines in strengthening their external defense requirements, as they interpreted the MDT. However, as recently as last year and perhaps as a result of their present situation, the GOP re-examined their position with regards to our military-to-military program and the emphasis on external defense. We are adjusting our normal bilateral program towards one that will assist the Armed Forces of the Philippines (AFP) in mission areas known in U.S. military parlance as Most Likely Operations (MLOs). Counter-terrorism is just such an operation. With this new direction, [Deleted] and recommended an increased FMF package. When the Burnams' were taken from Dos Palmas Island in May 2001, we began using these arrangements to assist the AFP/GOP in dealing with internal terrorist threats. But, it was not until the November meeting between Presidents Arroyo and Bush that agreements were reached that brought us to the present effort.

ENROUTE STRUCTURE

17. Senator THURMOND. Admiral Blair, one of the most critical shortfalls facing our combatant commands is in our strategic lift. At virtually every hearing, commanders at all levels have voiced the same concerns about our ability to move large numbers of troops and equipment over long distances. Your statement reflects similar concerns. Although additional lift is critical, so are the enroute structures of airfields and refueling points. What is your assessment of the enroute facilities in the Pacific region? Where would you place additional emphasis?

Admiral BLAIR. Our enroute infrastructure is reliant upon 40–50 year old facilities that will eventually fail or will severely limit our airlift throughput capability unless required improvements are made. Below are specific examples of U.S. Pacific Command (USPACOM) infrastructure requiring improvement to support our warfighting requirements.

Theater Munitions Infrastructure: Commander in Chief, U.S. Pacific Command (USCINCPAC) requires an additional \$147 million be applied to upgrading theater munitions infrastructure. In many instances, facilities are 1950's era and do not support next generation weapons systems nor the reception of containerized munitions.

[Deleted]. The \$9.7 million for military construction (MILCON) in fiscal year 2002 repairs only the wharf and seawall. It is the minimum essential project to bring in construction equipment and supplies for Phase 2 and 3 projects for the runway and taxiway repair, scheduled for fiscal year 2003 and fiscal year 2004. [Deleted]. The future years of fiscal year 2004, fiscal year 2005, and fiscal year 2006 reflect a current Pacific Air Forces (PACAF) funding profile of \$24 million, \$25 million, and \$10 million, respectively.

USCINCPAC requires the capability to project power and provide warfighting support from a network of bases with first class facilities. This requires sufficient resources, particularly in Sustainment, Restoration, and Modernization (SRM) accounts, to preserve capital investment of mission support facilities, as well as in-theater MILCON funding for new construction/replacement of old facilities and systems vital to the warfighting effort.

The theater needs a Joint Mobility Center (JMC) at Hickam Air Force Base, HI and Elmendorf Air Force Base, AK to support rapid deployment of forces and material. Development of JMCs by the Air Force at these bases will significantly enhance rapid deployment capability of Army forces from Hawaii and Alaska in current and future configurations. Army initiatives to study the feasibility of improvement of airfields in Hawaii to meet future Army and Air Force joint training needs, as well as Army upgrades of mobility training facilities in Hawaii, will further enhance rapid deployment infrastructure.

INTEROPERABILITY

18. Senator THURMOND. Admiral Blair, during the committee's recent hearings on the future of NATO, General Ralston pointed out that one of his concerns was that our European allies were not keeping pace with the United States as for modernization of their Armed Forces. How would you rate the warfighting capabilities of our key allies in the Pacific in terms of interoperability with our forces?

Admiral BLAIR. The Command, Control, Communications, and Computers (C⁴) interoperable warfighting capability of Pacific allies is less than with NATO countries. [Deleted]. Australia is generally interoperable by way of a small air, land, and sea capability, but they are in great need of modernization, including C⁴, airlift, air-to-air, and command and control. Australia is moving forward with the purchase of four Airborne Early Warning and Control (AEW&C) "mini-AWACS" platforms to complement command and control of combined operations. Australia and Japan are pursuing Link-16 for future tactical data link operations, as have our European allies. [Deleted].

The political landscape and vast oceans of the Pacific magnify the challenges of developing multilateral "NATO like" alliances. The U.S. modernization of C⁴ capability outpaces that of any allied nation in the Pacific and will continue to do so for the foreseeable future.

MILITARY FAMILIES

19. Senator THURMOND. General Schwartz, Seoul, which has the largest concentration of U.S. military and civilian personnel, is only located only 24 miles from North Korea, well within short range missiles and in some cases within long range artillery. Based on this threat, why do we continue to concentrate headquarters, troop facilities, and family housing in Seoul?

General SCHWARTZ. Actually, our forces are not concentrated in Seoul. While we have some headquarters units in Seoul, our Air Force units are well south of Seoul and the main ground units are not located in Seoul and we have no plans to bring additional units to Seoul.

In many ways the "shared risk" of our servicemen and families living among our South Korean hosts is a significant deterrent factor. This situation is similar to our families living along the inner German border during the Cold War. Additionally, under the LPP, we eventually plan to move from 85 scattered bases into 20 enduring installations. This will allow us to concentrate on building new family housing well south of Seoul thus, negating the long-range North Korean artillery threat.

LAND PARTNERSHIP PLAN

20. Senator THURMOND. General Schwartz, one of the issues facing our military is the population encroachment on our facilities and ranges. You are working to resolve this issue in part through the Land Partnership Plan (LPP), which will return a significant amount of land to the Republic of Korea, and in return U.S. forces will get improved facilities and less encroachment. What guarantees do you have from the Republic of Korea that the encroachment issue will not resurface in future years as the Republic's population grows?

General SCHWARTZ. The Republic of Korea has whole-heartedly agreed to the principle of removing encroachment and has incorporated this in writing within the LPP. They have agreed to remove encroachment from all land retained under the LPP and conduct joint surveys in preparation for our security fencing. Security fence-

ing, which will commence in January 2004, will further ensure the protection of our training lands from encroachment. I believe that once we have instituted the principles and actions of the LPP, we will no longer see major instances of encroachment within this theater.

TRAINING RANGES

21. Senator THURMOND. General Schwartz, last year Congress provided authority to increase the Army's National Training Center at Fort Irwin to meet the training needs dictated by more sophisticated weapons systems. I expect that to the same degree, our forces in Korea are facing similar challenges. How are you addressing the training challenges?

General SCHWARTZ. You are correct in recognizing that we have similar training and land challenges in Korea. We are planning for training requirements now and in the future to include possible new weapons systems. To the greatest extent possible, we are leveraging training simulators and simulations to meet training requirements through expanded joint use of ROK training land. We are placing great emphasis in this area. Our training office is working closely with the Republic of Korea (ROK) military to best use training lands to meet current and future training requirements for both alliance members. Additionally, through LPP, we have gained access to superb ROK training areas.

MILITARY FAMILIES

22. Senator THURMOND. General Schwartz, you are a strong advocate for improving the quality of life for our military personnel in Korea. Top on your list is to improve the quality of family housing and increase the number of families allowed to accompany service members to Korea. How many family members are currently living in South Korea?

General SCHWARTZ. We have 13,077 total family members (5,640 military, 6,271 Department of Defense (DOD) civilians, and 1,166 retirees) living in Korea. This breaks down to 10,231 command sponsored and 2,846 non-command sponsored family members living in Korea.

23. Senator THURMOND. General Schwartz, considering the tense situation in Korea, how do you justify the increase in accompanied tours?

General SCHWARTZ. As you are aware, the quality of life of the soldiers, airmen, sailors, and marines and their family members who serve in Korea is very important to me. A Korea assignment today involves some of the poorest living and working conditions of any permanent change of station assignment in the military. Substandard facilities, living and working conditions in Korea take their toll on the force as a whole. The new Seoul family housing planned is for the personnel already authorized accompanied tours who currently reside off post. We plan to increase about 90 percent of new family housing south of Seoul to negate the threat of North Korean long-range artillery.

A major factor driving my request for an increase in accompanied tours is the effect that a nearly 95 percent annual turnover has on this command. In Vietnam, I experienced the debilitating effects of a 1-year rotation policy. It is a documented fact that 1-year tours significantly hurt our warfighting capability, effectiveness, and cohesion. A 1-year tour in Korea does not allow a soldier, sailor, airmen, or marine to gain the necessary appreciation of the terrain, the doctrine, or the threat. Personnel rarely have the overlap necessary to ensure a seamless transition and this negatively impacts our warfighting capability.

The North Korean threat is formidable and real; however, I am confident that we can successfully implement our Noncombatant Evacuation Operations (NEO) plans, which are designed to get our families off the Korean peninsula in the event hostilities become imminent. We exercise the NEO plan frequently with our colleagues from the American Embassy—Seoul. A full scale NEO would represent a serious challenge, but we would be successful in evacuating our family members out of Korea.

KOREA HAS NOT KEPT PACE

24. Senator THURMOND. General Schwartz, the DOD benchmarks for acceptable living and working conditions is C-2. I understand that when Korea is compared to both U.S. Army Europe and U.S. Forces Japan, it is rated the lowest in all cat-

egories. In order to improve the quality of life for the men and women serving in Korea, what do you consider your most urgent need and why?

General SCHWARTZ. We have articulated our vision in a comprehensive Fix Korea Business Plan which incorporates training, infrastructure, and quality of life. The ultimate goal of our plan is to make Korea an assignment that service members will actively seek. Our Fix Korea Business Plan is the right solution for the problems we face today and this roadmap balances resources with requirements and provides the key to Balanced Readiness.

I need stable Sustainment, Restoration, and Modernization funding of approximately \$260 million per year. Current Sustainment, Restoration, and Modernization funding levels have allowed us to provide day-to-day critical maintenance of our facilities, the Sustainment, but we have not been able to get to the Restoration and Modernization piece.

I also need stable Military Construction (MILCON) funding of \$200–\$300 million per year. Our infrastructure, with regard to electrical power, water and sewer upgrades, must be fixed if we are to sustain readiness levels. We must have power generation systems, water distribution and sewage treatment plants that we can rely upon in times of emergency or crisis. We do not have reliable systems today. We must take action now to fix these enormous readiness and quality-of-life concerns.

Unaccompanied Housing Improvements is also a part of this critical priority. Our objective is to provide enlisted service members with quality housing by the Department of Defense mandated date of 2008. Even with our great on-going renovations we will continue to face a shortfall in fiscal year 2003 of \$44.7 million of our total requirement. Adequate housing for unaccompanied senior enlisted soldiers (E7–E9) and officers is urgently needed as well. Unlike CONUS Army units, all Second Infantry Division soldiers, including senior enlisted and officers, are required to live on post. Even with the Army's support to buyout ALL unaccompanied housing requirements by fiscal year 2008, we will still have senior enlisted and officers living in inadequate housing when the barracks buyout is complete. We urgently need congressional help to support this \$81 million Military Construction requirement beginning in fiscal year 2003.

To correct other quality-of-life deficiencies we need to replace or upgrade 52 maintenance facilities and 17 physical fitness centers throughout U.S. Forces Korea. For fiscal year 2003, we need your help with a Military Construction of \$102.4 million for maintenance facilities and \$23.0 million for physical fitness centers, \$13.1 million for a chapel and two fire stations and \$32.9 million for mission-oriented facilities. Additional Military Construction funding will enable us to execute a comprehensive construction program and eliminate the unacceptable living and working conditions in aging facilities that U.S. forces in Korea face every day.

COLOMBIA PEACE PROCESS

25. Senator THURMOND. General Speer, the United States has made Colombia its third-largest recipient of foreign aid after Israel and Egypt. Until now the aid, mostly for military equipment and training, has been channeled to the war on drugs. Now that the peace process in Colombia has fallen apart, will there be an effort to channel this aid effort toward fighting the terrorist/rebel groups?

General SPEER. Although we have seen great progress of the Colombian military over the last 4 years, the military still lacks the resources to create a safe and secure environment in Colombia. Fundamental security and stability are necessary for the government of Colombia to re-establish its ability to govern. In addition to combating the FARC and its current terror campaign, protecting infrastructure, and protecting the electoral process, the Colombian military must contend on a daily basis with the ELN, AUC and other drug trafficking organizations, further strapping their limited manpower and resources. As a minimum, the Colombian military needs additional resources whether it is through security assistance or another form of funding.

All assistance that U.S. Southern Command provides to Colombia will continue to stay within congressionally defined boundaries and be consistent with existing policy. If the President or Congress change the policy/law to support beyond the current counterdrug focus, then we will adjust accordingly. Given the threat to Colombia's democracy, they could certainly benefit from additional support aimed at the three declared foreign terrorist organizations creating such turmoil in their country.

SECOND COUNTERDRUG BRIGADE

26. Senator THURMOND. General Speer, your statement reflects the administrations support for training and equipping a second counterdrug brigade for the Colombian Army during this fiscal year. Considering the current crisis in Colombia, is this the most effective use of our resources?

General SPEER. I believe that funding a second counterdrug brigade is the most effective use of our resources. Fundamental security and stability are necessary for the government of Colombia to re-establish its ability to govern. The first counterdrug brigade is the best trained and equipped brigade in the Colombian Army. The plan to build a second counterdrug brigade for the Colombian Army follows the overall strategy outlined in the original Plan Colombia, which is to expand the effort against coca growing and processing into other areas of the country. The success of the first brigade gives us good reason to be optimistic about Colombian efforts to expand the war on production of cocaine into more of their country.

Moreover, additional resources are needed for the Colombian military to create a safe and secure environment in Colombia. The myriad of challenges facing Colombia will benefit from all forms of U.S. assistance. In defining our assistance, it is important to recognize the inextricable link between the foreign terrorist organization and drug trafficking.

POLITICAL SITUATION IN VENEZUELA

27. Senator THURMOND. General Speer, one of the more controversial leaders in South America is Venezuela's President Chavez. Based on press accounts, he is harboring leftist groups and sees himself as another Fidel Castro. Whatever his political views, what is the political situation in Venezuela and how does it affect the rest of the region?

General SPEER. The political situation in Venezuela is tenuous. President Chavez was elected president as a result of the traditional political parties losing credibility, worsening economic conditions, and a general sense among the marginalized sectors of Venezuelan society that their quality of life could only be improved by a radical departure from the political status quo. Chavez' popularity has greatly declined, due to his failure to deliver on his campaign promises.

His extreme political rhetoric has contributed significantly to the polarization of the Venezuelan political landscape. President Chavez has taken undemocratic steps that have solidified his power, increasing opposition from different segments of society including business, labor, media, elites, clergy, and members of the military. Although opposition has grown in the last several months, it lacks a single leader who can unite all of its elements. Consequently, the opposition lacks direction and cohesion.

Likewise, Chavez' rhetoric and actions have strained Venezuela's relationship with Colombia, due primarily to the perception that Chavez and/or important members of his government maintain a relationship with the guerrillas. The FARC moves across the border with ease. There are weapon shipments to the FARC and ELN that originate in Venezuela. Although we do not have any evidence linking official government involvement to these weapons shipments, there are certainly strong implications that support official complicity. Moreover, Chavez' anti-U.S. and "Bolivarian" rhetoric continues to irritate Venezuela's Latin American neighbors. He maintains strong ties with Cuba and has visited terrorist-supporting governments, including Iraq and Libya. Chavez' apparent disdain for Venezuelan democratic institutions and systems raises the specter of the "strongman" presidencies seen in the seventies and has the potential to undermine the democratic progress made in the region in the last 20 years.

DMZ

28. Senator THURMOND. General Schwartz, are there any special arrangements for evacuating women soldiers from the areas near the DMZ if the feather drops? A commander back in the 70s said it was his greatest concern.

General SCHWARTZ. We have no special arrangements or plans to evacuate women soldiers in Korea in case hostilities become imminent. Any potential evacuation would be evaluated on an individual case-by-case basis.

QUESTIONS SUBMITTED BY SENATOR BOB SMITH

CONVENTIONAL ARMAMENTS IN KOREA

29. Senator SMITH. General Schwartz, what would be the first signs if Pyongyang were taking National Security Advisor Condoleeza Rice's road map and pulling back some of their conventional armaments on the DMZ? What would be our minimum requirement?

General SCHWARTZ. Despite numerous attempts by the Republic of Korea government to discuss substantive military confidence building measures (CBMs) with North Korea, they have shunned all attempts at dialogue. The general principle is that North Korea needs to respond to tangible CBMs that are both verifiable and transparent. Any reference to specific minimum requirements would be speculation until North Korea begins to respond to CBM proposals in good faith.

U.S./CHINA MILITARY-TO-MILITARY EXCHANGE PROGRAM

30. Senator SMITH. Admiral Blair, I am very disturbed by reports that the Department of Defense is considering renewing the U.S./China military-to-military exchange program even after the EP-3 incident and the illegal detention of that crew, and especially given so many reports that inadvertent disclosures of militarily useful information to the Chinese during these exchanges. For example, the Chinese learned bar coding after a visit to FEDEX in Memphis. I find this outrageous. Do you believe these exchanges are reciprocal and can you tell me what is the U.S. interest in having the Chinese observe the Cobra Gold military exercise?

Admiral BLAIR. U.S./China military-to-military contacts did not totally cease in response to the EP-3 incident, but were substantially reduced to a few carefully reviewed and appropriate activities. For example, the U.S.-People's Republic of China (PRC) Military Maritime Consultative Agreement (MMCA) held a special meeting in Guam in September 2001 to discuss ways to avoid incidents such as the EP-3. This incident and subsequent MMCA meetings underscored the need for contacts that keep communications open between us, especially when misunderstandings arise. I can assure you that, since I became the Commander in Chief of U.S. Pacific Command in February 1999, our contacts have been reciprocal, with little chance of national security risk for either side. This year, the Chinese, along with other nations from the region, will observe the humanitarian assistance aspects of Exercise Cobra Gold. This is meant not only to encourage China to participate constructively in theater security cooperation efforts, but also to satisfy our ally, Thailand, who has raised concerns about conducting exercises next door to their giant neighbor. It also assures our other allies and friends in the region that we are not trying to use them in any effort directed against China.

31. Senator SMITH. Admiral Blair, have we established a strong counter-intelligence program to prevent inadvertent disclosures of information?

Admiral BLAIR. The Air Force Office of Special Investigations, Army Military Intelligence, and the Naval Criminal Investigative Service, under their respective service Counter-Intelligence (CI) charters, provide both threat assessments and defensive briefings for official travelers to the People's Republic of China (PRC). [Deleted]. Defensive briefs provided by the Service (CI) agents in one-on-one sessions further enhance visitor awareness. These briefs use the information contained in the threat assessments, as well as database information that can be tailored to the specific mission of the traveler. [Deleted]. This activity occurs not only at the Service component headquarters in Hawaii, but throughout the U.S. Pacific Command (USPACOM) AOR at the sub-unified command and unit level."

[Deleted].

In summary, awareness of the threat is key to the prevention of inadvertent disclosure, and I am confident that the military CI services in this theater are taking a proactive approach in reducing the vulnerability of DOD travelers to PRC intelligence collection activity.

I should point out that the Chinese CI is not very effective. A senior Colonel defected from China last year—he has extensive contact with American officers and grew disenchanted with his lot in China.

32. Senator SMITH. Admiral Blair, are Chinese officers vetted by our Embassy for any human rights violations before being asked to visit the United States?

Admiral BLAIR. Yes. Both the Department of Defense—which would typically nominate Peoples Liberation Army (PLA) officers for participation in U.S. Government-sponsored programs—and the Department of State are keenly aware of U.S.

human rights laws and policies, and would not extend invitations to known PLA human rights violators. Multiple formal and informal institutional screening processes that precede final approval of such participation provide adequate assurances against the admission of such individuals to this country.

CHINA: SOUTH CHINA SEA AND BORDER DISPUTES

33. Senator SMITH. Admiral Blair, I'm concerned that the Chinese are still using maps that claim the entire South China Sea as their territory, including parts of Russia and India. What parts of India and Russia are they claiming and how far do their South China Sea claims extend?

Admiral BLAIR. There are three main areas of territorial contention along the disputed India-China border. The People's Republic of China (PRC) claims some 26,200 square nautical miles (nm) of Indian-occupied territory in India's Eastern state of Arunachal Pradesh, as well as several small areas along the India-China border west of Nepal. India claims China is illegally occupying about 12,520 square nm of northern Kashmir, including 1,514 square nm ceded to seijing by Pakistan in 1963.

Although Russia and China have approximately a 2,500-mile border, the specific disputes are confined to several islands in the Amur River in northeast China. As the river shifts in its channel, the location of the islands shifts, favoring one side or the other. At present, neither side has chosen to make this a major diplomatic issue.

The PRC began publishing maps in 1993 that show an extensive South China Sea claim, in addition to the internationally recognized 12nm territorial sea limit and 200nm Economic Exclusion Zone (EEZ). The claim includes the Spratly Islands between Vietnam and the Philippines, and the natural gas fields lying within Indonesia's 200nm EEZ. The Chinese claim that their "historical waters" include the South China Sea and associated islands. However, it is clear their claims in the Spratlys are grounded in protecting and pursuing both strategic and economic interests in the region.

CHINA: STABILITY IN THE SOUTH CHINA SEA

34. Senator SMITH. Admiral Blair, what does this portend for stability—does China still have their military presence at Mischief Reef, which is in the 200 mile economic zone of the Philippines?

Admiral BLAIR. China has used its own maps to good advantage, claiming they support Beijing's claims of sovereignty over areas on the country's margins. In the case of the South China Sea, the so-called "Chinese Line" that takes in most of that body of water has been, and remains, purposely ill defined. By asserting territorial rights and sovereignty over large expanses to which other nations also claim rights under international conventions, China believes it gains some degree of leverage in negotiations.

China continues to maintain a military presence on Mischief Reef, and has upgraded its facilities there substantially since the original construction of the facility in 1995. As you have noted, Mischief Reef lies well within the Philippines, 200 nautical mile (nm) Economic Exclusion Zone (EEZ), 120nm west of Palawan, and is 150nm east of the Chinese headquarters facility on Fiery Cross Reef.

Nevertheless, the political temperature has cooled somewhat in the last 2–3 years. Beijing probably believed, initially, that it could finesse any Philippine objections to Mischief Reef in bilateral talks. There are other claimants to the Spratlys (Vietnam, Malaysia, the Philippines, Brunei, and Taiwan), and Beijing found itself in the unaccustomed and uncomfortable position of having to deal with the entire Association of South East Asian Nations (ASEAN) grouping on this issue, in a multilateral forum. In addition, as China engages increasingly on the international stage—as with its World Trade Organization accession and selection as an Olympic venue Beijing is discovering it must continually fine-tune its international relations and priorities.

In short, we can say at this point that China's interests in the South China Sea are attuned more to stability than conflict, and that instability there would impede the pursuit of more important goals. Last fall, ASEAN agreed to develop a free trade zone with China, for instance, and China and the Philippines are scheduled to begin talks this year on "joint development" of the Spratly archipelago. China now has considerably more interest in maintaining stability in the South China Sea than in asserting its sovereignty.

It would be premature to forecast a resolution of competing South China Sea claims because the underlying territorial and sovereignty issues remain. However,

it seems unlikely that the Chinese will stir up conflict in this area in the foreseeable future.

U.S./CHINA MILITARY-TO-MILITARY EXCHANGE PROGRAM

35. Senator SMITH. Admiral Blair, as you are aware, the U.S./China military-to-military exchange program has been an ongoing concern of mine and several of my colleagues in recent years. In the near future, I anticipate a response back from Secretary Rumsfeld to a letter I co-wrote with Senator Helms and Representative Rohrabacher, which, among many recommendations, expressed our belief that a program needs to be implemented by the Department of Defense to ensure U.S. military personnel do not divulge, inadvertently, militarily sensitive information to the Chinese People's Liberation Army during exchanges. From what I have read from various sources, you continue to enthusiastically endorse and believe that the U.S./China military-to-military exchange program is essential to our relationship with China, and will some day pay dividends, despite the fact that such exchanges continue to favor China and continue to hemorrhage information which, in my view, carelessly places U.S. forces in the Pacific in jeopardy.

I am sure you have seen the article in *The New Republic* dated April 1999 regarding a U.S./China exchange. U.S. and PLA officers conclude the days itinerary by breaking bread at the Officer's Club and continue "relationship building"—one of the exchange program's goals. Many things were discussed, including U.S. aircraft carrier vulnerabilities. This was not classified information, however, it could only be pieced together by exhaustive research through decades of military journals. Instead of letting the Chinese at least have to work to piece together information, this Nation continues to embrace a program where the PLA is given direct access to our officers, who have no real program in place to guard against such information-gathering by the PLA.

Do you agree this aspect of the U.S./China military-to-military exchange program is a problem and represents a threat which cannot be tolerated?

Admiral BLAIR. The April 1999 article to which you refer describes activities said to have taken place back in 1998, before my tenure as Commander in Chief, U.S. Pacific Command (USPACOM), so I am not in a position to comment on the article's accuracy. There were very few contacts in USPACOM in 1999 before the accidental bombing of the Chinese embassy in Belgrade. I would not accept the characterization of these contacts as hemorrhaging information to the Chinese. Military-to-military contacts ceased for the remainder of 1999, following the accidental bombing. Since 2000, all of our military-to-military contacts with China have been conducted in accordance with the provisions of Public Law 106-65 (Fiscal Year 2000 National Defense Authorization Act), which prohibits Chinese exposure to 12 categories of activities with the potential to create a national security risk. When visiting Hawaii in 2000, members of one Chinese delegation even commented on their lack of exposure to operationally oriented activities. Finally, I have found personally in my visits to China that in discussions with PLA officers I learn more classified information about China than the Chinese learn of classified information about the U.S. Armed Forces.

36. Senator SMITH. Admiral Blair, in light of examples such as the one I highlighted (please see information in question # 35), what have you done, and what are you doing presently, to counter such information-gathering by the PLA?

Admiral BLAIR. I do strongly believe that U.S./China military-to-military exchanges are essential to our understanding of China's military intentions and capabilities. Due to the closed nature of their society, every interaction results in our side acquiring information and developing an understanding that is otherwise denied. The Chinese participants in the interaction learn no more than what was already in the public domain, due to our much more open society. I can converse at length on military issues using information already in the public media, which tends to result in my Chinese counterpart revealing information which was previously unknown to us. Military-to-military exchanges have many other benefits, such as creating relationships that can be very useful to us in managing crises.

Recognizing the value of military-to-military exchanges, we do not neglect the importance of counter-intelligence (CI) programs to protect classified and sensitive information. The Air Force Office of Special Investigations, Army Military Intelligence, and the Naval Criminal Investigative Service, under their respective Service CI charters, provide both threat assessments and defensive briefings for official travelers to the People's Republic of China (PRC). [Deleted]. Defensive briefs provided by the Service CI agents in one-on-one sessions further enhance visitor aware-

ness. These briefs use the information contained in the threat assessments, as well as database information that can be tailored to the specific mission of the traveler. [Deleted]. This activity occurs not only at the Service component headquarters in Hawaii, but throughout the U.S. Pacific Command's area of responsibility at the subunified command and unit level.

[Deleted].

In summary, due to the volume of open source information that is already readily available to the Chinese, and because of the proactive approach of the military CI services in this theater to prevent inadvertent disclosures, I am confident that our side acquires more information that was previously unknown to us than the Chinese obtain from us via military-to-military exchange programs.

SHARING INTELLIGENCE

37. Senator SMITH. General Speer, I have one comment and then a question. General Serrano has a sterling reputation on Capitol Hill as former head of the Colombia Narcotics Police. He is now being considered for director of the U.N. Office for Drug Control and Crime Prevention—which would be ideal for him given his experience. The State Department apparently is backing a candidate from Italy with no counterdrug experience, despite the fact that the next person in this job will have a key role in creating an anti-narcotics police force in Afghanistan. I'd like you to do whatever you can in your capacity to promote General Serrano as the best candidate for this very important job—I think its vital to our success in Afghanistan and in the war on terrorism.

Second, I am mystified as to why we're not helping the Colombian Armed Forces with intelligence sharing. The narco-guerrillas have been on a rampage, kidnapping one Senator, and murdering uncooperative Colombian citizens. Please explain to me what possible rationale there could be for not sharing intelligence on the whereabouts of these Revolutionary Armed Forces of Colombia (FARC) terrorists?

General SPEER. [Deleted].

QUESTIONS SUBMITTED BY SENATOR RICK SANTORUM

STRATEGIC AND AMPHIBIOUS LIFT ASSETS

38. Senator SANTORUM. General Speer and General Schwartz, General Tommy Franks, USA, Commander in Chief, U.S. Central Command, recently indicated that improving strategic and amphibious lift is a top priority in his AOR. While Mobility Requirements Study 2005 (MRS-05) established a requirement of lifting 54.5 million-ton-miles-per day, it is unclear whether the military can meet this new requirement. Does the United States military have enough strategic and amphibious lift assets to meet the requirements of your particular AOR?

General SPEER. The Chairman of the Joint Chiefs of Staff recently identified that the "Department of Defense has worked diligently to overcome shortfalls in strategic lift capabilities. . . . However, we remain concerned about the effects of a sustained high operations tempo on the force, strategic lift and sustainment shortfalls, and shortages of ISR assets as well as the challenges associated with WMD, antiterrorism, and force protection. Additionally, in some locations, we face operational limitations that may affect mission success."

The United States military does not have enough strategic assets to meet U.S. Southern Command's (USSOUTHCOM) requirements together with all of the other Commands' requirements. Strategic lift satisfies the majority of routine support requirements for Embassy and Mission personnel. In some instances, operational requirements are met using training hours. In a typical month, USSOUTHCOM requires approximately eight C-141 and two C-5 strategic assets to satisfy our routine requirements. Theater Security Cooperation (TSC) events, however, can be more problematic.

Operation Enduring Freedom (OEF) and the establishment of Joint Task Forces 160 and 170 in Guantanamo Bay, Cuba highlighted concerns over the competition for limited strategic airlift to support real world contingencies. On several occasions, OEF contingency missions in the USSOUTHCOM AOR were delayed or rescheduled regardless of their priority. For example, on 19 March, the aircraft scheduled to deploy a secure communications suite in support of JTF 160 was rescheduled for a higher priority mission. The secure communications suite deployed 9 days later. Future GWOT and DOD operations, Presidential travel and other CINC's requirements will further limit availability of a finite number of strategic lift assets further complicating mission execution. Our ability to execute more robust contingencies in

the AOR will be significantly impacted if other Major Regional Contingencies are ongoing.

Sustaining military to military engagement and security cooperation, preparation for contingency operations, and our mission personnel are the center of our strategy to meet the national interest. Sustained availability of ample and properly resourced strategic lift is crucial in accomplishing this strategy.

Admiral BLAIR. The U.S. military has sufficient strategic airlift and sealift to meet U.S. Pacific Command (USPACOM) wartime requirements when considered independently, meaning when we are not conducting a limited number of smaller-scale contingencies. [Deleted].

[Deleted].

[Deleted] we strongly support the Air Force effort to procure 180 C-17 aircraft as well as improve the C-5 aircraft capability through the Reliability Enhancement and Re-engineering Program and the Avionics Modernization Program. [Deleted].

General SCHWARTZ. The United States military does not have enough strategic and amphibious lift assets to meet the requirements of the Korea AOR.

We fully support the Joint Chief of Staff in the establishment of an increased airlift capability requirement. However, we are concerned that 54.5 million-ton-miles per day (MTM/D) does not represent a large enough increase. In fact, there must be an increase in strategic lift to ensure sufficient operational capability arrives in theater as quickly as possible. CFC must have more sealift and airlift to close forces earlier than indicated in the MRS-05 study. By expediting the arrival of required combat, combat support, and combat service support forces, we enhance our capability to attack the enemy throughout his depth, increase our friendly operational tempo, and decrease the risks to our forces.

While acknowledging the limitations of MRS-05, we believe future studies should increase realism to accurately simulate the true nature of warfare on the Korean peninsula. Increased involvement of the warfighting CINC is a necessity to provide subjective response to the model in accordance with current and projected threat capabilities and OPLAN CONOPS. Additionally, to insure simulation fidelity and enhance validity we recommend continued investment in computer simulations used to conduct these types of studies. Based on our analysis, MRS-05 findings are conservative estimates of future programmatic requirements. Although increased lift requirements are identified, we believe those requirements are understated.

Additionally, there has been a long-standing requirement for amphibious lift for the assault echelon of three Marine Expeditionary Brigades. Having this Expeditionary maneuver capacity aids our Korea warfighting requirements.

NORTH KOREA

39. Senator SANTORUM. General Schwartz, during his State of the Union speech this past January, President Bush called special attention to Iraq, Iran, and North Korea—singling them out as members of an “axis of evil.” Terrorism, warned President Bush, was not the paramount danger facing the U.S. Equally worrisome were efforts by Iraq, Iran, and North Korea to develop nuclear, chemical, and biological weapons.

The President’s National Security Advisor, Condoleezza Rice, has stated that “North Korea is now the world’s number one merchant for ballistic missiles, open to anyone, no matter how malignant the buyer’s intentions.” The Bush administration notes Pyongyang remains a grave concern because of its direct support for terrorist organizations which operate in many countries to which North Korea has exported and continues to export missiles and technology.

Although North Korea has suffered from economic stagnation and famine, do you believe that there is any reason to believe that the state of North Korean army or its arsenal of ballistic missiles is any less ready than it was 5 years ago.

General SCHWARTZ. No! In fact, the North Korean ballistic missile arsenal has improved over the past 5 years, as evidenced by the Taepo Dong launch in 1998, engine testing and increased production. I would state that North Korea has improved capabilities in the last few years. Their proliferation of missiles have given them regional operational reach and global impact.

North Korea operates what can be described as a wartime economy, allocating resources to the military at the expense of the civilian sector. The North Korean Army actually produces hard currency that is used for its own sustainment as well as for use by the North Korean leadership. Consequently, North Korea’s economic problems and famine (1994–1998) failed to impact the military in the same way it impacted the civilian sector. We expect North Korea’s “military first” policy to continue

as the North's leadership maintains its reliance on the military to sustain the security of the Kim Regime and ensure North Korea's regional position.

Between the early and mid 1990s, economic distress and social turmoil eroded readiness and overall military capabilities of the North Korean military in Cold War terms, but not in 21st century threat terms. The North has learned by studying us and through a methodical readiness and force improvement program that continues today. This program includes measures such as increased training of key units; movement of large numbers of artillery assets forward; expansion and upgrading of its ballistic missile inventory; creation of new units in the forward area; command and control enhancements; acquisition and production of limited quantities of new weapons systems; and equipment such as submarines, tanks and artillery.

40. Senator SANTORUM. General Schwartz, do you have any reason to believe the current regime in North Korea has severed links to terrorist organizations?

General SCHWARTZ. We have detected no North Korean direct links with active terrorist groups. However, it continues to provide sanctuary to terrorists of the Japanese Red Army (JRA). These terrorists had hijacked a plane to North Korea over two decades ago. While the JRA itself is no longer an active terrorist group of concern to the U.S., these terrorists and North Korea's assistance in allowing them to elude justice remain a lasting concern. We consider that the expulsion of these terrorists would constitute a credible action by North Korea that it no longer supports terrorism. However, we do have credible information that North Korea continues to sell missiles and other weapons to countries in the Middle East and Africa that do directly support terrorism.

[Whereupon, at 12:17 p.m., the committee adjourned.]

**DEPARTMENT OF DEFENSE AUTHORIZATION
FOR APPROPRIATIONS FOR FISCAL YEAR
2003**

THURSDAY, MARCH 7, 2002

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

SERVICE CHIEFS

The committee met, pursuant to notice, at 9:38 a.m. in room SH-216, Hart Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Cleland, Landrieu, Reed, Akaka, Bill Nelson, E. Benjamin Nelson, Carnahan, Warner, McCain, Inhofe, Roberts, Allard, Hutchinson, Sessions, and Collins.

Committee staff members present: David S. Lyles, staff director; and Christine E. Cowart, chief clerk.

Majority staff members present: Daniel J. Cox, Jr., professional staff member; Madelyn R. Creedon, counsel; Creighton Greene, professional staff member; Jeremy L. Hekhuis, professional staff member; Maren Leed, professional staff member; Gerald J. Leeling, counsel; Peter K. Levine, general counsel; and Michael McCord, professional staff member.

Minority staff members present: Judith A. Ansley, Republican staff director; Edward H. Edens IV, professional staff member; Gary M. Hall, professional staff member; Carolyn M. Hanna, professional staff member; Mary Alice A. Hayward, professional staff member; Ambrose R. Hock, professional staff member; George W. Lauffer, professional staff member; Thomas L. MacKenzie, professional staff member; Joseph T. Sixeas, professional staff member; Scott W. Stucky, minority counsel; and Richard F. Walsh, minority counsel.

Staff assistants present: Leah C. Brewer, Daniel K. Goldsmith, Andrew Kent, and Nicholas W. West.

Committee members' assistants present: Frederick M. Downey, assistant to Senator Lieberman; Andrew Vanlandingham, assistant to Senator Cleland; Marshall A. Hevron and Jeffrey S. Wiener, assistants to Senator Landrieu; Elizabeth King, assistant to Senator Reed; Davelyn Noelani Kalipi and Richard Kessler, assistants to Senator Akaka; William K. Sutey, assistant to Senator Bill Nelson; Neal Orringer, assistant to Senator Carnahan; Brady King, assistant to Senator Dayton; Benjamin L. Cassidy, assistant to Senator Warner; Christopher J. Paul, assistant to Senator McCain; John A.

Bonsell, assistant to Senator Inhofe; George M. Bernier III, assistant to Senator Santorum; Robert Alan McCurry, assistant to Senator Roberts; Douglas Flanders, assistant to Senator Allard; James P. Dohoney, Jr., assistant to Senator Hutchinson; Arch Galloway II, assistant to Senator Sessions; Kristine Fauser, assistant to Senator Collins; and Derek Maurer, assistant to Senator Bunning.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody. The committee meets to receive testimony from the chiefs of the military services on the fiscal year 2003 budget request. General Shinseki, Admiral Clark, General Jones, and General Jumper, we welcome you back to this committee. We have had a long tradition of receiving frank and candid advice from our senior military leaders on national security issues, and we look forward to your testimony this morning.

As we meet today, U.S. Armed Forces are deployed around the globe meeting new commitments in Afghanistan, the Philippines, and other places, and fulfilling longstanding commitments in Korea and Germany. The loss of life in Afghanistan this week is a vivid reminder of the risks that our men and women in uniform take when we send them in harm's way. Their courage is inspiring, their commitment to their mission is total, and our debt to them is immense. Their performance is also a tribute to the entire leadership of the Department of Defense, including our witnesses today, because that performance depends on the training and equipment that the services are responsible for providing.

Some of the systems that are essential to today's forces are recent acquisitions, such as the unmanned aerial vehicles which have been in use only a few years. Many have been in our inventories for decades. The investments that we make today in this budget are needed to ensure that our military is as prepared for future wars as it has proven to be for Operation Enduring Freedom. For this reason, we will be particularly interested in the trade-offs that this budget makes between investments in our legacy forces and investments in military transformation and the basis on which the services are recommending these trade-offs.

The administration's budget request for fiscal year 2003 includes the largest proposed increase in military spending in two decades, \$48 billion more than the amounts provided for during the current fiscal year. I remain concerned that this increase comes without a comprehensive strategy or a detailed plan to guide that spending. The administration has not yet submitted its national security strategy, which is required to be submitted annually with the budget by section 603 of the Goldwater-Nichols Act. That was a provision which Senator Warner authored and which this committee has strongly supported.

The Department has not issued any military strategy to the best of my knowledge, nor has the Secretary of Defense submitted his annual report to the President and Congress, which is required by section 113 of Title 10 to be submitted annually with the budget, and the Department has not yet submitted a Future Years Defense Program (FYDP), which is also required to be submitted annually with the budget by section 221 of Title 10.

I am sure that our witnesses today recognize the difficulty that this committee faces in assessing whether we are funding the right programs and are setting the right priorities in the absence of that strategy or detailed plans for the size, structure, or shape of our military. Our hearings so far this year have revealed that despite the \$48 billion increase proposed in the 2003 budget, that there are important areas where this budget does not meet the future needs of our military services.

For instance, even as the Navy's budget is going up substantially, the number of ships in the budget is going down. This budget would build 17 ships over the next 3 years, compared to the 23 ships in the shipbuilding plan of the last administration for the same period.

The military construction budget request is 25 percent below last year's level. This amount is sufficient to recapitalize our facilities every 120 years, almost double the Department's goal of a 67-year replacement cycle, and our witnesses today have indicated that they have other unfunded priorities such as force protection, antiterrorism, and even personnel strength. So with this large increase in defense spending this still brings us back to the question of priorities.

America's Armed Forces are performing superbly in their fight against terrorism. The creativity and ingenuity we have seen in the campaign against al Qaeda in Afghanistan shows that our military leadership resisted the temptation to fight the last war. They are fighting today's war, and now we in Congress must resist the temptation to fund the last war. That is, to add money to this budget for programs that are a holdover from the Cold War and do not help build the kind of military that we need to meet the threats of the 21st century. We will continue to do, as a committee, all in our power to ensure that our Armed Forces have the right resources, tools, and technologies to meet those threats.

Senator Warner.

STATEMENT OF SENATOR JOHN WARNER

Senator WARNER. Thank you. Mr. Chairman, so that we can move ahead, I am going to ask to include my statement in the record and I will just make a few observations.

First, I certainly join you in expressing my sympathy and gratitude to those families who are grieving today for the loss of their loved ones and for those injured. I am going to comment at the end of my remarks about a period in history 57 years ago, to give some perspective to the contributions that have been made through half-a-century by the men and women of the Armed Forces to maintain the freedom of this country.

Each year, our committee looks forward to this important hearing, and with no disrespect to the concept of civilian management of the Department of Defense, there has to be in any system checks and balances, and traditionally the chiefs have come before Congress and given that perspective. I join my chairman in asking each of you today to give us not only your professional views, but also your personal views, which each of you agreed to do at the time of your confirmation. In that way, we can get at times a different perspective from that presented by the civilian control of the

Department of Defense. That civilian control, of course, is key. It goes back to the very beginning of our history, and yesterday Secretary Rumsfeld came to the Senate and met privately with, I believe, 70 Senators. He spent an hour-and-a-half and responded to each and every question asked by those present.

I stayed from the beginning until the very end. It was a full coverage of all aspects of the operation now in the Afghan area of responsibility (AOR) and in other parts of the world. He clearly enunciated the goals of President Bush, a very courageous President.

At this critical time in our history I think he is surprising the world with the brilliance of his leadership and the strong conviction he has about the need to rid the world of terrorism. Your men and women of the Armed Forces are right there in the front lines, and also a number of other nations are very much involved in this operation. For various reasons, we cannot give all the details on it, but the American public, and especially the Muslim world, should understand this is not the U.S. versus the Muslim world, this is the free world versus small, unrepresentative elements of the Muslim world, and we are joined by an extraordinary coalition of forces in this engagement.

Our committee has a very heavy responsibility this year. We face the largest increase percentagewise in defense spending since Ronald Reagan was President and we are going to go about that in a very careful and methodical way. First, we will start with the oversight, and then with other means to hopefully convince all members of the Senate that this budget submitted by this courageous President is the one that we need at this time, not only for the projection of our forces abroad to deter attack, but for our homeland defense, the President's highest priority, this Senator's highest priority, and each of you in various ways are participating in that.

In my judgment, not since World War II has this Nation been so unified behind its President, the men and women in uniform, and the vast array of civilians who work directly to support the men and women in uniform in your respective departments. We are exceedingly grateful to all.

Further, this war has truly been a joint operation. That has been a goal we have been trying to achieve for many years. I think at long last we go onto the battlefields, onto the ships, and into the air in every respect proud of the various units and respective services, but fully accepting joint responsibility to prosecute this very difficult war.

Lastly, these past 2 weeks, as I visited with families and others that have been hit by these casualty situations, and as I traveled through my state talking to my constituents about this conflict, I remind them of our history, of what has gone before us. Every casualty, one single individual, is a frightful loss to our Nation, to their families, and to their services. I remember so well 57 years ago in that period in history when two great battles raged between the United States and our adversaries in Europe and in the Pacific.

Take the Battle of Iwo Jima: in 30 days from February 19, 1945, until March 26, 1945, the total American casualties were 25,851, with 6,800 dead and 19,000 wounded. That was in the Pacific. In Europe, during the Battle of the Bulge, from December 16, 1944 to January 19, 1945, approximately 83,000 of the Eighth Corps were

attacked by 30 German Divisions. Of the 83,000, there were 41,000 casualties, with 4,000 killed in action, 20,000 wounded, and some 17,000 missing. That is the price that our Nation has paid, working with our allies, to protect freedom. I hope all Americans will reflect on the proud history of those who preceded you, wearing the uniforms of your respective services, and what they, their families, and this Nation have done in our world leadership role to protect freedom.

At this point, I would like to submit my opening statement and the statements of Senators Thurmond and Allard.

[The prepared statements of Senators Warner, Thurmond, and Allard follow:]

PREPARED STATEMENT BY SENATOR JOHN WARNER

Thank you, Mr. Chairman. I join you in welcoming our service chiefs this morning.

I want to express my sincere appreciation to each of you for your service to our country. This committee holds many hearings each year, but none more important than this one. We look to you for the professional military judgments that are so critical to our annual budget deliberations. Time and time again, you and your predecessors have summoned the courage to point out growing shortfalls and challenges to current and future readiness. Balancing the many needs and competing priorities of your respective services, and making the tough recommendations, is a difficult, but critical task.

I want to begin by expressing my sympathies, condolences, and gratitude to the families, units, and friends of our service men and women who have lost their lives in this important global war against terrorism. Their loss, defending America and freedom, reminds us of the dangers our men and women in uniform face every day, as they defend our freedom around the world. We were encouraged by our early success in the war, but these tragic losses serve to remind us that this war on terrorism is just beginning. It is a struggle that will take us to the far corners of the world and the price will be high, but as President Bush recently reminded us: "While the price of freedom and security is high, it is never too high."

The President's budget request for fiscal year 2003 represents the largest increase—\$48 billion over the fiscal year 2002 appropriated level—for the Department of Defense in two decades. All of you have long advocated significant increases in defense spending to reverse years of overuse and underfunding of our military forces. Now, following the most devastating attack on our homeland in history, with our Nation at war, it is essential that Congress stand together with our President and our men and women in uniform by providing the resources you will need to fight this war and prepare for the many challenges ahead.

The President has rallied the Nation, and, indeed the world, to fight this global war against terrorists and those who harbor them. It is a war unlike any we have ever fought before. It is a credit to each of you gentlemen that when the Nation called, each of your services was ready. Over the past few weeks, we have heard from our regional commanders in chief and from Secretary Rumsfeld about just how well our service men and women have performed. Clearly, it has been with distinction. The Nation is thankful to you, gentlemen, for the trained and ready forces that continue to make our Nation proud—well done.

The events of the past week have been a stark reminder that this war is far from over. Our forces have performed magnificently so far, but many challenges lie ahead. We will continue to depend on you, gentlemen, to answer the difficult questions about the long term impact of the current high operational tempo; to tell us what has worked well; and, to tell us what needs to change.

This war has truly been a joint operation—all services operating together as one and many coalition nations operating with U.S. forces. When the full story is told, people will marvel at the new roles played by our special operations forces, our maritime forces, our unmanned vehicles, and other high tech weaponry and techniques. During my travels to the region and in my on-going conversations with troops and commanders, I am constantly reminded that we are fighting a new kind of war and writing a new chapter in military history. Each of you has championed evolutionary and revolutionary changes within your respective services that will enable this new chapter to have a positive ending. Now, we must ensure that we adequately fund the capabilities and concepts that have served us so well, and carefully study the

lessons learned to determine what more is required to transform our forces to meet the new and unexpected threats ahead.

I am supportive of this budget request and its priorities of winning the war against terrorism, defending our homeland, improving quality of life for our service personnel, and transforming our forces. But, I do have some concerns that I hope each of you will address. Despite a \$48 billion increase, it is clear that this budget request does not fully address the needs of our Armed Forces, as evidenced by unfunded requirements for the services which are in excess of \$23 billion. Significant shortfalls in the shipbuilding account and unmet needs for additional end strength are high on my list of concerns.

As we discuss and debate this budget request in the days and weeks ahead, as is the duty of this committee and Congress, on one thing we can all agree: the commitment, dedication, and performance of the soldiers, sailors, airmen, and marines in service to their Nation has been remarkable. We are ever mindful of the dangers they confront every day and are forever grateful for their willingness and readiness to serve.

The Nation is united in purpose and determination as seldom before in our history—united behind our President and our Armed Forces. We, in Congress, will do everything we can to provide the resources and capabilities you need to train, man and equip your services to carry on their proud traditions of service to country.

PREPARED STATEMENT BY SENATOR STROM THURMOND

Thank you, Mr. Chairman.

Mr. Chairman, this morning we meet to receive testimony from our senior military leaders regarding the adequacy of the President's budget request for the Department of Defense. Before recognizing our distinguished panel, I want to express my condolences to the families and friends of the soldiers, sailors, airmen, and marines who were killed in Afghanistan during the most recent battle against terrorist forces. These heroic deaths are vivid reminders of the sacrifices our military personnel make daily, whether it is in Afghanistan, Bosnia, Korea, or here at home. I want them all to know how proud I am of every one of them.

Today's hearing will provide the committee the opportunity to hear directly from the senior leaders we hold responsible for the readiness of our military services. General Shinseki, Admiral Clark, General Jumper, and General Jones have already had a major impact on improving the current readiness of their services. More important, they have provided the vision on how to transform their services to meet the challenges of the new century. I doubt that any of them envisioned the tragedy of September 11 and the war against terrorism, yet each of their services responded magnificently both in fighting the terrorist on their turf and in providing the visible security at our airports, in the sky, and here on Capitol Hill.

Despite the need to transform each service, we cannot forget the basic needs of the men and women in uniform. In prior hearings, both General Ralston and General Schwartz went into great detail describing the dismal conditions of the facilities in their commands. Many of my colleagues have personally seen these facilities and have also described them during various hearings. Mr. Chairman, I hope that the committee, working with our service chiefs, will dedicate additional resources to make headway in upgrading these facilities to the standards we owe our soldiers, sailors, airmen, and marines.

Finally, Mr. Chairman, we must also take actions to ease the economic impact the Reserve call up has had on the lives of the individuals and their families. Many Reservists, whether from the National Guard or Reserves, suffer financially because of their service to the Nation during this time of crisis. Since we will be relying on our citizen soldiers to a greater extent than ever before, we have to ensure that their service does not result in an economic hardship on them, their families, or business. I hope we can work together to provide a solution to this persistent problem.

Thank you, Mr. Chairman.

PREPARED STATEMENT BY SENATOR WAYNE ALLARD

Thank you Mr. Chairman.

First and foremost, I want to express my most sincere appreciation to each of you for your leadership and dedication. Today our Nation is demanding much of our military to fight a global war on terrorism. Our forces are fighting in Afghanistan, protecting our security at home, and assisting forces in the Philippines, Yemen, and even Georgia. This is in addition to Operations Northern Watch and Southern

Watch, and other on-going commitments around the world. Despite the strain of these demands, the men and women of our Armed Forces have met the challenge and demonstrated their great skill, courage, and dedication. This success was no accident. Troops take time to develop their expertise. Weapon systems such as Global Hawk take time to design, build, and test. The leadership must have the vision to coalesce these forces so they are ready when ever and where ever their country calls on them. You've demonstrated such vision and we are deeply indebted.

As we fight this war today, we must continue to look to the future and build a fighting force ready to defeat the threats of the future. I believe the transformation you're undergoing is important and necessary to our national security. Although the Taliban may no longer rule in Kandahar, and although al Qaeda may no longer train terrorists in Afghan camps, many threats to our national security remain. As President Bush has clearly stated, regimes exist which wish to do us harm. We must remain strong and capable to respond to these threats.

Chairman LEVIN. Thank you very much, Senator Warner. I think, given the large number of Senators and witnesses we have, that we will move directly to our witnesses' statements.

General Shinseki.

**STATEMENT OF GEN. ERIC K. SHINSEKI, USA, CHIEF OF STAFF,
UNITED STATES ARMY**

General SHINSEKI. Thank you very much, Mr. Chairman. Senator Warner, distinguished members of this committee, it is an honor once again to appear here before this committee with the service chiefs to update you on the posture of the Army and its state of readiness.

First, let me on behalf of the Army, much as Senator Warner and the chairman have done, express our deepest condolences to the families from all of our services who have suffered injury and loss in this war on terrorism. We have the greatest fighting forces and the best leaders in the world from all of our services.

Willingly and without hesitation, they continue to demonstrate their profound and abiding devotion to this Nation and on our behalf they take risks, go into harm's way, shed blood, and prepare to give lives as necessary, as some have here in the recent fighting. They do so to defend peace and freedom and our way of life. They will see this through to its decisive outcome, and we could not be prouder of all of them.

Senator Warner's remarks remind me that perhaps for the first time since World War II we have American young men and women fighting directly on behalf of the American people, as a result of what happened on September 11.

Let me further report, Mr. Chairman, that our soldiers and our civilians in the Army appreciate much more than I can put into words what you have accomplished on their behalf this past year, enhancements in pay, health care, housing, and retirement benefits. They continue to make incredible contributions and even more incredible sacrifices, but they look to us to demonstrate both the Nation's appreciation and its commitment to them and their families. It is a commitment that you have honored well, and they are grateful.

Nearly 3 years ago, the Army took a hard and discriminating look at itself. After examining our capabilities against the emerging strategic environment as we saw it then, we decided to take some risks. We committed ourselves to transforming the way we will fight and win the new wars of the new century. This committee

elected to underwrite Army transformation when the very term was unfamiliar and a bit uncommon.

Today, when one considers the magnitude of what we have accomplished with your support, it is staggering. With this submission, the Army buys its last heavy tank, confirmation of our sustainable momentum and our move towards the irreversibility we seek to achieve through transformation.

Your investments are paying dividends. The selective recapitalization and modernization of our legacy systems maintains the acceptable readiness to fight and win today through this decade and beyond, as we transform today's capabilities into Objective Force overmatch. This August, our first Interim Brigade Combat Team (IBCT) at Fort Lewis will achieve its initial warfighting capability. By December we intend to operationally test two of its battalions, and by next spring we will evaluate the entire interim brigade. This interim capability will safeguard us through the remainder of this decade.

Finally, the Defense Advanced Research Projects Agency (DARPA) and the Army will shortly announce the lead systems integrator for our Future Combat Systems of the Objective Force, the future force that we are trying to bring on by the end of this decade. It will be a new solicitation and acquisition strategy that will accelerate transformation to that Objective Force by the year 2010. Through this transformation strategy, selectively recapitalizing the legacy force, modest investments in an interim capability, and then transforming into future Objective Force capabilities, we remain prepared to fight these near-term conflicts against terrorism, or any of a host of other dangers, even as we set about changing ourselves to fight the wars of the 21st century.

The Army has done a lot to help itself. We have made our own tough decisions to the critical fund transformation requirements for the Interim and Objective Force between fiscal years 2003 and 2007. We have restructured or eliminated 18 Legacy Force modernization systems. We have reduced heavy maneuver and artillery battalions by 25 percent. We have cut aviation structure by 21 percent. We have manned our 10 Active component divisions and two active cavalry regiments to 101 percent, moving our personnel resources within our structure.

Since October 2000, the strength of other early-deploying units has grown from 92 percent to 99 percent, and we project reaching 100 percent by the end of this fiscal year. The "Army of One" advertising campaign has been a resounding success. In 2001, we achieved our recruiting targets for the second year in a row, and we have exceeded our retention goals as well. This year, for the third year in a row, we will induct roughly 180,000 Americans into the force.

We have been changing our stance as an Army, and the President's budget builds on the momentum we have attained over the last 2½ years. But we do need to do more, and we do intend to move faster. The attacks of September 11 validated our vision, and the ensuing war against terrorism has underscored the need to accelerate.

All of our troops from all of our services are performing superbly, Active, Guard, and Reserve. In Afghanistan, Army special

operatives enable the anti-Taliban forces to compel the enemy to mass so that the significant capabilities of our air-delivered munitions could be brought to bear.

These successes are not accidental, and they are never easily won. Victories in battles like Mazar-e-Sharif, Herat, Konduz, Bagram, and now in the Shahi Khot region, as well as successful operations on objectives Rhino and Gecko and in the region of Tora Bora, represent years of difficult work, superior training, and real-world experiences in places like Bosnia, Kosovo, Nigeria, Colombia, the Philippines, Pakistan, and Uzbekistan, to name a few.

Mr. Chairman, our investments have borne fruit in a conflict that was difficult to predict 6 months ago. Our new century is marked by uncertainty. Recognizing and preparing for that uncertainty is what the Army vision is all about. In this new century, strategic success demands strategic responsiveness, seeing the world with an unblinking eye, having agile, versatile, lethal, survivable, and sustainable capabilities, and then maintaining the infrastructure and lift to be able to deliver that force anywhere in the world quickly to win decisively.

That force for the Army is the future Objective Force, and with your continued strong support and the support of the administration you will see that force fielded by the end of this decade.

Mr. Chairman, thank you. I look forward to your questions.

[The prepared statement of General Shinseki follows:]

PREPARED STATEMENT BY GEN. ERIC K. SHINSEKI, USA

Mr. Chairman and distinguished members of the committee, thank you for this opportunity to report to you on the United States Army's readiness to provide for our Nation's security today and in the future. Throughout our Nation's history, the Army has demonstrated that it is America's decisive ground combat force with capabilities sufficiently diverse to cover the full spectrum of operations demanded by the Nation—anytime, anywhere. The essence of the Army remains unchanged—an ethos of service to the Nation, the readiness to fight and win wars decisively, and a willingness to accomplish any mission the American people ask of us.

Today, we are engaged in a global war on terrorism and defense of our homeland. Soldiers, on point for the Nation, are protecting and promoting American interests around the globe. They are accomplishing these vital missions much as we have for over 226 years with little fanfare or attention. The Army is able to accomplish what is asked by relying on the strength of its soldiers—Active, National Guard, Army Reserve—and civilians who honorably and proudly answer the calls to duty.

The Army has no illusions about the challenges it faces. It must help win the global war on terrorism and prepare for future wars and conflicts by effectively using the resources you provide us to transform. With the continued support of Congress and the administration, our soldiers will continue to do their part to decisively win the global war on terrorism, rapidly transform themselves to fight and win new and different kinds of conflicts, meet our obligations to allies and friends, and maintain our readiness for the unexpected and unpredictable challenges that may arise.

THE STRATEGIC ENVIRONMENT

The attacks of 11 September provide compelling evidence that the strategic environment remains dangerous and unpredictable. Although we may sense dangerous trends and potential threats, there is little certainty about how these threats may be postured against America or her interests. Uncertainty marks the global war on terrorism, and our soldiers continue to be involved in smaller-scale contingencies and conflicts. Yet, the potential for large-scale conventional combat operations will continue to lurk just beneath the surface. Victory in battle will require versatile combat formations and agile soldiers, who can deploy rapidly, undertake a multiplicity of missions, operate continuously over extended distances without large logistics bases, and maneuver with speed and precision to gain positional advantage. Our soldiers must be capable of prosecuting prompt and sustained land operations across a spectrum of conflict resulting in decisive victory.

THE STRATEGIC FRAMEWORK

The 2001 Quadrennial Defense Review (QDR) established a new strategic framework for the defense of the Nation that struck a balance between near-term readiness and our ability to transform ourselves in order to meet current and future conflicts. The report outlined a new operational concept that gives continued priority to homeland defense, promotes deterrence through forward presence, and asks that we have the ability to conduct both smaller-scale contingencies and large scale, high-intensity combat operations simultaneously.

Our soldiers can defeat enemy armies, seize and control terrain, and control populations and resources with minimal collateral casualties and damage. They can operate across the spectrum of military operations, from full-scale conventional conflict to fighting terrorists, to setting the conditions for humanitarian assistance. This multifaceted ground capability enables us to assure our allies and friends, dissuade future military competition, deter threats and coercion, and, when necessary, decisively defeat any adversary.

As the Army continues to work with other departments, agencies, and organizations, emerging requirements that are not fully defined in the 2001 QDR may require additional resourcing, whether technological, logistical, or force structure. Despite 10 years of downsizing, the Army has accomplished all assigned missions to a high standard. In short, we are doing more with less, and the strain on the force is real. Our soldiers continue to give us more in operational readiness than we have resourced.

While we fight and win the global war on terrorism, the Army must prepare itself to handle demanding missions in the future strategic environment. Over 2 years ago, the Army undertook transforming itself into a force that is more strategically responsive and dominant at every point on the spectrum of military operations. We have gained insight from previous deployments, operations, and exercises, along with leading-edge work in Army Battle Labs, joint and Army warfighting experiments, and wargames. With this insight, the Army embarked on initiatives to assure its dominance in a new contemporary operational environment by deterring and defeating adversaries who rely on surprise, deception, and asymmetric warfare to achieve their objectives against conventional forces. The attacks of 11 September 2001 and our subsequent operations overseas validated the Army's transformation. If anything, 11 September provided new urgency to our efforts. Thus, we are accelerating transformation to give our commanders the most advanced capabilities they need to ensure that we have the best led, best equipped, and best trained soldiers for the emerging global environment. To mitigate risk as we transform to meet future requirements, we will prioritize among the imperatives of meeting existing threats, safeguarding our homeland, and winning the war against terrorism.

SOLDIERS—ON POINT FOR THE NATION

Globally, soldiers offer tangible reassurance to our allies, build trust and confidence, promote regional stability, encourage democratic institutions, and deter conflict. Nothing speaks to the values of America more than soldiers on the ground providing comfort, aid, and stability at home and abroad. The Army, as part of a joint military team, provides a wide range of options to our leaders and commanders. As we have seen, in today's world we cannot win without the human dimension on the battleground. Whether it be gathering intelligence, challenging an adversary's ability to conceal and seek cover, or protecting innocent civilians, the American soldier remains the ultimate precision weapon during combat operations, particularly when legitimate targets are interspersed among non-combatants. In the final analysis, it is the soldier on the ground who demonstrates the resilience of American commitment and provides the needed flexibility to decisively defeat our adversaries.

Since October 2001, Army conventional and special operations forces, as part of the joint force, have participated in Operation Enduring Freedom in the Afghanistan theater of operations. The range of their capabilities has been extensive. These highly trained soldiers have worked with local forces to forge a powerful alliance. They have designated targets for air strikes, secured airfields, and performed reconnaissance and security missions that facilitated the safe introduction of follow-on forces. Supporting the war effort, they have provided security to joint forces, critical facilities, and supply lines, and they have received and prepared both combat and humanitarian supplies for air delivery to Afghanistan. Currently, more than 12,000 soldiers are deployed—from Egypt to Pakistan, from Kenya to Kazakhstan. Although hostilities in Afghanistan are shifting focus, requirements for ground forces are growing—they are assuring regional stability in Afghanistan, directing humanitarian assistance and relief operations, securing detainees at Guantanamo Bay, Cuba, and deploying to the Philippines.

At home, the Army continues its long tradition of support to homeland security. Even before 11 September 2001, the Army had 10 trained and certified Weapons of Mass Destruction Civil Support Teams ready to assist civil authorities and had trained 28,000 civilian first responders in 105 cities. Since the attacks, we have mobilized over 25,000 Army National Guard (ARNG) and United States Army Reserve (USAR) soldiers for federal service here and overseas. Nearly 11,000 soldiers are on state-controlled duty securing airports, seaports, reservoirs, power plants, the Nation's capital region, and serving at "ground zero" in New York City alongside the U.S. Army Corps of Engineers. To increase protection for our citizens and reduce vulnerability, we accelerated the safe destruction of the U.S. stockpile of lethal chemical agent and munitions while combating the proliferation of chemical weapons. Continuing a commitment to civil authorities, nearly 500 soldiers worked Super Bowl XXXVI, and over 5,000 soldiers are helping ensure the security of the 2002 Winter Olympics in Salt Lake City, Utah.

But, fighting the global war on terrorism in no way diminishes the requirements placed on the Army for support to missions and operations around the world—indeed, it expands it. While the Army remains engaged at home, it is prudently taking action for follow-on operations around the world, to include mobilizing some 2,000 ARNG soldiers to augment our missions in the European theater. In fact, the Army—Active, ARNG, and USAR—has over 124,000 soldiers and 38,000 civilians stationed in 110 countries. Additionally, on any given day last year some 27,000 soldiers were deployed to 60 countries for operations and training missions. It is easy to forget that our soldiers have been on the ground conducting peacekeeping missions in the Balkans for 6 years, in Saudi Arabia and Kuwait for 11 years, and in the Sinai for 19 years. Our soldiers have been in Korea and Europe for over 50 years, assuring their peace and stability while, at the same time, providing the Nation with a rapid deployment capability to areas near those theaters of operations, as needed. Depending on the next move in the war on terrorism, additional manning requirements will be placed on the Army that will inevitably create more stress on our current end strength.

THE ARMY VISION: PEOPLE, READINESS, AND TRANSFORMATION

On 12 October 1999, the Army articulated its vision that defined how the Army would meet the Nation's requirements now and into the 21st century. The vision is comprised of three interdependent components—people, readiness, and transformation. It provides direction and structure for prioritizing resources to ensure the Army remains the most dominant and intimidating ground force in the world to deter those who would contemplate threatening the interests of America. Ultimately, it is about risk management, striking a balance between readiness today and preparedness for tomorrow. It is about having overmatching capabilities while simultaneously reducing our vulnerabilities in order to dominate those who would threaten our interests—now and in the future. It is about examining where we are now and where we need to be, and it is about achieving decisive victory—anywhere, anytime, against any opposition. The Army's budget request for fiscal year 2003 supports the Army vision and the strategic guidance to transform to a full spectrum force while ensuring warfighting readiness. It reflects a balanced base program that will allow the Army to remain trained and ready throughout fiscal year 2003, while ensuring our force is protected as we fulfill our critical role in the global war on terrorism. It mans the force—end strength of 480,000 Active component, 350,000 Army National Guard, and 205,000 Army Reserve soldiers—and provides our soldiers with better pay and incentives.

People

People—soldiers, civilians, retirees, veterans, and their families—are the Army. People are central to everything we do in the Army. Institutions do not transform; people do. Platforms and organizations do not defend our Nation; people do. Units do not train, they do not stay ready, they do not grow and develop leadership, they do not sacrifice, and they do not take risks on behalf of the Nation; people do. We must adequately man our force, provide for the well-being of our soldiers and their families, and develop leaders for the future so that the Army continues to be a professionally and personally rewarding experience. Soldiers will always be the centerpiece of our formations. They are our sons and daughters. We are committed to recruiting and retaining the best people and giving them the finest tools to do their job so that they remain the world's best army.

Manning the Force

Current and future military operations depend on an Army with the flexibility to respond quickly in order to rapidly meet changing operational requirements. The

Army has approached its manpower challenge in a variety of ways. In fiscal year 2000, we implemented a personnel strategy to man units at 100 percent. Starting with divisional combat units, the program expanded in fiscal year 2001 and fiscal year 2002 to include early deploying units. Funding in the fiscal year 2003 budget for change-of-station moves improves our ability to man units at desired grade and skill levels by placing soldiers where they are needed. The Army is currently assessing its ability to fill remaining units by the end of fiscal year 2004.

The ARNG and USAR now make up more than 50 percent of the Army's force structure. Ongoing and expanded reserve integration initiatives—to include full time support—have increased Reserve readiness and increased their ability to rapidly transition from a peacetime to a wartime posture.

A new advertising campaign in 2001—"An Army of One"—raised the awareness and interest levels of potential soldiers. The Army achieved 100 percent of its goal for all components in recruiting and retention for the second year in a row. To ensure that we recruit and retain sufficient quality personnel, we continue to examine innovative recruiting and retention programs. The increases for enlistment and retention bonuses will enable the Army to sustain these recruiting and retention successes, although some shortfalls remain.

Well-Being

Our soldiers appreciate, more than you realize, your support this past year for pay increases of at least 5 percent and the 3.6 percent for the civilians who support them. Targeted pay increases for highly skilled enlisted soldiers and mid-grade officers, the online electronic Army University education program, and upgraded single-soldier barracks and residential communities further support and aid in maintaining the well-being of soldiers willing to put their lives at risk for our national interests. In turn, the attention to a soldier's well-being helps the Army recruit and retain the best people. Our soldiers ask little in return, but they judge their Nation's commitment to them by how well it takes care of them and their families. It is a commitment we must honor.

Army readiness is inextricably linked to the well-being of our people. Our success depends on the whole team—soldiers, civilians, retirees, and their families—all of whom serve the Nation. The term Well-Being is not a synonym with "quality of life," but rather an expansion of the concept that integrates and incorporates existing quality of life initiatives and programs. Well-Being takes a multifaceted approach. We are working with the Office of the Secretary of Defense to improve TRICARE in order to provide better medical care for soldiers, families, and retirees and to continue to close the compensation gap between soldiers and the civilian sector, and the budget's increases housing allowances reduces out-of-pocket expenses for military personnel from 11.3 percent in fiscal year 2002 to 7.5 percent in fiscal year 2003 and puts the Army on track for eliminating average out-of-pocket costs entirely by fiscal year 2005 for those soldiers and families living on the economy.

Leader Development

Civilian and military leaders are the linchpin of transformation. The leaders and soldiers who will implement the new warfighting doctrine must be adaptive and self-aware, capable of independent operations separated from friendly elements for days at a time, exercising initiative within their commander's intent to rapidly exploit opportunities as they present themselves on the battlefield. Leaders must be intuitive and capable of rapid tactical decisionmaking, and all soldiers must master the information and weapons systems technologies in order to leverage their full potential. But new technologies and new kinds of warfare will demand a new kind of leader. As part of our transformation process, the Army is taking a comprehensive look at the way we develop officers, warrant officers and non-commissioned officers through the Army Training and Leader Development Panels to review and assess issues and provide recommendations on how to produce the Army's future leaders. We have expanded these reviews to include Army civilians in anticipation of the need to replace the increasing number who will become retirement eligible after fiscal year 2003. The Army must have top-notch military and civilian people at all levels in order to meet the global, economic, and technological challenges of the future.

In June 2001, the Army published the most significant reshaping of Army warfighting doctrine since 1982. Field Manual 3-0, Operations, emphasizes the Army's ability to apply decisive force through network-centric capabilities and shows just how dramatically the Army must transform itself to fight both differently and more effectively. This doctrine will assist in the development of a new force—the Objective Force—that maximizes the technological advantages of equipment, leader development, and evolutionary warfighting concepts. The Objective Force will demand a generation of leaders who know how to think, not what to think.

Readiness

At its most fundamental level, war is a brutal contest of wills. Winning decisively means dominating the enemy. To be dominant, we must be not only organized, manned, and equipped, but also fully trained. Today, the Army is ready for its assigned missions, but sustained support from the Nation, Congress, and the administration is required to ensure that we maintain our readiness. To do so requires that we pay attention to training, installations, force protection and readiness reporting. The fiscal year 2003 budget request supports readiness and provides funding to maintain our current facilities at an acceptable level. Fiscal year 2003 funding improves on fiscal year 2002 levels in terms of maintaining a stable training base to develop quality leaders and soldiers. Resources have been aligned to ensure our forces are trained, equipped and ready to fight. In addition, funding is provided to enhance unit training and deployability—a positive impact on overall readiness.

Unit Training

Tough, demanding training which is supported by an infrastructure that allows us to train, sustain, and deploy is essential to readiness. History has taught us and we have learned that, in the end, armies fight the way they train. The Army is committed to fully executing our training strategy—the higher the quality of training, the better the leaders and warfighters we produce. The result is an increased state of readiness to serve our Nation. To this end, we must fully modernize training ranges, combat training centers, and training aids, devices, simulators, and simulations to provide adequate and challenging training. The Army has funded the integration of virtual and constructive training capabilities to achieve realism and cost effectiveness.

As we move to greater network—centric warfare capability, our forces will operate with even greater dispersion, and maintaining sufficient maneuver areas for training these extended formations will become even more critical. Combat is a complex mixture of people, equipment, and the training that fuses them together. Live training requires adequate land, sea, air and spectrum to even begin to realistically recreate combat—like conditions. That space is increasingly being encroached upon, intensifying environmental constraints and operational restrictions that will result in unanticipated and unwarranted limitations on needed test and training activities. Thus, the Army is implementing a sustainable program to manage the lifecycle of training and testing ranges by integrating operational needs, land management, explosives safety, and environmental stewardship. This program will ensure the continuing viability of training ranges by addressing the multiple aspects of encroachment: endangered species and critical habitats, unexploded ordnance and munitions, spectrum encroachment, airspace restrictions, air quality, noise, and urban growth. As we transform to a future force with new systems, organizational structures, and new doctrine to achieve full spectrum operational capability, our training enablers and infrastructure, along with realistic and relevant training venues, must be funded to match the timelines we have established to field a highly trained soldier—one whose unit is poised to fight new and different kinds of conflicts while maintaining traditional warfighting skills.

The Army OPTEMPO budget is a top priority, and the Army is committed to improving its training and unit readiness. The budget supports a ground OPTEMPO program of 800 M1 Abrams Tank miles at home station. The Flying Hour Program is funded for an average of 14.5 required live flying hours per aircrew per month for the Active component, and nine live aircrew flying hours for Reserve components. We have scheduled 10 brigade rotations (9 Active component and 1 Army National Guard) through the National Training Center, 10 brigade rotations (9 Active component and 1 Army National Guard) through the Joint Readiness Training Center. The Battle Command Training Program will conduct two corps Warfighter exercises and train six division command and staff groups, an increase of one divisional staff training exercise in fiscal year 2003. Additionally, funding for training enabler support has been increased 20 percent from fiscal year 2002 levels.

Installations

Installations provide homes, family and training support, and power projection platforms for the Army. They are the bases where soldiers live, train, and from which they launch on their missions. Worldwide, we have physical plants worth over \$220 billion. For too many years, the Army has under funded long-term facilities maintenance in order to fully fund combat readiness and contingency operations; thus, we now have first-class soldiers living and working in third-class facilities. Commanders currently rate two-thirds of their infrastructure condition so poor that it significantly impacts mission accomplishment and morale. The fiscal year 2003 budget funds over 90 percent of sustainment, restoration, and modernization (SRM)

requirements and builds on the fiscal year 2002 funded levels, slowing the deterioration of our aging infrastructure. But, the major investment in SRM in fiscal year 2002 is helping to improve only the most critical conditions in our crumbling infrastructure. Over the next 5 years, SRM shortfalls will continue to approximate \$3 billion annually as a result of our aging facilities. Exacerbating this situation is the fact that the Army has more facility infrastructure than we need. The cost of operating and sustaining these facilities directly competes with funding our warfighting capability. The realignment or closure of excess facilities will free funds for installations and bring the recapitalization rate closer to the Department of Defense's goal of 67 years by 2010. The Army is divesting itself of mothballed facilities and examining privatization alternatives. For example, we are capitalizing on the success of the Residential Communities Initiatives by expanding the program to 24 projects to more efficiently and effectively manage installations. Encompassing over 63,000 family housing units, the program allows the private sector to remodel, build, and manage housing on Army bases in order to provide the quality housing our soldiers and their families deserve. The fiscal year 2003 budget provides the military facilities and soldier housing needed to improve Army readiness, quality of life, and efficiency. In fiscal year 2003, we will institute a centralized installation management organization that will improve our facilities and infrastructure through consistent funding and standards that promote the equitable delivery of base operation services and achieve efficiencies through corporate practices and regionalization.

Force Protection

The missions and training we assign soldiers are not without risks, and soldiers must be able to live, train, and work in safe, secure environments. We minimize risks by proactively protecting our force. For example, we reevaluated force protection security programs and adjusted over \$800 million in fiscal year 2003 to further support controlled access to installations, in-transit security, counter-terrorism training improvements, information assurance, situational awareness, crisis response, and force protection command and control. An additional \$1.8 billion is required for further force protection and security program requirements generated in the wake of the attacks on America.

Readiness Reporting

Measuring readiness requires accuracy, objectivity, and uniformity. The Army is transforming its current readiness reporting system to achieve greater responsiveness and clarity on unit and installation status. The Strategic Readiness System (SRS) will provide senior leaders with an accurate and complete near real time picture representative of the entire Army (operating forces, institutional forces, and infrastructure). The SRS will be a predictive management tool capable of linking costs to readiness so resources can be effectively applied to near- and far-term requirements. A prototype SRS is being evaluated at selected installations, and its development will continue to ensure compliance with congressionally-directed readiness reporting.

Transformation

Transformation is first and foremost about changing the way we fight in order to win our Nation's wars—decisively. The 21st century strategic environment and the implications of emerging technologies necessitate Army transformation. The global war on terrorism reinforces the need for a transformed Army that is more strategically responsive, deployable, lethal, agile, versatile, survivable, and sustainable than current forces.

Technology will enable our soldiers to see the battlefield in ways not possible before. See first enables leaders and soldiers to gain a greater situational awareness of themselves, their opponents, and the battle space on which they move and fight. Superior awareness enables us to understand first, to assess and decide on solutions to the tactical and operational problems at hand faster than our opponents—to gain decision superiority over our opponents. Networked units are able to act first, to seize and retain the initiative, moving out of contact with the enemy to attack his sources of strength or key vulnerabilities at a time and place of our choosing. The Army uses precision fires—whether delivered by joint platforms or soldiers firing direct fire weapons—to defeat the enemy as rapidly and decisively as possible. Army units will be capable of transitioning seamlessly from stability operations to combat operations and back again, given the requirements of the contingency. When we attack, we destroy the enemy and finish decisively.

The Army is taking a holistic approach to transformation, implementing change across its doctrine, training, leader development, organization, materiel, and soldier systems, as well as across all of its components. Transformation will result in a different Army, not just a modernized version of the current Army. Combining the best

characteristics of our current forces, the Army will possess the lethality and speed of the heavy force, the rapid deployment mentality and toughness of our light forces, and the unmatched precision and close combat capabilities of our special operations forces—adopting a common warrior culture across the entire force. Transformation will field the best-trained, most combat effective, most lethal soldier in the world.

True transformation takes advantage of new approaches to operational concepts and capabilities and blends old and new technologies and innovative organizations that efficiently anticipate new or emerging opportunities. Transformation will provide versatile forces that have a decisive margin of advantage over potential adversaries and fulfill the Nation's full spectrum requirements. Transformed ground forces will dominate maneuver on the battlefield to gain positional advantage over the enemy with overwhelming speed, while enhancing the capabilities of the joint force. This approach will contribute to the early termination of the conflict on terms favorable to the United States and its allies. Transformation will exploit network-centric capabilities to enable rapidly deployable and sustainable Army forces to quickly and precisely strike fixed and mobile targets throughout the depth and breadth of the battlefield.

Transformation consists of three interrelated elements—the Objective Force, the Interim Force, and the Legacy Force. We will develop concepts and technologies for the Objective Force while fielding an Interim Force to meet the near-term requirement to bridge the operational gap between our heavy and light forces. The third element of transformation is the modernization and recapitalization of existing platforms within our current force—the Legacy Force—to provide these platforms with the enhanced capabilities available through the application of information technologies. Several important initiatives that should produce even greater advances in 2002 are the production, testing, and delivery of the Interim Force vehicle early this year, and the development of mature technologies to achieve Objective Force capabilities.

Digitization concepts tested and proved with the Legacy Force are being refined in the Interim Force and will be applied to the Objective Force. These efforts, along with planned training and testing and joint exercises—such as the U.S. Joint Forces Command's "Millennium Challenge 2002"—will enable the Army to stay ahead of current and future adversaries by providing the Nation and its soldiers with unmatched advanced capabilities. To achieve additional momentum, we will carefully concentrate research and development and acquisition funding on our most critical systems and programs.

The Objective Force

The end result of transformation is a new, more effective, and more efficient Army with a new fighting structure—the Objective Force. It will provide our Nation with an increased range of options for crisis response, engagement, or sustained land force operations. Instead of the linear sequential operations of the past, the Objective Force will fight in a distributed and non-contiguous manner. Objective Force units will be highly responsive, deploy rapidly because of reduced platform weight and smaller logistical footprints, and arrive early to a crisis to dissuade or deter conflict. These forces will be capable of vertical maneuver and defeating enemy anti-access strategies by descending upon multiple points of entry. With superior situational awareness, Objective Force soldiers will identify and attack critical enemy capabilities and key vulnerabilities throughout the depth of the battle space. For optimum success, we will harmonize our transformation efforts with similar efforts by other services, business and industry, and our science and technology partners.

By focusing much of its spending in science and technology, the Army will create a new family of ground systems called the Future Combat Systems (FCS). This networked system-of-systems—a key to fielding the Objective Force—will allow leaders and soldiers to harness the power of digitized information systems. The FCS will allow commanders to bring a substantial, perhaps even exponential, increase in combat capabilities to the joint force without a large logistics footprint. Newer technologies will be inserted into the FCS as they become ready. In November 2001, the solicitation for the FCS Lead Systems Integrator (LSI) was released to industry. In coordination with the Army and DARPA, the LSI will select the "best of breed" technologies, components, and sub-components through maximum competition among the sub-contractors. The Lead System Integrator is a new solicitation and acquisition strategy that will accelerate the Army's transformation and see the FCS first unit equipped and operational by 2010. We anticipate selection of the Lead System Integrator in March 2002. In the fiscal year 2003 budget, we invested 97 percent of our science and technology resources toward the design and development of the Objective Force and enabling technologies. With this funding level, the Army will begin fielding an Objective Force—this decade.

We owe our soldiers the best tools and equipment so they are not put at risk by obsolete or aging combat support systems. The Comanche helicopter, the Objective Force Warrior system, and command, control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR) initiatives are integral components of the network-centric operations of the Objective Force. They are the infrastructure that allows soldiers to do what they do best—fight and win our Nation's wars. Comanche will provide an armed aerial reconnaissance capability critical for gathering intelligence for coordinated attacks against targets of opportunity, and the fiscal year 2003 budget supports continued System Development and Demonstration and Mission Equipment Package Development, component development testing, and flight-testing. The Objective Force Warrior system will provide quantum improvements over our current soldier systems in weight, signature, information exchange capabilities, ballistics tolerance, and chemical, biological, and environmental protection for our individual soldiers on the battlefield.

Terrestrial systems alone will not enable full spectrum dominance. Space is a vertical extension of the battlefield and a key enabler and force multiplier for land force operations. Objective Force commanders will access and integrate the full spectrum of C⁴ISR and Information Operations capabilities, to include national agencies, strategic and operational units, tactical organizations, and joint or multinational forces. In short, commanders will draw upon a wide array of capabilities that enable not just overwhelming force projection, but the ability to out-think our adversaries.

Transporting and sustaining the Objective Force will require capabilities that are cost effective, that adhere to rapid deployment timelines, and that have a smaller logistical footprint over longer distances without jeopardizing readiness. Materiel readiness will be maintained at reduced costs by increasing inventory visibility, eliminating artificial ownership barriers, and integrating automated systems.

The Interim Force

The Interim Force is a transition force that bridges the near-term capability gap between our heavy and light forces. It will combine the best characteristics of the current Army forces—heavy, light, and Special Operations Forces. Organized into Interim Brigade Combat Teams (IBCTs), it will leverage today's technology with selected capabilities of the Legacy Force to serve as a link to the Objective Force. Most importantly, the Interim Force—a combat ready force—will allow exploration of new operational concepts relevant to the Objective Force. The Army will field at least six of these new, more responsive brigade combat teams. These units comprise an Interim Force that will strengthen deterrence and expand options for the field commanders. Over the past 2 years, we have organized two brigades at Fort Lewis, Washington, and additional IBCTs are programmed for Alaska, Louisiana, Hawaii, and Pennsylvania. Leaders and soldiers of the IBCTs at Fort Lewis, along with an Army coordination cell, have been working closely with all supporting agencies to develop wide-ranging iterative solutions to doctrine, training, logistics, organizations, material, and soldier systems required to field the Interim Force. The first IBCT has completed brigade and battalion level headquarters training with the Army's Battle Command Training Program and company level maneuver live-fire training across the spectrum of conflict. The IBCT is training extensively for restrictive and urban terrain, and the force has used special operations training techniques and procedures for the development of night and urban fighting techniques. This brigade will attain its first incremental warfighting capability—and infantry company—in August of this year, and its full initial operational capability in May 2003.

Training of the Interim Force is proving that the practice of combining heavy, light, and special operations cultures results in a more adaptable and capable leader or soldier. The Army has learned from experimentation that technology such as digitization allows the integration of intelligence data with tactical and operational information and gives our leaders and soldiers the ability to seize and retain the initiative, build momentum quickly, and win decisively. The Army is accelerating the development and fielding of the Interim Force and studying the viability of fielding an additional interim capability in the European area. The fiscal year 2003 budget continues funding of 303 Interim Armored Vehicles (IAV) in fiscal year 2002 and 332 in fiscal year 2003 for the third IBCT.

Legacy Force—Revitalizing The Army

Transformation applies to what we do, as well as how we do it. We are working with the business community to accelerate change across the entire Army, promote cooperation, share information, gain greater control over resource management, and adopt better business practices by eliminating functions or activities that no longer provide value. This initiative seeks to focus constrained resources on achieving ex-

cellence in areas that contribute directly to warfighting. Transformation of our business practices cannot wait, and we have started at the highest levels.

The Army is restructuring the Army Secretariat and Army Staff to create a more unified headquarters for the conduct of enhanced policy, planning, and resource management activities. The goal is to transform the headquarters into a streamlined, integrated staff more responsive to rapidly changing operational and institutional missions and to push more resources out to the field units. This will streamline the flow of information and speed decisionmaking. The unified headquarters will seek greater integration of the Reserve components into key staff positions to better accommodate issues and concerns. To minimize turbulence in the workforce, we will reinvest manpower savings in other Army priorities. Realignment initiatives already underway will help us meet the congressionally-mandated 15 percent reduction in headquarters staffs. With congressional support, the Army will apply these methodologies to the entire force.

As the Army transforms, the Legacy Force—our current force—will remain ready to provide the Nation with the warfighting capability needed to keep America strong and free. Through selective modernization and recapitalization, the Legacy Force allows the Army to meet today's challenges and provides the time and flexibility to get Transformation right. Effectively managing risk without sacrificing readiness, the Army is focusing resources on systems and units that are essential to both sustaining near-term readiness and fielding the Objective Force while taking prudent risk with the remainder of the force. Recapitalization rebuilds or selectively upgrades existing weapons systems and tactical vehicles, while modernization develops and procures new systems with improved warfighting capabilities. The Army has identified 17 systems—its Prioritized Recapitalization Program—and fully funded them in selected units. Among these systems are the AH-64 Apache, UH-60 Black Hawk, and CH-47 Chinook helicopters; the M1 Abrams tank; the M2 Bradley fighting vehicle; and the Patriot Advanced Capability-3 missile defense upgrade. Modernization provides the linkage to facilitate the fielding of the Interim and Objective Forces. The Crusader self-propelled howitzer will provide combat overmatch to our commanders until at least 2032 and serve as a technology carrier to the Objective Force. Recent restructuring initiatives have reduced Crusader's strategic lift requirements by 50 percent. Technology improvements have increased its range by 33 percent, increased the sustained rate of fire by a factor of 10, and utilizing robotics, reduced crew requirements by 33 percent. The fiscal year 2003 budget supports completion of the detailed design effort, completion of critical technologies integration and risk reduction efforts, powerpack/drive train integration of the chassis, and initiation of manufacturing of System Development and Demonstration prototypes. Modernized M1A2SEP tanks and M2A3 Bradley fighting vehicles are capable of the same situational awareness as the Interim Force, thus enabling soldiers and leaders to learn network-centric warfare on existing chassis. The advantage these information technologies provide our current force further enhance its warfighting capability. Army Aviation modernization efforts will reduce our helicopter inventory by 25 percent and retain only three types of helicopters in service, and the savings in training and logistics will be used to support the recapitalization of our remaining fleet. As part of its Legacy Force strategy, the Army terminated an additional 18 systems and restructured 12 in this budget cycle.

A COMMITMENT TO THE FUTURE

The Army, like the American people, remains committed to preserving freedom. As we have for over 226 years, we will continue to win our Nation's wars. Contrary to some expectations, the post-Cold War period has not seen a reduction in the demands placed on soldiers on the ground. In fact, since the fall of the Soviet Union, the international security environment has underscored the importance of ongoing commitments and highlighted new requirements for the Army. These increased demands have intensified competition for resources and reduced needed investments in people, systems, platforms, and research and development. Unless redressed, risks incurred from this resources shortfall could undermine the Army's ability to satisfy national security requirements. At the same time, the war on terrorism, the requirement to secure the homeland, and the need to maintain readiness for possible near-term contingencies have validated the need for a new kind of Army—a capabilities-based ground force that can fight and win battles across the full spectrum of military operations. We are accelerating Army Transformation to achieve these capabilities. The Army cannot predict what changes the future will bring, but what will not change is the need for our Nation to have the best trained, best led, and best equipped soldiers on the ground, deployed rapidly at precisely the right

time, the right place, and with the right support structure as part of a joint military team.

Mr. Chairman and distinguished members of the committee, 2½ years ago, the Army committed to transforming the way we will fight and win the new wars of a new century, and this committee elected to underwrite Army transformation. Today, the magnitude of what we have accomplished is staggering. With this submission, the Army buys its last heavy tank—confirmation of our sustainable momentum, and our move towards the irreversibility we seek to achieve in transformation. Thank you once again for this opportunity to report to you today on the state of your Army. We look forward to discussing these issues with you.

Chairman LEVIN. Thank you very much, General.
Admiral Clark.

**STATEMENT OF ADM. VERNON E. CLARK, USN, CHIEF OF
NAVAL OPERATIONS**

Admiral CLARK. Thank you. Mr. Chairman, Senator Warner, and members of the committee, good morning. I appreciate the chance to be with you today. Mr. Chairman, I have a written statement I would like to submit for the record. I will not go over that 14-page document, but will offer a few brief words, if that is all right.

Chairman LEVIN. All of the statements will be made a part of the record in their entirety. Thank you.

Admiral CLARK. This is an important day for our Navy because I get to come before this committee and talk about our Navy. That is why I appreciate the chance to do so, because it is about our Navy's men and women, and I want to thank each of you for your support, which has allowed us to keep our great Navy sharp, at the ready, and on the point today.

Sometimes these thank-yous are broad and generic, and I would like to sharpen them down to two points. I want to thank you specifically for the funds that you have provided for readiness, which have allowed us to turn around the decline we were experiencing. Second, I want to thank you for the numerous actions that this committee has taken and spearheaded to make our people ready. From compensation, to all aspects of quality of service, your actions have greatly strengthened our Navy, and I greatly appreciate it. It truly has made a difference.

Regarding Operation Enduring Freedom, we are realizing success in the global war on terrorism, and I believe that is due first of all to the dedication of our sailors, and second, to the manpower and current readiness investments supported by Congress. I also believe that Operation Enduring Freedom has proven once again why we have a Navy and the value of sovereignty. Via freedom of the seas, we are able to operate naval platforms in the far reaches of this world, take the fight to a distant enemy, influence events, and carry out American foreign policy.

Naval forces are flexible. Anytime and anywhere is not just a bumper sticker, and the thing I like best about our forces is that we do not need a permission slip from a foreign government to conduct operations around the world. Our forces are about precise combat operations every day, and our forces are about persistent combat power. When we show up, we are ready to go to work for the long haul, and this unique combination of independence, mobility, precision, and persistence, is, I believe, important to our 21st century military.

Finally, regarding Operation Enduring Freedom, I am gratified by the unprecedented levels of jointness being demonstrated every day in these operations. None of us can do this by ourselves. The four of us sitting at this table are a team that has been called by my commanders in the field "the best ever that they have experienced in their careers." I believe this is a real tribute to the Army, Air Force, Marine Corps, and Navy.

I want to say that the budget submission that went forward from my office to the Secretary of the Navy represents my recommendations and includes some real tough choices. It prioritizes current readiness and manpower over future procurement and infrastructure. The reason is that I believe that it is my task to ensure that today's Navy is ready to win. Today's Navy is ready to go to sea, fight, and win, and I believe that our Nation's security relies upon that.

Having said that, every one of us that are involved in this know that we must keep an eye on the future, and that means buying sufficient numbers of ships and airplanes to meet future threats. This is the biggest challenge that my Navy faces today. It is not just numbers. In addition to buying enough ships and aircraft, we must buy the correct ships and aircraft for our future fleet.

Transformation is probably an overused word today, but it is a very important word, and we are involved in transforming our Navy to the 21st century to meet the challenges of the 21st century. At the heart of that is the research and development that is involved in the DD(X) program. I believe this is our research and development future, and most importantly this family of ships is going to define the United States Navy for the next four decades.

But it is about more than just ships and aircraft, it is about organizational agility because lots of realignment is going on in our Navy; it is about better business practices; and it is about buying the right products. Toward that end, we have terminated seven programs in this submission and restructured 12 others over previous years to capture efficiencies and better focus the resources that we have. We are not done, for there is more yet to do.

In summary, Mr. Chairman, I believe America's Navy is performing superbly in this war that we are engaged in, and we are today concluding, in the year that just passed, a record-setting year in retention, the best I have ever experienced in my military career. We are winning the battle for people. Current readiness is vastly improved, and we are postured to capitalize on opportunities for the future.

So again, I thank this committee for your steadfast support for your United States Navy, and for your superb support to our sailors and their families. They are committed, and they are inspired by the knowledge that our Nation is unified behind their cause in the fight for freedom. These young men and women are serving with pride and dedication, and some, as you have mentioned, Senator Warner and General Shinseki, even to the last full measure of devotion, as most recently shown by our own Navy Petty Officer First Class Roberts, who was killed in action on Monday in Afghanistan. But we are winning this war.

Sir, I look forward to answering your questions.

[The prepared statement of Admiral Clark follows:]

PREPARED STATEMENT BY ADM. VERNON E. CLARK, USN

Mr. Chairman and members of the committee, I appreciate this opportunity to appear before you. Your support of America's Navy has been vital to accomplishing our missions around the world—including swift and effective response to the attacks of 11 September 2001. I speak for the entire fleet in thanking you.

I: THE UNITED STATES NAVY—PRESENCE . . . POWER . . . PRECISION

On 11 September 2001, U.S.S. *Enterprise* was returning from deployment when satellite television provided tragic images of deadly attacks at home half a world away.

Within moments, the "Big E's" rudder swept over and, using the forward presence and mobility unique to naval forces, headed for the Arabian Sea. By the next morning, *Enterprise* was within reach of Afghanistan, ready to launch and sustain precision strikes against dispersed enemies hundreds of miles from the sea.

Enterprise was not alone in taking prompt action. U.S.S. *Carl Vinson* steamed at high speed to join her on station while surface combatants and submarines prepared Tomahawk missiles for long-range strikes. U.S.S. *Peleliu's* Amphibious Ready Group cut short a port visit to Australia and sailed toward the Arabian Sea. U.S.S. *Kitty Hawk* prepared to leave its homeport in Japan to serve as an innovative Special Operations support platform.

At home, shipmates saved shipmates in the Pentagon and swiftly reestablished command and control. U.S.S. *George Washington* and U.S.S. *John C. Stennis* took station off the east and west coasts of the United States along with more than a dozen cruisers and destroyers, guarding the air and sea approaches to our shores. Shortly thereafter, the hospital ship U.S.N.S. *Comfort* arrived in New York City, joining the Military Sealift Command Ship U.S.N.S. *Denebola* in providing food, berthing, and medical support to firefighters and recovery workers toiling in the ruins of the World Trade Center.

In the weeks following 11 September, naval forces led the way. Tomahawk shooters suppressed enemy air defenses while carrier strike packages flew hundreds of miles beyond the sea, destroying the enemy's ability to fight. Nearly 60 U.S. Navy ships have participated in Operation Enduring Freedom thus far, and over 9,000 sorties have been flown over Afghanistan, many in conjunction with U.S. Air Force assets. Sustained from the sea, U.S. Marines, Navy SEALs, Seabees, and Joint Special Operations Forces worked with local allies to free Afghanistan from the Taliban regime and al Qaeda terrorist network.

Presence . . . Power . . . Precision. Our Navy's response to the events of 11 September is testimony to the dedicated service of our Active and Reserve sailors, and our Marine and civilian shipmates in the Department of the Navy. It underlines the mobility, lethality, and reach of naval forces. Most importantly, it shows our dedication to mission accomplishment. We stand ready to fight and win!

II. VIOLENT HORIZONS AND NAVY TRANSFORMATION

The global war on terrorism is but the first war of the 21st century. Violent horizons lie before us, harboring profound challenges including the threat of cyberwar, weapons of mass destruction (WMD), continued international terrorism, and the havoc accompanying failed states. Importantly, such threats do not replace the specter of state-on-state conflict. They add to the danger and uncertainty, providing new sparks to already combustible situations.

Today's world is more dangerous in many ways than that which existed when we faced the global strike and sea denial capabilities of the Soviet Union. To ensure future warfighting effectiveness in this uncertain strategic environment, sovereign naval forces are being transformed to better prevent crises and—should deterrence fail—project offensive and defensive power ashore to defeat all adversaries. To accomplish these missions, we are striving to realize major increases in operational mobility, lethality, speed, stealth, precision, and firepower.

We are transforming to become a 21st century Navy of awesome capabilities: strategically and operationally agile; technologically and organizationally innovative; networked at every level; highly joint; and effectively integrated with allies. Enhanced naval capabilities will include deterrence options spanning the full range of threats facing our Nation. The ability of on-scene naval forces to shape events and control crises by both kinetic and non-kinetic means will be of increasing importance as WMDs proliferate in the future.

Dispersed and independent naval forces will provide the Nation with global precision and persistent strike capabilities, poised to seize the initiative, drive operational timelines, and foreclose enemy options. Sea-basing of joint assets will be fun-

damental to this mission, providing sanctuary for friendly forces at sea, away from vulnerable cities and troop concentrations ashore.

Naval forces will provide maritime strategic defense—assuring access to troops and cargo, projecting air defenses overland in support of joint forces and allies, and serving as a critical part of homeland defense by operating alongside numerous agencies, especially the United States Coast Guard.

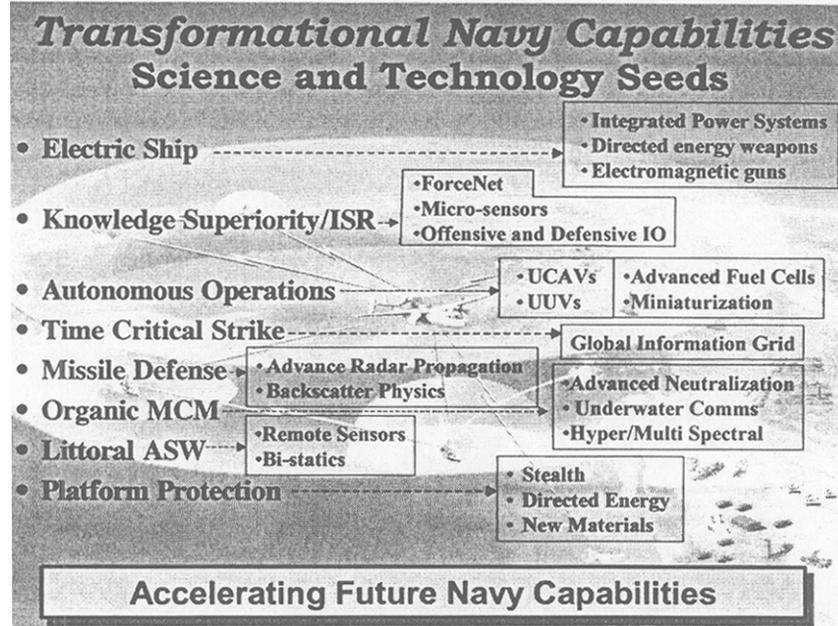
Our Navy is also dedicated to developing maritime-based information operations. Greater naval emphasis on information operations reinforces the larger transformation the U.S. military is undergoing in moving from the industrial age to the information age. Highly integrated, survivable, and redundant information systems are America’s asymmetric advantage, and naval forces provide critical nodes in our global information grid.

This family of shaping, offensive, and defensive missions will be enabled by network-centric warfare—the integration of sensors, information systems, platforms, and weapons to achieve major increases in warfighting effectiveness. Networks have been a Navy strength for decades and we are continuing to invest in this critical area.

Regarding platforms, 60 percent of the ships in the Navy today will be in the fleet in 2020. Thus, a significant portion of Navy’s transformation will occur within existing hulls, placing an emphasis on new systems and capabilities that can be inserted through modernization. These upgraded platforms will complement new ships and aircraft joining our fleet.

Examples of exciting new technologies that will accelerate our transformation toward a fully networked Navy include the DD(X) destroyer, SSGN strike submarine, Joint Strike Fighter, Unmanned Aerial Vehicles, Unmanned Underwater Vehicles, Tactical Tomahawk, Advanced Gun System, Theater Ballistic Missile system, Cooperative Engagement Capability, and Navy-Marine Corps Intranet, among others. These systems, in turn, will be employed in innovative ways via concepts validated in the Fleet Battle Experiment series coordinated by the Navy Warfare Development Command in Newport, Rhode Island.

Successful transformation will yield a dispersed and networked fleet that enhances deterrence, assures access, conducts precision strikes, gathers real-time intelligence, exercises joint command and control, and leverages the priceless advantage of sea control. In short, it will be a fleet that serves as the leading edge of America’s defense—around the world, around the clock.



III. NAVAL FORCES—LEADING EDGE OF AMERICA'S DEFENSE

The shaping, offensive, and defensive missions described in section II determine our Navy's posture, programs, and character. Expeditionary naval forces are central to the National Military Strategy and regional Commander in Chief (CINC) plans for combat operations. While some ships and squadrons are homeported overseas, most deploy rotationally for periods of 6 months in an 18–24 month cycle. This construct drives the Navy's force structure.

Forward-deployed naval forces—immediately employable, operationally agile, and capable of sustained combat operations against any adversary—are a critical part of America's defense. This has been especially true since the end of the Cold War, as the U.S. military has become a largely homeland-based force.

The United States withdrew two-thirds of permanently stationed military forces from Europe following the collapse of the Soviet Union. In the Middle East, all services fulfill presence requirements with rotational units. With the exception of Korea and Japan, Asian commitments are covered by naval forces or fly-away units from the United States. This draw-down of permanently stationed overseas forces amplifies the importance of the expeditionary Navy-Marine Corps team.

Accomplishing our missions has become steadily more challenging as the Navy's force structure declined 41 percent since 1991, from 538 to 318 ships. Yet the global war on terrorism has increased the call for forward-deployed naval forces. To support the war, we routinely have 85 ships deployed around the world.

In view of this larger requirement, we are investigating innovative methods of increasing the presence and striking power of naval forces. One construct is to complement Amphibious Ready Groups with surface combatants and submarines, producing Expeditionary Strike Forces equipped to destroy terrorist elements wherever they may be found.

We are also going to experiment with flexible manning techniques that may produce greater efficiencies in conducting prolonged on-station missions, such as guarding international straits or other locations of exceptional strategic value.

The Navy's contribution to the global war on terrorism is a vital component of our national effort to secure a safer world. It is stressing our force considerably, however. There is little elasticity in our force structure to allow for growth in the homeland defense, overseas defense, and offensive missions associated with the on-going campaign.

IV. MANPOWER AND CURRENT READINESS: SOLID PROGRESS

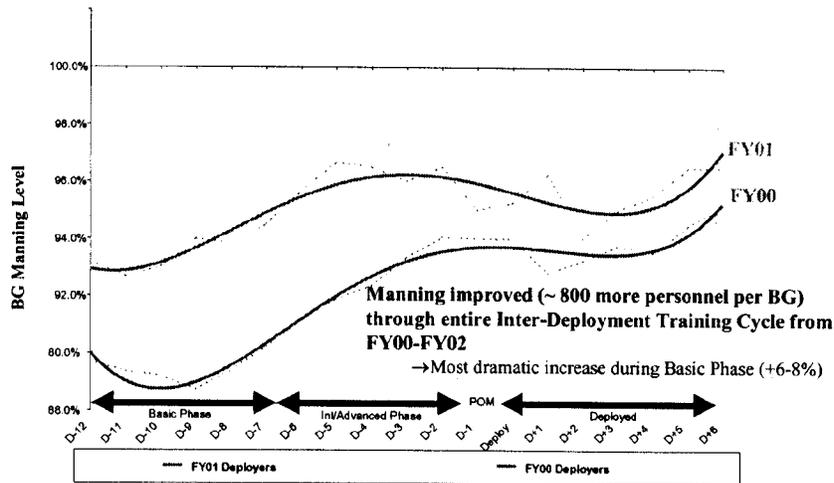
Thanks to superb leadership in the fleet—and the full support of the American people and Congress—our Navy is making solid progress in addressing long-standing issues, particularly concerning manpower and current readiness. These are the areas most vital to ensuring we have what it takes to win today.

Navy men and women are our most valuable resource and we must provide them with the tools and leadership to succeed. Improvements in compensation that Congress supported—bonuses, pay table adjustments, retirement reforms, and better medical benefits—are having the desired impact. The targeted pay raise and other initiatives in the fiscal year 2003 budget will reinforce these positive trends.

We are particularly grateful for congressional support of the Career Sea Pay program. Until fiscal year 2002, Career Sea Pay had not been increased since 1986, greatly eroding its value. Thanks to new authority granted by Congress, Career Sea Pay is now received by all sailors from the moment they report for sea duty, bolstering our retention efforts. An additional 25,000 sailors now receive Career Sea Pay.

These initiatives are paying off. Navy met its overall recruiting goals in fiscal years 1999, 2000, and 2001 and significantly improved reenlistment rates. This year, we are well ahead of the record-setting pace set in fiscal year 2001. Thanks to these successes, battle groups are deploying better manned than ever before.

Normalized BG Manning Levels



We are winning the battle for people, but important challenges remain. Officer retention in most line communities is below required levels, and recruiting shortfalls exist in officer specialty areas and critical enlisted ratings.

We are also dedicated to continuing the fight against attrition. The annual attrition rate for first-term sailors has been reduced from over 14 percent to 10 percent since 1998, retaining thousands of young men and women for service. We can do better, however. Concerned, involved leadership is central to minimizing attrition without compromising standards. To make this happen, I have directed Navy leaders to take every measure to ensure their people succeed and prosper.

Key to achieving that goal is cultivating a command climate throughout the Navy that offers plentiful opportunities, encourages participation, and is conducive to personal and professional growth. We are also striving to minimize the increased war-time operational tempo of the fleet via careful planning and innovative training. This is the first time in history that the services have faced a prolonged conflict with an all-volunteer force, and we must protect the integrity of our fleet.

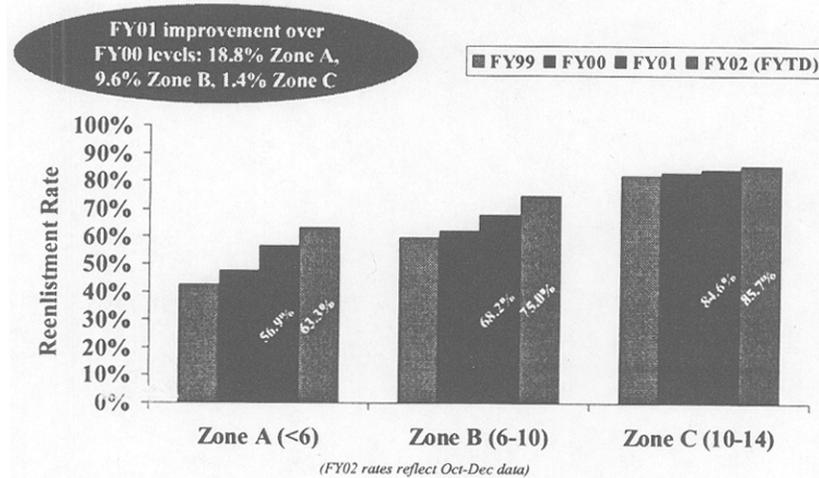
A major initiative aimed at strengthening the professional development of sailors is Task Force EXCEL (Excellence through our Commitment to Education and Learning), which is leading a revolution in Navy training. This effort will leverage new delivery mechanisms including distance learning technologies and an enhanced Navy information exchange network to provide a career-long training continuum for our sailors.

Additional specifics regarding progress being made in manpower and current readiness follow:

- Sailors are staying in the Navy and more are being advanced. The year 2001 was a record year for retention. We retained 57 percent of all eligible sailors at the end of their first enlistment, 68 percent of sailors with 6–10 years of service, and 84 percent of sailors with 10–14 years of service. More than 1,512 sailors were advanced in 2001 than the year before.

Navy Enlisted Reenlistment

...the percentage of Sailors at a career decision point who choose to stay Navy



- Pay is improving. In 2001, Congress provided the biggest base pay raise since 1981 and started reducing out-of-pocket expenses for housing. Our people are also being compensated for their valuable experience and skills via special and incentive pays, and retention bonuses.
- Sailors can invest in their own future. The new Thrift Savings Plan (TSP) provides a tax-deferred wealth-building vehicle to help military personnel achieve financial security. Navy leads all services in TSP enrollment.
- More readiness money is flowing to the fleet. Our priority is to take care of the Navy our Nation's taxpayers have already purchased. Fiscal year 2002's budget adds over \$5 billion to Navy readiness accounts over fiscal year 2001 levels.
- Combat readiness is improving. Fifty percent of additional funding the Department of the Navy received in fiscal year 2002 was devoted to enhancing current readiness, while 25 percent was directed toward Research and Development. Average readiness scores for our airwings improved by 8.2 percent from fiscal year 2000 to 2001.
- Ships and aircraft joining the fleet are the best in the world. In 2001, U.S.S. *Ronald Reagan* was christened and U.S.S. *Iwo Jima* was commissioned. Production is gearing up on more *Arleigh Burke* class destroyers, *Virginia*-class submarines, F/A-18 E/F strike fighters, MH-60S helicopters, and other outstanding programs.
- Innovation is central to our Navy. The new surface warfare family of ships will provide firepower across the full spectrum of 21st century operations. Our Navy also remains committed to Ballistic Missile Defense, working together with the new Missile Defense Agency to accomplish this vital mission.
- Transformational capabilities are being realized, including Cooperative Engagement Capability (CEC), the E-2 Radar Modernization Program, Tactical Tomahawk, Active Electronically Scanned Array (AESA), Advanced Targeting Forward-Looking Infrared (ATFLIR), Advanced Rapid Commercial Off the Shelf Insertion (ARCI), and the Enhanced Range Guided Munition, to name just a few.
- Experimentation has shifted to the waterfront. The Navy Warfare Development Command in Newport has been placed under Commander, Fleet Forces Command to strengthen the fleet's impact on innovation and experimentation.

V. THE POWER OF ALIGNMENT

Proper alignment is critical to ensuring our organization, systems, and processes deliver a combat-capable Navy that remains ready to sail in harm's way. Toward that end, we reorganized the Navy Staff so that a Deputy CNO is focused exclusively on Fleet Readiness and Logistics, while another Deputy CNO is dedicated to Warfare Requirements and Programs.

On the waterfront, we strengthened coordination between the Atlantic and Pacific Fleets by creating Commander, Fleet Forces Command. We also streamlined leadership of naval aviation, surface, and subsurface forces by establishing Fleet Type Commanders to lead each of those communities. These initiatives will improve operational performance by allowing us to more accurately determine requirements, enhance readiness, and maximize investment effectiveness.

We must, at every level, ensure our Navy is functioning as effectively and efficiently as possible. The Secretary of the Navy has made the incorporation of better business practices a major tenet of his plan of action. I share his dedication to this cause. Programs such as the Enterprise Resource Planning Group and Business Initiatives Council are central to this mission. These efforts are aimed at obtaining more accurate requirements forecasting, enhanced stability in program execution, greater efficiency in system design and production, and improved expenditure discipline in infrastructure maintenance and renewal.

Achieving these goals will provide the taxpayer with a fuller return on the investment dollars they entrust to our Navy for their defense.

VI. CHALLENGES: FUTURE READINESS AND INFRASTRUCTURE

These successes in manpower and current readiness mark important progress in strengthening our Nation's defense. Yet challenges remain, particularly in the areas of future readiness and infrastructure. Current aircraft and ship procurement rates will, if continued, result in a Navy numerically smaller than today's, and significantly smaller than that needed to sustain the war. Such a fleet would be an invitation to greater operational risk and international instability.

The global war on terrorism has levied new demands on our Navy, emphasizing the need for fleet units to confidently meet the challenges of an uncertain world on short notice. We must be able to conduct combat operations anytime, anywhere with maximum effectiveness and minimum risk, including in the homeland defense role.

Key to achieving this goal is minimizing the loss of readiness that occurs between deployments. For too long, the readiness of deployed forces has been achieved at the expense of the non-deployed segment of our force structure. Although we have made progress in correcting shortfalls, many non-deployed units are still operating below satisfactory readiness levels, making it difficult to meet operational standards, fulfill homeland defense missions, and complete predeployment requirements.

The age of our equipment is a major part of this problem. Many amphibious ships and our fleet command ships are reaching the end of their service lives. Such units often require unscheduled maintenance, diverting funds obligated elsewhere. These actions, in turn, produce maintenance backlogs that we cannot afford operationally or financially.

Additionally, ships reaching service mid-life, like some of our AEGIS cruisers, require modernization to be operationally viable in the future. Funds to complete this type of modernization have not historically competed successfully against other recapitalization requirements. We must change this mindset.

Naval aviation, in particular, faces profound challenges. Our aviation force now contains the oldest mix of type/model/series aircraft in naval history. To provide context, naval aircraft are on average 2 years older than our ships. Yet these aircraft are being tasked to unprecedented levels in the global war on terrorism.

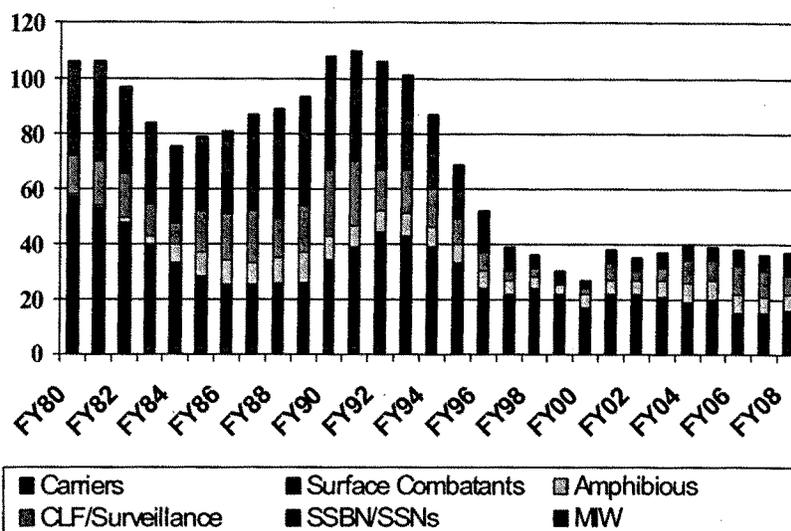
Naval aviation was under stress even before the current conflict. As a result, the F/A-18 force has been flown well in excess of planned utilization rates. More than 300 F/A-18 aircraft will require service life extensions earlier than planned. Similar situations apply to F-14s, EA-6Bs, P-3Cs, SH-60s, and virtually every other aircraft in the fleet.

One way to address the problems facing naval aviation is to introduce new aircraft into the fleet as soon as possible. Toward that end, the fiscal year 2003 budget provides some relief, although the 83 aircraft being requested do not come close to the level required to sustain today's fleet at its present level.

While our combatant fleet is, on average, fairly young, the rate of ship recapitalization bears watching. The following chart illustrates the dramatic decline in authorized ships since 1980.

SHIPS & SUBMARINES UNDER CONSTRUCTION

Fiscal Years 1980-2008



We must buy an average of 180–210 aircraft and 9 ships a year starting in the later years of the FYDP to sustain today's fleet. As noted, we are procuring significantly less than that. We will procure just 5 ships and 83 naval aircraft in fiscal year 2003.

The impact of the current procurement rate goes beyond force levels. It adversely affects the stability of our defense industrial base, and we are paying a premium in program cost due to the small number of units being built.

Still, we are investing in impressive programs that will comprise the core capability of our force in the coming decades. DD(X), CVN(X), JSF, FA-18 E/F, LPD-17 and the *Virginia*-class SSN present impressive technological leaps in warfighting capability, innovation, and reliability. Program specifics include:

DD(X)/CG(X)/LCS. Maritime dominance in the 21st century requires a naval force capable of projecting power and defeating anti-access threats. To accomplish these missions, the future surface naval combatant force will consist of four elements: DD(X) advanced multi-mission destroyers that provide precision strike and volume fires; CG(X) advanced cruisers to achieve sustained air superiority against airborne threats and ballistic missiles; agile Littoral Combat Ships (LCS) to defeat enemy defenses such as mines, small boats, and submarines; and today's AEGIS fleet kept current through the insertion of developing technologies. Cutting-edge systems integral to this family of ships include the Advanced Gun System, Multi-Function Radar/Volume Search Radar, Integrated Power System electric drive, and revolutionary hull forms.

CVN(X). The fiscal year 2003 budget provides RDT&E and advance procurement for the first CVN(X). CVN(X) will replace U.S.S. *Enterprise* in fiscal year 2013, when that ship is in her 52nd year of commissioned service. Design objectives for the CVN(X) class include a significant reduction of total ownership costs during the carrier's 50-year expected service life, reduced manning, and incorporation of a flexible infrastructure that will allow the insertion of new capabilities as they evolve.

JSF. The Joint Strike Fighter contract was signed in 2001. It will provide an aircraft with unprecedented stealth and range to the fleet as part of a family of tri-service, next-generation strike aircraft with an emphasis on commonality and technological superiority at an affordable price. The fiscal year 2003 budget supports procurement of the initial variant in fiscal year 2006.

F/A-18 E/F. The F/A-18 E/F will replace older F/A-18s and all F-14s. There is extensive commonality of weapons systems, avionics, and software between F/A-18

variants, and the infrastructure supporting the Super Hornet builds upon existing organizations.

LPD-17. We are not requesting additional LPD-17-class ships in the fiscal year 2003 budget due to design and production challenges with the lead ship. We remain fully committed to the program, however, as it supports vital littoral warfighting requirements and promises relief from the escalating costs of our aging amphibious ships. The twelve projected LPD-17s will replace four older classes of ships and serve as central elements of future Amphibious Ready Groups. We need to accelerate development as rapidly as design and production facilities will allow.

Virginia-class submarine (SSN-774). This class will replace *Los Angeles*-class (SSN-688) attack submarines as they leave the fleet. SSN-774s are designed for multi-mission littoral operations, as well as traditional open-ocean anti-submarine and anti-surface missions. They will also incorporate new technologies as they become available, ensuring future effectiveness. The fiscal year 2003 budget procures one submarine per year and continues RDT&E. This pace of procurement will have to be increased beyond the current FYDP to maintain the required attack submarine force level over the long term.

Infrastructure. Sustaining quality infrastructure is an important part of ensuring future readiness. Unfortunately, Navy's shore infrastructure condition is unacceptable. We face an annual facility sustainment cost of \$1.3 billion to keep our infrastructure from deteriorating, which we are not meeting. It will cost an additional \$1.7 billion annually to correct C-3 and C-4 deficiencies and recapitalize our infrastructure at the DOD-mandated 67-year rate. Still more funding will be required to move sailors ashore who currently live onboard ships.

Meeting these challenges requires consistent total facility life cycle investments and finding innovative ways to reduce our facility footprint. While the fiscal year 2003 budget makes modest increases in sustainment, restoration, and modernization (SRM) and military construction accounts, there is much left to be done. We are studying this problem and are working on a plan to provide out-year funding to help mitigate these significant challenges.

VII. CONCLUSION

Our national leaders have repeatedly told the American people that the war against terrorism will be neither easy nor short. In addition to targeting international terrorist networks, the President singled out states sponsoring terrorism for military action should they threaten international peace.

This struggle promises to be global in scope and simultaneous in execution. It will require the full might of America's Armed Forces. In pursuing victory, the United States Navy—forward deployed, highly capable, and poised for action—will play a leading role.

I thank the committee for your continued strong support of our Navy and our sailors. Working together, I am confident that we will win the global war on terrorism, leading to a more stable and peaceful world.

Chairman LEVIN. Admiral, thank you very much.
General Jones.

STATEMENT OF GEN. JAMES L. JONES, USMC, COMMANDANT OF THE MARINE CORPS

General JONES. Thank you, Mr. Chairman and members of the committee. I am very honored to be here today to present our budget request for fiscal year 2003. Before I do that, I would like to just say a few words about where your Marine Corps is today. Thank you very much for your focused application of resources that has enabled us to achieve the highest state of readiness across the service by any measurable index in the last 10 or 12 years.

As a result of this application, we are very secure in who we are and what we do. We are an expeditionary force of combined arms that is rotational in nature and draws on our partnership with the United States Navy. Our naval heritage is very important to us. We come from the sea, and I believe that sea-basing issues will be the subject of great discussion starting from this hearing on. We are a stable culture as a result of your wise investment. We have

a recruiting success that goes back 6½ years. We have a retention statistic that I think is admirable, if not astounding. Our young people are, in fact, not only joining us, but staying in at record numbers, and we are very pleased with the stability of our culture.

This happy state of affairs shows in our mission execution profile. Our rotational base is stable. People are not leaving as a result of being overworked or overstressed, although they are working very hard. We have been able to make some significant and impressive modernization steps for the first time in a number of years, and every now and then you get tested and asked to see if you can perform. We were tested following September 11 in the North Arabian Sea, when the Commander in Chief, Central Command asked the First Marine Expeditionary Brigade, composed of two Marine Expeditionary Units, to proceed to Camp Rhino in Kandahar. We did this at distances that were very challenging to us, but for which we have prepared for for many years.

That mission was successfully executed. We displaced two Marine Expeditionary Units in a landlocked country at distances ranging up to 400 miles and beyond. I would like to pause for a moment and introduce to you Brig. Gen. Jim Mattis, who was the commanding general of that brigade. Many of us saw him daily on CNN. Jim, would you please stand?

Chairman LEVIN. Welcome, General.

General JONES. He just returned home a couple of days ago. [Applause.]

Senator Warner drew some very evocative historical analogies, but I would give you one to show you the possibility of transformation. Jim Mattis led a Marine Expeditionary Brigade headquarters, which was composed of 56 people. Ten years ago that would have been 356. Twenty years ago it may have been 600. He had 56 people to lead a force of 4,400 marines from the sea, inland. He had to establish not a beachhead, but a position inland that was supportable, sustainable, and very precise in the application of power.

An interesting conclusion of this experience for me, and a very satisfying one, is that not only are the four of us at this table professional colleagues, we are also all good friends. We are almost on a first-name basis. [Laughter.]

What was really interesting to me in Operation Enduring Freedom was the synergy between the forces; the wonderful Special Forces who went in first; the marines who came in right on their heels and operated seamlessly, almost effortlessly, and without any difficulty; the ability to deliver precise fire power from the air; the ability to reinforce, to conduct massed casualty evacuations when necessary; the ability to recover downed aircraft in partnership with Special Forces and with the United States Navy, who were supporting us from the sea; and the transition to the arrival of the Army forces, the conventional forces again. These seamless transitions show that those who would suggest that the joint force of today are not organized, trained, and equipped to fight are really not doing their homework, because we are, and we celebrate that every single day.

The Joint Chiefs of Staff spends a lot of time talking about how we can make the mission work for the Nation. That is the first

order of business, not service priorities, and I am very proud to be part of a team that does that.

So we get our forces to the joint line of departure. They are trained, ready to perform, and ready to move on to other missions, and I suggest in the global war on terrorism we will need more of that in the future. I pledge to you we will continue to be full partners in making this a reality.

The issues of sovereignty are going to confront our forces in the global war on terrorism, and in fact are going to be ever-present in the 21st century. Sea-basing, as the CNO alleged, offers a way to take our Nation's sovereignty to those areas of the world that we are concerned about, and to be able to react in a capable and quick way to do those things that the Nation wants us to do.

Sea-basing will be an important aspect in our future discussions, and I am excited by some of the programs that the Navy is pioneering and the Marine Corps are helping with. One is the high-speed surface vehicle that we are currently testing off of Okinawa, which is a commercial vehicle today, but leased to us for experimentation.

For example, I can transport a full battalion of marines and all of their equipment from Okinawa to Guam in less than 2 days, at a fraction of the cost that we have had to expend regularly for strategic airlift. Those aspects of sea-basing and innovative ideas for the future will be transformational in terms of how we use and deploy our forces in the future.

The 2003 budget does some great things for your Marine Corps. In addition to increasing operations and maintenance, manpower accounts, and research and development, we have been able to achieve a 20-percent increase in our family housing spending. We have some exciting public-private ventures that are going to result for the first time in the ability to modernize our housing at Quantico, which we are very excited about. Starting in 2003, it is conceivable that, with your support, we will be able to rebuild every single house at Quantico, and that is something that has needed to be done for a long time.

We have had real program growth in the operating forces in our bases and stations that this project will provide, and the budget for the Marine Corps is a transformational gateway. For me, transformation has several components. It certainly has a leap in technology component, such as the tilt-rotor technologies, the Advanced Amphibious Assault Vehicle (AAAV), and the Joint Strike Fighter.

There is institutional transformation that we are, in fact, implementing right now, such as the way we manage the all-volunteer force. There is also operational transformation, which I just described to you, giving the example of a command element manned by only 56 people. These are tremendous transformation and logistics concepts, which will preclude us from having to stockpile our supplies on the field of battle and provide reach-back capability for fire power and delivery that significantly reduces the size of the headquarters that we need on the ground. Finally, I would suggest that base business and acquisition reform is absolutely essential to transformation, because if we cannot use our resources more efficiently, judiciously, and make quicker acquisitional decisions, then we are not going to be making the best use of the taxpayer's money.

We acknowledge a shortfall in the ability to turn around our ship constructions. I remain concerned that amphibious lift is still not as robustly enhanced as we would like it. The goal is 3.0 Marine Expeditionary Brigades assault echelon equivalence. We will need to recapitalize our maritime preposition forces towards the end of the decade. We have a paucity of fire support both from the sea and on land. We have plans underway to correct those shortfalls.

I would close by just asking for your continued support in a level sustainment of resources. The thing that makes life extremely difficult is the peaks and valleys. I testified 2 years ago that I thought a sustained investment of between 3½ and 4 percent of the GDP for a global power of this economic might is a reasonable goal to shoot for. I am gratified to see that the budgets are moving in that direction. I think the key for the future is to keep it at that level. I thank you, Mr. Chairman. It is a great pleasure to be here.

[The prepared statement of General Jones follows:]

PREPARED STATEMENT BY GEN. JAMES L. JONES, USMC

Chairman Levin, Senator Warner, and distinguished members of the committee; it is my pleasure to report to you on the state of your Marine Corps. On behalf of all marines and their families, I want to thank the committee for your continued support. Your commitment to increasing the warfighting and crisis response capabilities of our Nation's Armed Forces and to improving the quality of life of our men and women in uniform is central to the strength of your Marine Corps. As a result, your Corps was ready when called upon on September 11, 2001. We thank you for your effort in ensuring that marines and their families were poised to respond to the Nation's call in the manner Americans expect of their Corps.

The direction of the Corps is confident, clear, and unambiguous. The Corps understands its role as a force in readiness, but also realizes that the world is changing. For 226 years, marines have always been innovators in order to be ready for the next war. To assure success, we continually strive to be capable of rapidly adapting to new circumstances inasmuch as we recognize that the future is unpredictable.

The President's fiscal year 2003 budget enables the Navy-Marine Corps team to fight today's war on terrorism and transform itself to be ready for future challenges. This budget funds our 4th Marine Expeditionary Brigade anti-terrorism efforts, includes pay raises and new combat uniforms for our marines, and provides increased health care for our retirees. It also allows us to harness the new capabilities found in tilt-rotor technology and short take-off and vertical landing aircraft. We have increased funding for our operating forces in day-to-day operations, training, equipment maintenance, and force protection. Additionally, our bases and stations are sustained by the President's budget, which improves such critical areas as family housing and bachelor quarters. Furthermore, this budget's investments in ground equipment, ammunition, and research and development will help us recover from prior year shortfalls.

Marines have a vision for the future, and we are moving forward with the modernization and transformational efforts needed to make this vision a reality. We fully understand that our vision cannot be achieved independently of our sister services. Each of us has our own critical role to play in providing for our collective security. It is important that each of our contributions be, simultaneously, both unique and complementary. In particular, the Corps stresses the importance of our key partnership with the Navy. The Navy-Marine Corps team has never been stronger, nor more necessary for our country. In fact, the essence of our combined power is our teamwork.

Americans have relied upon the Navy and Marine Corps team to protect and promote the interests of the Nation since our creation by the Continental Congress in 1775. After helping to win American independence, naval services acted time and again to ensure our freedom and set in motion the ascendancy of our Nation as a global power under the banner of democracy and its potential. During the darkest hours of our history, the Navy and Marine Corps team has remained the most useful and most frequently used expression of our Nation's interests in forward presence and crisis response. Those of us who are privileged to serve in the naval services today have inherited a legacy that we are dedicated to preserving. Together we

will continue to flourish, due to steadfast appreciation of our heritage and a commitment to a tradition of continuous innovation and change.

Teamwork is the bond that forever joins our services and is the key to our enduring success. We have progressed from wooden ships of sail, with embarked marines, to modern networked Naval expeditionary strike forces that are forward deployed and full spectrum capable. We are a combined-arms force capable of ensuring America's access, including sustainable forcible entry operations to distant inland areas and austere locations. Always moving forward, we are incorporating advanced technologies to increase our capabilities to include exploiting the tremendous potential of sea control and power projection. Our innovation is not limited to equipment and weapons systems, but is also reflected in the development of new operational concepts and organizational evolution. When crises emerge, the Nation can depend on the Navy and Marine Corps Team.

Today, I will describe the Marine Corps' relevance to the current security environment as well as our future role as America's sea-based, expeditionary, combined-arms force. I will also address the Marine Corps' role as the Nation's medium-weight expeditionary force, bridging the gap between America's Special Operations Forces and the Army's critical land war-winning capability. The preponderance of this statement will focus on the Marine Corps' transformation plans and our vision for the 21st century.

I. THE MARINE CORPS' RELEVANCE: POWER PROJECTION FROM THE SEA-BASE

For the United States to provide its citizens with security and prosperity at home and abroad it must continue to lead the effort in maintaining international stability. One only need consider the events of September 11, and the fact that 30 percent of the United States Gross Domestic Product is directly related to global trade, to realize that America's well-being is inextricably linked to the international order. America must continue to establish and lead efforts to maintain stability around the world. This challenge requires the integrated application of all elements of national power: economic, political, diplomatic, cultural, intellectual, technological, and military. Working in concert with the other components of national power, our Armed Forces perform a vital role in establishing and maintaining conditions that directly affect global stability and America's security and prosperity. History shows that our men and women in uniform play a pivotal role in our Nation's international credibility. It is not an exaggeration to claim that our Nation's most important gift to world order is found in the service of our young men and women in uniform. Before anything good happens in the world, they are there establishing the framework for peace and stability.

Inasmuch as global stability is intrinsically tied to America's relationship with other nations in the world community, the United States benefits significantly from military to military relationships around the globe. However, as nations continue to raise issues of sovereignty, especially during a crisis, we must find new ways to conduct our Nation's necessary engagements and have the means to respond to crisis without being excessively restricted by geo-political issues. In the 21st century, we are likely to see a change in the number and type of large, quasi-permanent American bases around the world as defined by the post-Cold War era. We must begin to develop alternatives to ensure that we are able to maintain our peacetime presence and our crisis response capabilities. Twenty first century basing initiatives are issues that will have to be addressed in the near future.

We cannot deter aggression, nor defeat future adversaries, solely with military capabilities based at home. Regional engagement requires presence, and there is no such thing as truly effective "virtual presence." The inherent mobility and flexibility of Naval forces in providing off-shore basing options is an effective counter to increasing limitations to access and basing rights. America's stabilizing influence overseas is contingent upon our ability to deploy, employ, and sustain persistent military forces from the sea. Indeed, the Navy-Marine Corps team's sea-based power projection capabilities are a cornerstone of our military's contribution to our enduring security and that of our allies.

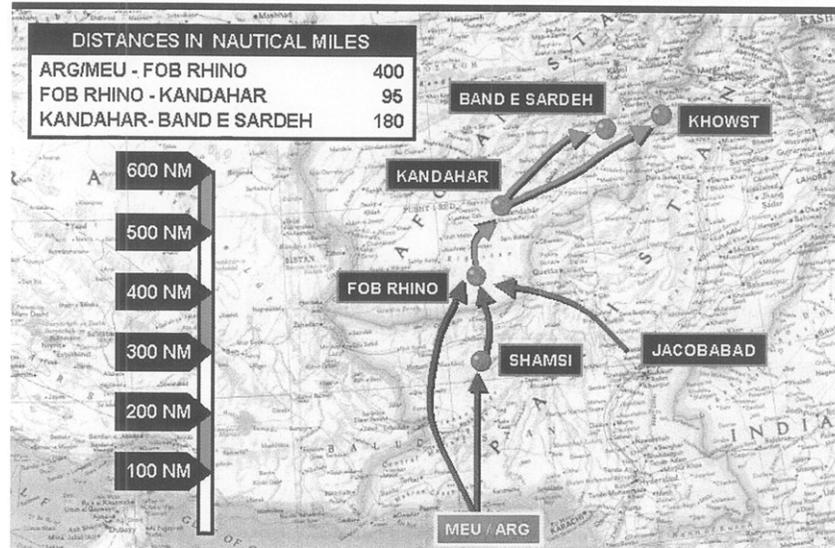
Sea-based capabilities provided by the Navy-Marine Corps team are an important means for America to cultivate its relationship with the world, providing the advantage, both in peacetime and in crisis response operations, of being able to control the size of our "footprint" ashore. Sea-basing also provides the operational advantages of force protection, operational maneuver space, and the sanctity of sovereign platforms from which we can engage adversaries.

The Navy-Marine Corps team's sea-based capabilities have been re-validated over the past several months. In Afghanistan, sea-based Naval forces provided a signifi-

cant portion of tactical air sorties and the initial deployment of major, sustained ground force presence, reaching over 600 miles inland. [See Figure 1]

Operation Enduring Freedom has also proven the value of the Navy-Marine Corps Team as an important element of a joint force.

SHIP TO OBJECTIVE MANEUVER (STOM)



[Figure 1]

Important contributions were made through Marine integration with Special Operations Forces, the Army, and the Air Force in the areas of intelligence, surveillance, and reconnaissance capabilities to long-range strike and close air support capabilities. The Marine Corps has demonstrated that the Marine brigade a flexible, medium-weight, combined arms, expeditionary force is not only responsive, but also a full and effective partner in joint and coalition operations.

II. THE MARINE CORPS' ROLE: A SCALABLE, SUSTAINABLE, FORCIBLE ENTRY FORCE

The Marine Corps provides our Nation and its Joint Force Commanders the full scope of military capabilities required to respond to the broad spectrum of threats and potential missions that confront America's Armed Forces today and in the future. For 6 percent of the Department of Defense's budget, the Marine Corps provides 20 percent of our Nation's ground combat maneuver battalions, tactical fixed-wing aircraft squadrons, and attack helicopter squadrons, as well as one-third of its Active Duty combat service support.

If there is a lesson to be learned from ongoing operations in Afghanistan, it is that there is tremendous power and capability in the diversity of our Armed Forces today. Joint Force Commanders must have the fullest possible range of options and capabilities available in order to apply the desired effects, both lethal and non-lethal, in any given scenario. Indeed, the flexibility and robustness of America's Armed Forces is a product of the varied and unique capabilities each service contributes to our Nation. Accordingly, our capabilities need to be complementary, not duplicative, if we are to provide the diverse and versatile capabilities needed to confront the uncertain threats of the future. Together, our joint force forms a mosaic of integrated capabilities to defeat the myriad threats and challenges we may face today and tomorrow. Enhancing these capabilities across the force is in the national interest.

Marine Air-Ground Task Forces have proven their utility in meeting challenges and exploiting opportunities. The versatility of the Marine Expeditionary Brigade is

emblematic of the scalability of our Marine Air-Ground Task Forces. In size and capability, these brigades are midway between our “light” Marine Expeditionary Units and our “heavy” Marine Expeditionary Forces. Furthermore, our Marine Expeditionary Brigades can either deploy on amphibious shipping or be airlifted into a theater of operations to link up with equipment and supplies aboard Maritime Prepositioning Ships.

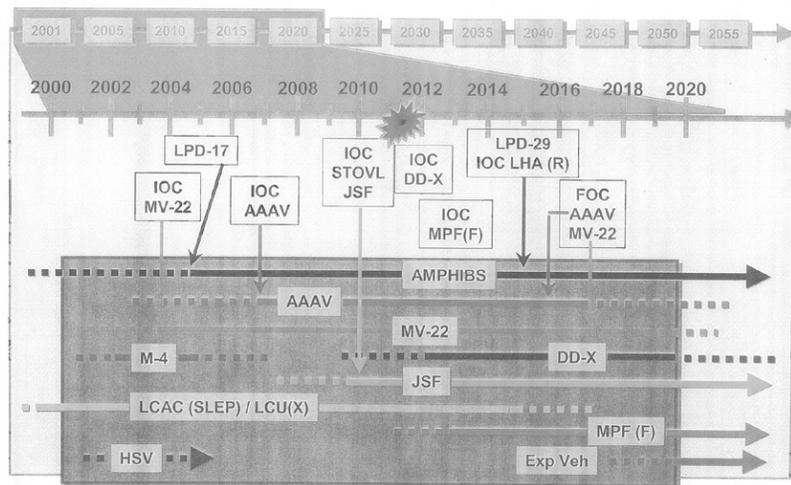
While the global war on terrorism has demonstrated the current capabilities of the Navy-Marine Corps Team, our continuous transformation and modernization promise even greater future capabilities for the Marine Corps. Transformation is an ongoing process, however, not an end-state. It spans decades of innovation and experimentation. It is also not limited to technology, but includes change in our organizational structure, operational concepts, and business practices.

The Marine Corps has always been at the forefront of transformation and innovation. Throughout our history, the Marine Corps has changed and evolved from ship security, to naval constabulary, to light infantry, to an amphibious assault force, to an air-ground expeditionary team. In the past, our development of close air support, amphibious warfare, vertical envelopment, short take-off and vertical landing technology, and maritime prepositioning have benefited our joint warfighting capability. Today, the Marine Corps remains true to its warrior culture and continues in a tradition of change. Drawing on our history of transformation, the Marine Corps is moving forward with new concepts, innovation, and exciting experimentation. Our focus is on the creation of new capabilities, which will yield the operational advantages we seek to have in dealing with future conflicts.

III. THE MARINE CORPS’ TRANSFORMATION: CONCEPTS, TECHNOLOGIES, AND ORGANIZATIONS

Although many think of transformation primarily in terms of weapons systems, true transformation results from a synthesis of new technologies with strategic vision, revolutionary operational concepts, and agile, adaptive organizations. Clearly, we must harness the potential military benefits of rapid advances in technology. The V-22 Osprey is but one example of the potential of proven transformational technology. The path to transformation involves a robust program of experimentation with new concepts, capabilities, and operational prototypes while actively pursuing forward-looking science and technology efforts. As we experiment and introduce new capabilities, we will rapidly mainstream the changes into our ready forces. [See Figure 2]

CONVERGENCE OF OPERATIONAL CAPABILITIES



A. TRANSFORMATION OF OPERATIONAL CONCEPTS AND BETTER BUSINESS PRACTICES

Technological innovation plays a paradoxical role in military transformation. With each problem it solves, technological innovation tends to introduce new challenges and opportunities. Operational concepts can offset these tensions by finding the means to capitalize on technological strengths and also guard against creating new weaknesses. In light of heightened fiscal awareness and the need to be effective with our resources, we must reform our business practices to maximize available resources and develop more expedient means of fielding programs and equipment. With this in mind, the Marine Corps is committed to transforming its operational concepts and business practices.

The ongoing process of conceptual change is embodied in the recent publication of our overarching concept, Expeditionary Maneuver Warfare. It is the foundation for the way the Marine Corps will conduct operations in the 21st century. Expeditionary Maneuver Warfare is the union of our core competencies, maneuver warfare philosophy, expeditionary heritage, and the concepts by which we organize, deploy, and employ forces. It emphasizes the unique and proven capabilities the Marine Corps provides Joint Force Commanders and the synergy created when leveraged with the complementary capabilities of other services and agencies. These capabilities translate into power projection designed to promote global security and reassure our allies and friends, while deterring and defeating adversaries and potential foes.

Central to our conceptual transformation is the potential power represented in a future integrated sea-base. At-sea arrival and assembly, selective off-load, and at-sea reconstitution capabilities stand to revolutionize the way Naval forces project power and influence around the globe. Our evolving logistics concepts promise indefinite sustainment of Marine forces, both afloat and ashore. As well, Marine forces afloat typically rely upon the command, control, communications, and computer (C⁴) capabilities aboard amphibious shipping to provide critical reach-back connectivity to deployed elements of the Marine Air-Ground Task Force, and communications with joint and multinational forces. These afloat C⁴ capabilities are crucial to the success of sea-basing and to achieving the full potential of Naval power projection.

The Marine Corps' sea-basing strategy is yet another illustration of continued transformation in operational concepts. Recognizing the increasing limitations on future basing potential of American forces overseas and the simultaneous need for the United States to maintain a forward presence, the Navy and the Marine Corps are developing a forward presence strategy as an extension and augmentation of our concept of sea-basing. Sea-basing is the formation of joint assets at sea to project and sustain combat power ashore, while reducing or eliminating our landward logistics footprint during combat operations. The sea-based presence strategy boosts forward engagement during peacetime by increasing the number of countries that we may visit without being permanently stationed at large fixed-bases in host nations. Marines can deploy from country to country and advance diplomatic and informational efforts through military-to-military relations, small unit training, liaison exchanges, and exercises. III Marine Expeditionary Force's annual Cooperation Afloat Readiness and Training in the Asia-Pacific region is an illustration of this concept.

In addition to codifying overarching conceptual innovations, the Marine Corps is adjusting its tactics, techniques, and procedures to better support conceptual change. Marine Aviation Weapons and Tactics Squadron 1 is adapting tactics, techniques, and procedures for the employment of aviation operations in urban terrain a vital, yet challenging environment today and in the future. Advancements have been made in target selection and tracking, weapon selection and employment, friendly unit position identification, command and control, and staff planning. Likewise, the Marine Corps is actively engaged in the development of the underlying concepts of Network Centric Warfare for Naval expeditionary forces. We are exploiting state-of-the-art information and networking technology to improve situational awareness and to integrate widely dispersed sensors, forces, and weapons. Network Centric Warfare will allow commanders to achieve mission objectives rapidly and decisively by concentrating the combined fire and maneuver of Naval forces afloat and ashore at decisive locations and times. Similarly, the Marine Corps led Joint Non-Lethal Weapons Directorate is forging the way for the development of non-lethal technologies, as well as the tactics, techniques, and procedures for effectively employing their effects. Congressional funding of the Non-Lethal Technology Innovation Center at the University of New Hampshire will continue to provide further stimulus for the experimentation and formulation of doctrine that guides the tactical use of these new weapons.

Just as it is transforming its doctrine, the Marine Corps is also transforming its business practices. Our readiness is a reflection of balancing the demands of current requirements around the globe with the imperative to invest and be prepared for

the future. This balance can over the long haul be achieved only if resources are reallocated from overhead and support activities to our fighting forces. To accomplish this reallocation of resources, we are adopting better business practices to achieve greater cost-effectiveness. There are several different avenues that the Marine Corps is taking to make this happen. We are streamlining organizations to eliminate redundancy and maximize integration. We are also reducing excess support structures to free resources and focus on core competencies.

To transform our business practices, the Marine Corps must increasingly rely on business intelligence and associated technologies promoting access to information. We consider information to be a strategic asset, and by assuring access to information, we will improve the operational agility of the Marine Corps. Our efforts to promote enterprise management of information technology confirm our need for a common infrastructure that includes a shared data environment, realignment and consolidation of many of our information systems, and the search for cost-effective strategies.

Commercialization, privatization, and out-sourcing are among the methods the Marine Corps has used to reduce costs, but ultimately it is competition between public and private sources that has led to increased savings. The Marine Corps has initiated competition between government sources and private sector commercial sources for a broad number of activities, best seen in the Marine Corps' application of such competition vis-à-vis its bases and stations. To operate our 15 major installations essentially providing the range of support services typical of a municipality a labor force of approximately 20,000 marines and 14,000 civilians are employed. One of the processes we have used in these competitions to save money is Activity-Based Costing and Management. This process provided our installation commanders information that enabled them to save over \$30 million last year by analytically measuring the costs of particular work and evaluating the performance of that work.

Another example of turning to the private sector and using competition to bring down costs is the success of our new camouflage utility uniform. The uniform was created, tested, produced, and fielded by the Marine Corps with the use of a new digital camouflage design technique through a single source vendor, yielding a product that is superior in quality, comfort, and cost to that in existence today. We are extremely pleased with this innovative uniform that not only costs less in the long run, but is a product improvement benefiting our marines. All of this was achieved within a 1-year period.

Just as the Marine Corps' new utility uniform is an example of both tactical and business innovation, so too are the transformation of operational concepts and business practices seen together in our Integrated Logistics Capability. The Integrated Logistics Capability is redefining and realigning our supply and maintenance process by providing our logisticians with greater awareness of equipment status, increasing their capacity to more rapidly and effectively respond to logistical requirements on the battlefield. The simple objective of our Integrated Logistics Capability is to avoid weighing down the warfighters with the requirement to haul, protect, and administer massive amounts of supply material. The foundation of this concept and business practice is a revolutionary change in military methodology: shifting from massive inventories to small inventories. With the use of new technologies and practices proven in the private sector, the Corps will, in essence, create a "new order" for its logistics enterprise and undertake the revolutionary changes necessary to ensure that it continues to be the premier fighting force in the world. Second Force Service Support Group at Camp Lejeune, North Carolina, is currently testing many of these new processes in a year long "proof of concept" to validate the direction in which we are heading. These efforts will allow Marine logisticians to support the battlefield of the 21st century with a smaller logistical footprint in a more cost-effective manner.

B. TRANSFORMATION AND MODERNIZATION THROUGH HARNESSING TECHNOLOGIES

With the foundation of requirements drawn from its new concepts, the Marine Corps is transforming its weapons systems and assets throughout the five elements of our Marine Air-Ground Task Forces our ground, aviation, logistics, and command elements, as well as our supporting establishment. The following examples are but a few of our transformational and modernization efforts. Many of our investments involve modernization of existing capabilities vital to effectively and efficiently fulfill our core competencies. A more comprehensive description of the Marine Corps' entire acquisition program can be found in the Marine Corps' Concepts & Issues: Forging the Future Marine Corps.

Amphibious Shipping for Sea-basing

We are a maritime nation and we must capitalize on this part of our national character to ensure that we are ready for the challenges that are over the horizon. The requirement for our amphibious shipping remains the linchpin of the Corps' ability to influence the international security landscape, project power, and protect the Nation's interests during peacetime and crises. While it has long been recognized that we require an amphibious ship force structure capable of simultaneously lifting the assault echelons of three Marine Expeditionary Brigades, today's amphibious lift can support only two-thirds of this requirement in certain aspects of the lift footprint. I strongly recommend that we commit to redress this shortfall as a matter of urgent priority.

We are grateful for your support in replacing four classes of older ships with the new LPD-17 *San Antonio* amphibious ship class. Delivery of these 12 ships to the fleet is currently planned to be complete in 2015. However, we remain concerned about further schedule slippage in the LPD-17 program. Such delays compromise our ability to fulfill our global forward presence responsibilities and must be avoided. Similarly, we are concerned with replacing the LHA-1 Tarawa class ships. Considering the extended time-frame for ship design, construction, and delivery, we need to ensure now that we are ready to replace the Tarawa class when they reach the end of their 35-year service life starting in 2011. [See Figure 3]

Expeditionary Lift (MEB Assault Echelons)

- Five lift fingerprints based on the 1991DoN Lift II Study
- Assumes the 12th LPD 17 class ship delivers in FY15
- LST 1184 & LSD 39 will decommission in FY02/03
- LHA Tarawa Class first decommission in FY11
- Current ships have serious problems

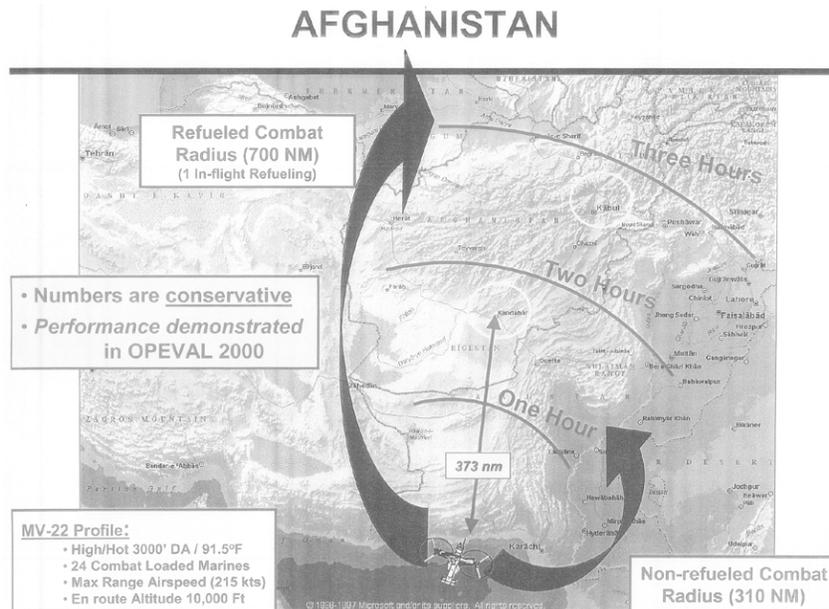
FY	2002	2003	2004	2005	2006	2007	2015
Troops	2.73	2.68	2.68	2.71	2.67	2.66	2.63
Vehicle SqFt	2.10	2.01	2.01	2.08	2.14	2.17	2.48
Cargo CuFt	3.71	3.70	3.70	3.76	3.75	3.78	3.75
VTOL	3.25	3.25	3.25	3.3	3.32	3.35	3.43
LCAC	3.50	3.42	3.42	3.46	3.42	3.54	3.83

Expeditionary Lift Requirement: 3.0 MEB AE

The leases of our current fleet of Maritime Prepositioning Ships (MPS) will expire in fiscal years 2009, 2010, and 2011. The development of advanced Maritime Prepositioning capabilities, High Speed Vessel platforms, and new lighterage vessels will significantly increase the strength and flexibility of our sea-based expeditionary operations. The marriage of a modern amphibious fleet with modern Maritime Prepositioning Shipping capable of hosting at-sea arrival and assembly of forces will minimize the requirement for access to secure ports and airfields, and give our Nation an unmatched asymmetrical advantage in projecting power.

Tilt-Rotor Aircraft

The V-22 Osprey remains the Corps' number one aviation acquisition priority. Recent actions in Central Asia have only reinforced the immediate need for this truly transformational capability. [See Figure 4]



Tilt-rotor technology holds the promise to revolutionize aviation we should not be afraid to embrace this promise. Both the Department of Defense's Panel to Review the V-22 Program and the National Aeronautics and Space Administration's Tiltrotor Aeromechanics Phenomena Assessment Panel concluded that tilt-rotor technology is sound and that mishaps have been the result of engineering deficiencies that can be solved. The V-22 will radically increase the Marine Corps and Special Operations Command's operational reach and tactical flexibility. The Osprey's superior range, speed, and payload will give Marines and Special Operations Forces the ability to accomplish combat missions and other operations from distances previously unattainable, with response times far faster than possible with other airframes. The battlespace of the future will demand capabilities that provide rapid and effective maneuver. Through the use of the V-22's increased speed and range, we not only improve our ability to influence the tempo of operations, but we provide our forces with greater survivability. These capabilities are the foundation for how we have planned to transform our operational concepts and intend to reorganize our force structure.

We are aware of the challenges associated with the Osprey but are pleased that the Under Secretary of Defense for Acquisition, Technology, and Logistics has announced that a new comprehensive flight test program for the V-22 will start this spring. This flight test effort will be "event-driven," as opposed to being "time-driven." Both the Secretary of the Navy and the Under Secretary of Defense for Acquisition, Technology, and Logistics will periodically review flight test results to assess progress.

Short Take-Off and Vertical Landing Aircraft

In late October 2001, the contract was awarded for the Joint Strike Fighter, signaling a new era in naval aviation. The advantages of a stealthy strike fighter capable of taking off from an expeditionary base on land or at sea, fly in supersonic cruise, accomplish its mission with advanced sensors and weapons, then return to its expeditionary site are dramatic. This aircraft will transform the very foundations of tactical air power. It will provide the reliability, survivability, and lethality that our forces will need in the years ahead. Moreover, the Short Take-Off and Vertical Landing Joint Strike Fighter variant provides operational access to more than three to five times the number of airfields available around the world that are currently capable of supporting our so-called "legacy" aircraft. The Short Take-Off and Vertical Landing Joint Strike Fighter can also operate from both conventional carriers and amphibious assault ship decks, effectively doubling the number of shipborne

platforms available for operations. As these highly capable aircraft move from sea-based platforms to expeditionary airfields, they can effectively decrease response time for missions by 75 percent and increase time-on-station by 50 percent. These capabilities represent a significant increase in strategic agility, operational reach, and tactical flexibility over conventional aircraft.

Fire Support Systems

Of critical interest to our Marine Air-Ground Task Forces is the status of our fire support systems on land, at sea, and in the air. We currently have an acute shortage of fire support. It is vital for us to move ahead with existing programs to provide our marines with this important warfighting enhancement. Indeed, the funding, testing, and development of our systems are vital. The Lightweight 155 Howitzer is needed to replace our aging "legacy" field artillery weapons. The High Mobility Artillery Rocket System, moreover, promises to be rapidly deployable and will be a key part of our expeditionary operations, firing both precision and area munitions under all weather conditions, as well as extending our ground-based fire support umbrella to 60 kilometers. In addition to these fire support systems, we need the Ground Weapon Locating Radar to protect our forces against our adversaries' counter-battery fires. We should also continue to invest in Naval Surface Fire Support. Remedying the fire support shortfall we have lived with for much of the last two decades is crucial.

Advanced Amphibious Assault Vehicles

The Advanced Amphibious Assault Vehicle program remains the Corps' highest ground acquisition priority and promises to allow high-speed surface maneuver from ship-to-shore as well as on land. This vehicle will be able to deploy to objectives from over the visual horizon, 25 miles and beyond, and will allow our ships to remain beyond the range of many threat weapons and surveillance systems. It will help off-set an enemy's anti-access strategies and bolster expeditionary operations from the sea. Furthermore, the Bushmaster II 30mm cannon will give the vehicle a lethal direct fire capability. The Advanced Amphibious Assault Vehicle will be a decisive expeditionary warfare tool for operations in littoral areas worldwide.

High Speed Vessel

High-speed, intra-theater sealift, catamaran vessels provide phenomenal increases in speed and tactical flexibility for our Navy-Marine Corps Team. Building on operational use of the Royal Australian Navy's HMS Jervis Bay, our Joint Venture High Speed Vessel promises to reap new developments that will lead to new capabilities. Additionally, leasing the 331-foot commercial catamaran Austal West Pac Express, III Marine Expeditionary Force has demonstrated the viability of such vessels, using it to transport marines and their equipment to training exercises through out Asia and lifting 950 marines and 550 tons of materiel per trip, the equivalent of 14 to 17 military cargo aircraft. The Navy-Marine Corps Team's current requirement is for a craft that can transport 400 tons of cargo, travel 1,200 miles without refueling, and achieve a speed greater than 40 knots. We are confident in the High Speed Vessels capacity to deliver these capabilities and transform our intra-theater mobility.

Tactical Unmanned Aerial Vehicles

Unmanned Aerial Vehicles have already seen extensive action in the war against terrorism and their use is expanding. This technology's potential, combined with its ability to conduct dangerous missions without the risk of personnel casualties, make this a truly transformational asset. The Navy and Marine Corps' Vertical Take-Off and Landing Unmanned Aerial Vehicle Engineering Development Model program is designed to test and evaluate various sensor packages and the Tactical Control System architecture for use in future Tactical Unmanned Aerial Vehicles. In the interim, Marine Corps Pioneer systems will be upgraded to perform Unmanned Aerial Vehicle functions (Reconnaissance, Surveillance, and Target Acquisition). Presently, Marine Corps Unmanned Aerial Vehicles are preparing to deploy to Central Command's area of responsibility.

Aerial Refueling

Replacement of our aging KC-130 Hercules fleet with KC-130J aircraft is necessary to ensure the viability and deployability of Marine Corps Tactical Aircraft Refueling and Assault Support well into the 21st century. The KC-130J's performance features include increased cruising airspeed, night vision compatible interior and exterior lighting, enhanced rapid ground refueling capability, digital avionics, and powerful propulsion systems. These strengths promise lower life cycle expenses and eliminate the need for costly KC-130F/R Service Life Extension Programs. In

sum, the KC-130J gives us the aerial refueling capability required to meet our current and future tactical aerial refueling demands.

Maritime Prepositioning Shipping Support Facility

Supporting the Marine Corps' Maritime Prepositioning Shipping, the Blount Island facility in Jacksonville, Florida, is truly a national asset that must be secured for long-term use. Its peacetime mission to support the Maritime Prepositioning Force has been of exceptional value to the Corps, but its wartime capability of supporting massive logistics sustainment from the Continental United States gives it strategic significance. The purchase of Blount Island is planned for fiscal year 2004, when our current lease of the facility will expire.

Command and Control

Command and Control technologies being introduced into Marine operating Forces are key to making Expeditionary Maneuver Warfare a reality. Marine forces once ashore will utilize the Lightweight Multi-band Satellite Terminal, Tactical Data Network, and High Frequency Automatic Link Establishment Radios to link widely dispersed forces into the Network Centric environment. These technologies will result in capabilities that will greatly increase the operational agility of your Marine Corps.

C. TRANSFORMATION OF ORGANIZATIONAL STRUCTURE

The transformation of our weapons systems and equipment, as well as our operational concepts and business practices, is a difficult task. Transforming how we organize ourselves is even more difficult. Nonetheless, building on its institutional legacy of adapting to match the threats and missions of a given time, the Marine Corps is reorganizing its structure. Furthermore, at the core of transforming our organization, is the optimizing of our greatest asset, our marines.

One of our leading examples of transformational reorganization is the 4th Marine Expeditionary Brigade (Anti-Terrorism). The 4th MEB (AT) combined our Marine Security Guards stationed at America's embassies around the world, Fleet Anti-Terrorist Security Teams, and Chemical Biological Incident Response Force with an organic aviation component, combat service support element, and specialized anti-terrorism infantry battalion, as well as a command element with dedicated planners, coordinators, and liaison officers for anti-terrorism operations. The 4th MEB (AT) has had an immediate impact, deploying to our re-opened embassy in Kabul, as well as supporting anthrax decontamination at the Capitol and security at the Olympics and the State-of-the-Union address. In the near future, all deployable units will deploy with an anti-terrorism capability.

In addition to standing up the 4th MEB (AT), we are looking at other organizational transformation initiatives. We are looking at additional ways to optimize our forces by realigning outdated structures to reflect new realities. Now is the time to consider how to best organize our forces to meet the needs of this transformational era.

Similar self-examination has led to successful change in our supporting establishment. Three illustrations of this are Marine Corps Combat Development Command, the Marine Corps Intelligence Activity in Quantico, Virginia, and Materiel Command in Albany, Georgia. By reorganizing the Marine Corps Combat Development Command we have redefined its role in supporting Marine Operating Forces and the Service Headquarters. It has emerged as the Corps' home for long-range thinking and has taken on the role of coordinating requirements with the Navy as well as facilitating the Marine Corps' relationship with Joint Forces Command. The Marine Corps Intelligence Activity, likewise, has been highly successful in validating our intelligence reach-back concept. Exploiting both new command relationships and connectivity, the Marine Corps Intelligence Activity is providing timely, accurate intelligence to our globally deployed tactical forces. Similarly, by establishing Materiel Command we have created a unity of effort and streamlined processes for the Marine Corps' acquisition and logistics support functions and ground weapons/equipment life cycle management processes. Materiel Command transformation initiatives for materiel readiness improvements and increased visibility of total ownership costs will achieve significant future cost avoidance and savings. This allows the Installations and Logistics Department at Headquarters Marine Corps to more effectively concentrate on policy decisions and support to the operating forces and the regional combatant commanders. In each of these reorganizations, optimizing efforts of the men and women who serve our Corps has been our primary intent.

Our People

Our highest priority remains unchanged: marines, their families, and our civilian workforce. The most advanced aircraft, ship, or weapons system is of no value without highly motivated and well-trained people. People and leadership remain the real foundations of the Corps' capabilities.

It is important to note that the Marine Corps operates as a Total Force, including elements of both Active and Reserve components. We continue to strengthen the exceptional bonds within our Total Force by further integrating the Marine Corps Reserve into ongoing operations and training. Both Marine Expeditionary Force Augmentation Command Elements, two infantry battalions, two heavy helicopter squadrons, two aerial refueler transport detachments, as well as other units have been mobilized to support Operation Enduring Freedom. Called to duty, over 3,000 Marine reservists are providing seamless support from operational tempo relief at Guantanamo Bay to augmentation at Camp Pendleton and Camp Lejeune.

Because our people are our number one priority, safety in the Marine Corps is a critical concern. While it is essential to maintaining our readiness, it is also a vital element of the quality of life that we provide our marines and their families. I am pleased to report that 2001 was a banner year for safety in the Marine Corps. The Aviation community set a record, posting the lowest Class A mishap rate in the Corps' history. Through education, vigilance, and command involvement we reduced privately owned vehicle fatalities 39 percent last year. Overall, we had our second lowest mishap fatality rate in 14 years. These are all very positive signs in our quest to safeguard our most precious assets, our marines.

One factor contributing to our safety challenge is that we are a young force. The average age of our marines is 24, roughly 6 to 8 years younger than the average age of the members of the other services. This is part of the culture of the Corps, as our unique force structure shows 68 percent of our marines being on their first enlistment at any one time. The nature of our force structure requires us to annually recruit 41,000 men and women into our enlisted ranks. To fill this tremendous demand, our recruiters work tirelessly and have consistently met our accession goals in quality and quantity for over 6½ years. The performance of our recruiters has been superb.

Retention is just as important as recruiting. We are proud that we are meeting our retention goals across nearly all military occupational specialties. Intangibles such as the desire to serve the Nation, belong to a cohesive organization, and experience leadership responsibilities through service in the Corps are a large part of the reason we can retain the remarkable men and women who choose to stay on Active Duty. Concrete evidence of this phenomenon is seen in our deployed units, which continually record the highest reenlistment rates in the Corps. The Selective Reenlistment Bonus Program has been an additional, powerful tool to meet our retention goals. Increases for the Selective Reenlistment Bonus Program, as well as the targeted pay raise initiative, will go a long way toward meeting our retention goals and helping take care of our marines and their families.

While we recruit marines, generally, we retain families. The effectiveness of our marines is dependent, in large measure, on the support they receive from their loved ones. Our families are therefore vital to our readiness. Increased pay, as well as improved housing and health care, directly influence our families' quality of life and, in turn, enhances the readiness of our units. Your support of our families' quality of life has greatly contributed to our retention success. We are extremely thankful for the enactment of much-needed improvements to the TRICARE system for our Active Duty personnel and for our retired veterans. Thank you, as well, for continuing to support increases in the Basic Allowance for Housing that help our marines meet the rising costs of rent and utilities within the limits of their housing allowances.

This committee has provided considerable support to our marines and their families and the Marine Corps has also improved services to our families in hopes of further enhancing their quality of life. We have established Marine Corps Community Services aboard our installations to better provide for both our Marine families as well as our single marines, who constitute nearly 60 percent of our total Active Force. We have also sought to recognize and support our marines and families with special needs and I am proud to say that both the Marine Corps' Exceptional Family Member Program and the Military Committee for Persons with Disabilities were the recipients of the 2001 S. Robert Cohen Annual Achievement Award for their commitment to facilitating and coordinating support and services to families with special needs.

Similarly, seeking to be more responsive to our marines and to enhance their career opportunities, we have undertaken a number of manpower reforms to better manage the force. Through the personal involvement of commanders, career plan-

ners, and leaders throughout the chain of command, we have been able to meet our retention goals, stabilize our force, and reduce the burden on our recruiters. We are investing considerable resources to successfully recruit, develop, and retain the civilians who work alongside our marines. Our strategic plan in this regard is to develop civilian career programs that integrate and advance technical and leadership competencies.

We are also investing in our marines by improving how we train and educate them. We believe the old adage, "you fight the way you train." Because of this, our training exercises are becoming increasingly joint and combined to provide our marines with the experience that they will need when they are called upon to respond to crises that require them to work alongside our sister services and partners from other nations. Our ability to effectively operate in both joint and coalition environments was clearly evident in the experiences of the marines of Task Force 58 in Afghanistan. However, we are increasingly finding that the training and mission effectiveness of our marines is degraded by the many forms of encroachment on our bases and stations. We need your continued support to ensure that the growing complexity and expense of encroachment issues do not curtail our efforts to conduct meaningful training. Encroachment issues will continue to be a 21st century problem.

Experience, in tandem with education, is the best foundation for dealing with both difficulty and fortuity. Accordingly, we are not solely focused on training our marines, but on educating them as well. We have expanded our non-resident education programs to ensure that greater numbers of marines have the opportunity to better themselves. We are also adjusting our policies to better accommodate family realities such as spouses with careers or children with exceptional needs when selecting officers to attend various schools that require a change in duty station. We have instituted a "National Fellows program" for competitively selected junior officers and staff non-commissioned officers to experience the corporate world, think tanks, non-governmental organizations, and the workings of Congress. The experiences they receive will broaden perspectives and provide valuable insights that will strengthen our capacity to innovate and adapt in the years to come.

The Marine Corps' commitment to training and education, as well as our commitment to our "warrior culture," is reinforced in our recently instituted martial arts program. We have developed a discipline unique to the Corps, and we are in the process of training every marine in its martial skills. This program promotes both physical prowess and mental discipline. Successive levels of achievement are rewarded with different colored belts reflecting a combination of demonstrated character, judgment, and physical skill. This training will benefit marines in the complex missions we face; especially in peacekeeping and peacemaking operations where physical stamina and mental discipline are vital to success. At its heart, our martial arts training is fundamentally focused on mentoring our young men and women and helping them to understand that the keys to mission accomplishment are often a matter of combining intelligence, strength, and self-control to influence circumstances, rather than simply resorting to the application of deadly force. The warrior ethos we instill in our marines transforms them into intelligent and disciplined warriors, and mirrors the Marine Corps' own transformation in equipment, doctrine, and structure.

IV. CONCLUSION

In summary, the Marine Corps' transformation is a synthesis of new operational concepts and better business practices, leap-ahead technologies, and realigned organizations. This transformation promises to exponentially increase the Corps' sea-based capabilities as America's medium-weight expeditionary force in the years ahead. Our capabilities, combined with those of our sister services, form an integrated array that provides America with the diversity and versatility she needs to confront different threats and environments and accomplish disparate missions. In close partnership with the Navy, we are proud of what our Corps contributes as America's forward engagement and expeditionary combined-arms force. We are grateful to you for your leadership and for the unwavering support you provide to your Corps of Marines.

Chairman LEVIN. Thank you, General.
General Jumper.

**STATEMENT OF GEN. JOHN P. JUMPER, USAF, CHIEF OF
STAFF, UNITED STATES AIR FORCE**

General JUMPER. Mr. Chairman, Senator Warner, and distinguished members of the committee: I am proud to join my colleagues up here today and represent your Nation's Air Force and airmen. Today, more than 30,000 of our Nation's airmen are engaged in operations in Afghanistan, Northern Iraq, Southern Iraq, and the Balkans.

In addition to that, as you all know, we have approximately 11,000 airmen engaged in daily Combat Air Patrols (CAPs), joined by our NATO allies, patrolling the skies over America. Eighty percent of this is done by the Guard and Reserve, and they are doing a magnificent job for this Nation.

Sir, we could not be more proud of the fact that, of all our technology and weapons systems, we think that the greatest weapons system we have in our United States Air Force is our people. I carry a simple message today from them as they, for the first time in this budget, see the opportunity to reverse the trends in readiness, and I echo the sentiments of my colleagues. I had one master sergeant on the flight line at Langley Air Force Base tell me, "sir, I would have given up my pay raise to get the parts to fix my airplanes." For the first time in a long time we see the ability to get those parts to fix those airplanes.

It does not happen instantly, as you all know. It takes a couple of years to manufacture some of these long lead parts, but the indications are all there, and we are giving the people the resources that they need to do their job. That is all they ask of us, the leadership of the United States military.

Sir, in this budget you will see a great deal that goes into transformation in the form of stealth, standoff precision, space, and information. We have seen a lot in Afghanistan. We have seen transformation even from the most recent battle in Kosovo. We have seen things done in Afghanistan that we could not even do then.

We have all read the stories in the newspaper of the Special Forces troop on the ground or a horse with the laptop sitting on the saddle horn and a satellite giving him his exact position. Bouncing around on the back of the saddle is a tripod that holds laser goggles that he stops and sets up.

One such person was 24-year-old Air Force Combat Controller Staff Sergeant Linehart. I recently had him in to brief all of the four-stars in the Air Force on a particular mission that was referred to earlier. He is a young man, totally unassuming, just doing his job, absolutely astounded that a bunch of four-star generals would be interested in what he is doing. But here you have this perfect marriage of the military art of the last century and the century before that, with the military art of this century. I studied General Shinseki's budget request very carefully. I did not see any cavalry in there, but I am sure that it will be back in vogue before long.

Senator ROBERTS. We do have a cavalry unit at Fort Riley. [Laughter.]

General JUMPER. Forgive me, sir.

Chairman LEVIN. Which is now going to be plussed-up significantly. [Laughter.]

General JUMPER. This young man sat on a hilltop and called in B-52 strikes, and the B-52 from 7 miles in the sky put in GPS-guided munitions to within 800 meters of Sergeant Linehart's position. This is one snapshot of the vision of transformation in today's military; we had a bomber that was built 40 years ago putting in a precision strike within 800 meters of someone's position who just gotten off a horse and used a pair of laser goggles to get a very precise set of coordinates to data-burst up to that bomber.

In other situations we have read about, we have seen how the Predator unmanned air vehicle (UAV) has taken its streaming video and put it into the cockpit of our AC-130 gunships and performed essentially scout duties, so when the AC-130 gunships arrived on station it could begin engaging targets immediately. This has not been just for the Air Force. Sergeant Linehart was not just talking about B-52s, he was talking to F-14s, F-18s, and AC-130s from all the services who make this technology work in a way that saves lives on the ground and engages the enemy in more lethal ways.

Mr. Chairman, we will pursue integration of manned and unmanned space and information technologies to close the seams that have existed, as we have been closing them for the last 10 years among our services. My component commander, Admiral Vern Clark, said that he has never seen it better. We have come a long way from the days of Operation Desert Storm when, as you may recall, we had to take an aircraft from the aircraft carrier every day and fly the air tasking order out to the aircraft carrier in order to coordinate our activities. Sir, those days are gone, and I am proud to sit up here with my colleagues and to be able to report that to you today, and we are going to make it even better.

Mr. Chairman, let me sum up by saying thank you to this committee for giving our people the resources they need to do their job. Thank you for our pay raise that shows them that we do appreciate their service. In the 35 years I have been wearing this uniform, it never ceases to amaze me. Every time we have a conflict and I walk among the soldiers, sailors, airmen, and marines that are engaged in the conflicts of this Nation, I realize they continue to rise to greater heights of accomplishments and pride.

Thank you very much, Mr. Chairman, for the opportunity to be here today. I look forward to your questions.

[The prepared statement of General Jumper follows:]

PREPARED STATEMENT BY GEN. JOHN P. JUMPER, USAF

Mr. Chairman and members of the committee, the Air Force remains focused on transformation. It is a continuous journey, and fundamental to succeeding in the joint services' task to provide for this Nation's security. This fiscal year 2003 budget takes significant strides along this path, and will enable us to remain the world's most capable air and space force.

During the past year, the Air Force has had numerous opportunities to implement and validate significant changes in the conduct and strategies of war, exploit the rapid advancement of innovative technologies, and deliver global reconnaissance and strike for America's national security. Our successes are America's successes; they are the direct result of the tireless and unconditional service by men and women of the total Air Force and their families.

We recognize much work and many opportunities to improve await us. Despite our unassailable dedication to a demanding operational pace at home and abroad—including Northern Watch, Southern Watch, Noble Eagle, and Enduring Freedom—we have not faltered in our steps to continue the tasks of our unprecedented trans-

formation. We are pressing forward to develop and refine our operational and organizational processes and strategies to address the changing national security and economic environments. We are focusing on the horizontal integration of our manned, unmanned, and space assets in order to provide real-time actionable, exploitable intelligence to commanders. We are committed to leveraging technology to combine our air and space capabilities in order to increase asymmetric advantages for our Nation. As our transformation continues, we will support our people, revitalize the military industrial base, and seek efficiency at every turn. We are the world's preeminent Air and Space Force, remaining true to our vision by providing global vigilance, reach, and power across the spectrum of military and humanitarian operations for America and our allies.

We are able to perform the extraordinary feats asked of our Air Force because we are blessed with full endorsement from the American people, Congress, and the President of the United States—all of whom provide unwavering support to our efforts and missions. We sincerely appreciate this confidence in our commitment and our capabilities to provide our great Nation with superiority in air and space throughout this century.

PREFACE

If Americans had not fully understood the idea of “asymmetry” before September 11, they received a horrific education on that day. In a lesson reminiscent of one 60 years earlier, air assets were employed in a malicious fashion on an unsuspecting people. This time, however, the attacks resonated a particular evil, for civil airlines were used to wreak destruction and death upon civilians.

The World Trade Center, the Pentagon, and a field in Pennsylvania were the battlefields of asymmetric warfare. A terrorist group exploited the United States' asymmetrical vulnerabilities, far in excess of their relative size and the physical results of the attacks. Within minutes of these attacks, the United States, through Operations Noble Eagle and Enduring Freedom, was providing education on an asymmetry of its own making—the object lesson of joint and combined warfare visited on the perpetrators of the September 11 strikes. The Air Force is fully prepared to execute the missions required—with our air, space, and special forces assets—to carry this global war on terrorism to its conclusion, ending as President Bush declared, “at a time and place of our choosing.”

Operation Noble Eagle (One)

Operation Noble Eagle unofficially began 3 minutes after North American Aerospace Defense Command (NORAD) received word from the Federal Aviation Administration of two hijackings. F-15 Air Defense fighters from Otis Air National Guard base in Massachusetts raced toward the skies over New York. Thirty minutes later, a similar attack unfolded in DC. Within minutes, Guard F-16s from Langley Air Force Base (AFB) were on an intercept track while other Guard F-16s headed to the skies over the Capital. Though notified too late to thwart the attacks, the jets were in place to stop any further strikes, including the aircraft that crashed in Pennsylvania.

Within hours of these attacks, the Air Force had established combat air patrols across America with air refueling support to keep them aloft, and command and control assets to direct them. By December, these sorties exceeded 8,000. Meanwhile, as the Air Force air defenses secured the skies, numerous other combat support enablers—strategic and tactical lift, civil engineers, medical teams, combat communications, command centers, chaplains, and security forces—rolled into action. The Air National Guard generated over 100 C-130s to support the movement of FEMA, FBI, human organs and blood, Combat Support Teams (CSTs), medical equipment, and combat communications. In addition, over 70 personnel arrived from Andrews AFB to help coordinate emergency medicine at the Pentagon alongside the Surgeon General of the Air Force.

Within 24 hours, the Air Force swiftly deployed 500 medics to McGuire AFB, to respond to any Federal Emergency Management Agency (FEMA) tasking for equipment and/or personnel needed at the World Trade Center. State-of-the-art medical emergency facilities were assembled, which included four Expeditionary Medical Support packages (EMEDS) (lightweight modular systems). Critical Care Air Transportable Teams (CCATT), which provide emergency medical attention while in-flight, were quickly established at both the Pentagon and McGuire AFB. The port mortuary also was activated, with over 600 Air Force Active Duty, Guard, and Reserve personnel deploying to Dover AFB. They assisted in the identification and preparation of the remains of the Pentagon attack victims, working alongside the Armed Forces Medical Examiner, FBI, Army, and Navy personnel. Critical Stress Management Teams conducted counseling to personnel assigned to recovery efforts

at both locations. Finally, since the National Disaster Medical System was activated, the Air Force Medical Service (AFMS) also set up its aeromedical evacuation assets at both McGuire AFB and Andrews AFB.

Meanwhile, demonstrating their invaluable integration in the total force, Air Force Reserve and Air National Guard airlift crews were among the first to bring in critical supplies, equipment, and personnel, including emergency response teams from FEMA, fire trucks, search dogs, and earth moving equipment. At the time of this writing, more than 10,000 Air Force reservists and over 20,000 Air National Guard members have been mobilized, and many more continue to provide daily support as volunteers. Thousands of Air National Guardsmen, Reservists, civilians, contractors, and Active Duty members are ensuring air and space security over America.

Operation Enduring Freedom (OEF)

When the President decided on the appropriate course of action, air and space forces were called into action. At the outset, Air Force bombers proved instrumental to putting weapons on targets in Afghanistan. The vast mobility capabilities of the Air Force quickly moved assets into the theater, while simultaneously making possible Navy and Air Force fighter attacks.

Enduring Freedom also revealed an improvement from even the most recent operations. Air and space precision assets paired with multi-service special forces on the ground proved an effective, efficient, and devastating mix of capabilities. Additionally, we have pushed developing technologies forward and have found operational successes in advanced employment of Unmanned Aerial Vehicles (UAVs).

This operation is about creating effects—deterrence and defeat of terrorism—so it is more than simply munitions-on-targets. The Air Force is at the forefront of psychological campaigns, applying robust information warfare campaigns while also leading the humanitarian relief mission—essential to any long-term stability in the region. Airdropping millions of rations to a starving people, Air Force mobility forces directly affected the future of the new Afghan Government.

“Let’s Roll!”

As it has throughout its history, America will champion the cause of freedom and defeat those who would attempt to deny us this most basic tenet. Guaranteeing our success is “. . . the strength of our country—the skill of our people and the superiority of our technology.”

INTRODUCTION

The world’s premier Air Force begins 2002 under new leadership. The Secretary and Chief of Staff bring unique and complementary experiences to bear upon the dynamic promise of American air and space power in the 21st century. The Air Force is in the business of global reconnaissance and strike, including the full application of unparalleled mobility forces. Our efforts are fuelled by a vision of global vigilance, reach, and power to help the Nation assure our allies and friends, while dissuading, deterring, or decisively defeating any adversary. The specific concept of “core competencies”¹ well known among successful organizations has been adapted by Air Force leaders to characterize the capabilities that are central to our mission: air and space superiority, information superiority, global attack, precision engagement, rapid global mobility, and agile combat support.

The Air Force and the Nation entered 2001 aware of the challenges and opportunities of a new administration. The Department of Defense was to undergo significant evaluation, with the expectation of dramatic changes to follow. President Bush brought an eminently qualified team to defense and national security, and the Air Force welcomed the injection of energy and attention the Nation’s defense was to receive. Long a force for innovation, airmen continued their leadership throughout the months of military reinvention. Capabilities-based planning was emerging as the Quadrennial Defense Review (QDR) focal point, and the Air Force strove to maximize the assessment of new technologies, revolutionary concepts of operation, and visionary organizational changes. However, amidst this important task, terror struck the United States. The Air Force, and the Nation, exited 2001 at war.

¹ According to two leading scholars, successful enterprises “consolidate corporate-wide technologies and production skills into competencies that empower individual organizations to adapt quickly to changing opportunities.” The three identifying characteristics of core competencies are: (1) They transcend a single product or service and provide potential access to a wide variety of markets; (2) they are perceived by customers to deliver significant benefit; and (3) they should be hard to imitate. See C.K. Prahalad and Gary Hamel, “The Core Competence of the Corporation,” *Harvard Business Review*, May–June 1990.

This new adversary, and those of the future, will pose a formidable challenge to American interests at home and abroad. They will attempt to intimidate, deter, or defeat our Nation through a variety of means, to exploit our asymmetrical vulnerabilities and avoid confronting U.S. military power directly. These strategies will include the use or threatened use of weapons of mass destruction, and the use of terrorism on U.S. soil. They will also attempt to counter the tremendous asymmetric advantages of U.S. air and space power.

To meet these challenges, Air Force strategy calls for a capabilities-based approach to defense planning. This enables the service to answer a broad range of challenges posed by potential adversaries, while also developing the capabilities it needs for the future. This capabilities-based planning must remain tied to ongoing Air Force transformation that continues to develop new technologies, concepts of employment, and organizational adaptations.

The Road Ahead

The transformation of the military now runs parallel to the transformation of our Nation. Just as the military is exploring new capabilities and concepts of operation (CONOPs) to engage threats, America as a whole is experiencing new appreciation for the cost of freedom. The Air Force, the Department of Defense, and the American people are up to the challenge.

Though a shock, the events of September 11 did not fundamentally alter the course for a transformed military; rather, they served as an affirmation of our current direction. Turning away from decades of restrictive force-to-threat planning, the Air Force along with the Defense Department is on course to define desired effects, and then secure capabilities which allow us to reach that end. Additionally, the QDR and the Defense Planning Guidance (DPG) address organizational changes, which add to the effectiveness of new military methods.

This describes the heart of Air Force transformation. Assessing existing and potential adversaries' capabilities against our own, we are developing task forces for a variety of mission requirements, from strategic response to homeland security. For example, Global Strike Task Force, which describes how we will operate in an anti-access scenario, is the next step in our journey to fully achieve our mission while also opening doors to adaptive and innovative operational plans, and relevant organizational structure.

In order to draw the greatest effectiveness from these capabilities, the Air Force will exploit America's technical dominance to elevate our asymmetric advantage over any adversary. This involves harnessing the attributes of stealth, precision, standoff, space, and information technology. The success of our capabilities-based CONOPS depends upon reducing the find, fix, track, target, engage, and assess (F²T²EA) cycle and achieving persistent intelligence, surveillance, and research (ISR) capabilities. Key to this is the horizontal integration of manned, unmanned, and space assets. By facilitating digital conversations at the machine-level we will provide the Joint Force Commander with the decision-quality information required to ensure success—the “sum of the wisdom” resulting in a cursor over the target. With determined exploration and exploitation of space capabilities—culture, principles, personnel, and assets—we will widen our asymmetric advantages and set the bar beyond reach of any adversary. Such transformation will guarantee America's global vigilance, reach, and power—establishing powerful national mechanisms to assure, dissuade, defeat, or deter.

These are the building blocks to true transformation—technologically elevated capabilities, focused CONOPs, and embedded structural changes. The Air Force remains at the forefront of each of these transformational elements. We ensure the freedom to operate around the globe and in the sky and space above, under any circumstances, and for whatever mission the Nation requires. This is asymmetry—exploitation of capabilities no other force in the world possesses—and it is fundamental to redefining jointly fought warfare on America's terms. Maintaining this advantage is critical, and a constant challenge. In the year ahead, we will meet this test by solidifying the roots of our success: readiness, transformation, and the resource that makes these possible—our people.

THE YEAR IN REVIEW

In 2001, the Air Force had an enormous impact on the peacekeeping and combat missions around the world. From the Korean Peninsula to Kabul, across every continent and over all bodies of water, Air Force civilian, Active, Guard, and Reserve Forces were executing global reconnaissance and strike missions. Through combined exercises, humanitarian interaction around the globe, and decisive combat action, we assured our friends and dissuaded, deterred, or defeated our adversaries.

In the Balkans, contributions to the region included fighter, tanker, command and control, ISR, and airlift aircraft. Combat search and rescue (CSAR) forces, special operations units, and unmanned aerial vehicles (UAVs) also flew in support of the operation. In 2001, the Air Force flew approximately 1,000 sorties, enforcing no-fly-zones over the former Yugoslavia.

In Southwest Asia (SWA), the Air Force maintained a continuous, steady-force presence of more than 8,000 airmen in support of Operation Northern Watch (ONW) and Operation Southern Watch (OSW). Air Force ISR assets provided crucial intelligence and situational awareness, particularly in the form of indications, warning, and intelligence. We were the vital element in monitoring Iraq's compliance with United Nations' directives. Coalition forces flew over 22,000 combat sorties in SWA during 2001, 70 percent of which were flown by the Air Force.

In response to the terrorist activity of September 11, we began providing support to homeland defense via Operation Noble Eagle and support to the war against terrorism via Operation Enduring Freedom. By the end of 2001, we had flown 11,000 combat air patrol, surveillance, and refueling sorties protecting U.S. cities and other high-value assets. We also maintained an alert readiness status on the ground in order to scramble and intercept threat aircraft. Nearly 14,000 airmen have deployed to Southwest Asia in support of Operation Enduring Freedom. This number represents nearly every specialty in the Air Force, from engineers to explosive ordnance disposal, pilots to special operators. Of the over 18,500 total coalition sorties flown, almost 46 percent have been flown by the Air Force. These sorties included fighter, tanker, command and control, special operations, UAV, ISR, and airlift aircraft. Initially, the Air Force was the sole provider of airlift for humanitarian relief to the people of Afghanistan. By the end of December, Air Force mobility teams had delivered over 2.4 million humanitarian daily rations and over 4,300 tons of wheat, rice, and cold weather gear. Ultimately, in the land locked country of Afghanistan, everything brought in to build up and sustain our forces was brought in by air.

The Caribbean and South America continued to be the focus of the ongoing war on drugs. Counter-narcotic missions were flown around the clock by all interagency organizations. The Air Force contributed aircraft and crews flying missions as fighter-interceptors, airlift, ISR, and CSAR. Of the almost 3,000 sorties flown, the Air Force flew approximately 25 percent. These efforts directly contributed to seizures that totaled over 75,000 kilos of narcotics.

Establishing operational imperatives for 2001 and beyond, the Secretary of Defense named the Air Force as executive agent for national security space. We now shoulder the responsibility for planning and programming of space systems for the Department. The Secretary and Undersecretary of the Air Force will direct efforts to nurture a space culture and ensure that the advancement of space capabilities receives focused and heightened emphasis. Throughout the year, we also maintained approximately 100 satellites in earth orbits that directly supported, and continue to support, not only the Air Force, but also the other services and the civilian population. Global positioning satellites assisted travelers worldwide. Data provided by Air Force weather satellites and communications and missile launch-detection satellites was used by all services. In order to maintain this robust capability, we launched, deployed, and initialized operations of eight additional assets in 2001.

The Air Force provided an American presence in regions of the world where the U.S. is working to build goodwill and improve relations. It also enabled quick humanitarian relief during natural and man-made disasters. During the month of January, following a devastating earthquake in India measuring 7.7 on the Richter Scale, two C-5s and four C-17s transported 115 short tons of humanitarian cargo to Ahmedabad, India. In April, a C-17 airlifted 10 cheetahs from Africa to America as part of a gift to the United States from the people of Namibia. Additionally, Air Force engineers from Active and Air Reserve Component Red Horse units accomplished several school construction and water well drilling humanitarian projects throughout Central and South America.

When the floodwaters rose in Houston in June, a C-17 transported Federal relief workers and 30,000 pounds of relief supplies to Texas. Additionally, the Air Force deployed a 92-person Expeditionary Medical Support System (EMEDS) to the area to relieve local hospital emergency rooms workload. The EMEDS cared for over 1,000 patients from this disaster, and the AMS envisions placing EMEDS throughout the country to offer added future regional quick-response capabilities. Later, in August and September, Air National Guard and Air Force Reserve C-130 aircraft equipped with modular airborne fire-fighting systems flew 185 missions and dropped over 800,000 gallons of fire suppressant on wildfires in Idaho and California. Additionally, they flew 45 support sorties lifting 414 firefighters and over 300,000 tons of cargo into the area.

Whether at home or abroad, in combat, humanitarian operations, or training, we strive to accomplish the mission effectively, efficiently, and safely. Effective risk management directly contributes to readiness and warfighting capability. In 2001, a combination of targeted mishap prevention efforts and chain-of-command commitment resulted in sustained low mishap rates in all major areas. On the ground, a record low was achieved for off-duty sports and recreation fatalities with four total. In the on-duty ground fatality category, the Air Force tied the fiscal year 1998 all time record low of three. In the air, Class A Flight Mishap performance yielded the third lowest mishap rate in USAF history.

The Air Force-wide fielding of safety tools and metrics such as the web-based Safety Automation System continues to improve operational and acquisition risk management decision-making. These efforts, coupled with aggressive seasonal safety campaigns, enable leaders at all levels to take proactive action aimed at specific trend areas. The Air Force's commitment to safety as a combat multiplier continues to enhance force preparedness and mission accomplishment.

"The Expeditionary Air and Space Force (EAF) After 2 Years"

Our considerable mission accomplishments in 2001 have in large measure been made possible by the continued maturation of the EAF. Throughout the year, we called upon all facets of our Air Force—Active, Guard, Reserve, civilian, and contractors—to meet the demands of the war on terrorism and our steady-state commitments. In addition to the rotational deployments in support of OSW, ONW, Icelandic Operations, and counter-drug operations, we were called upon to support wartime efforts at home with ONE, and overseas with OEF. The large demand on the Air Force increased the OPTEMPO drastically and placed a sizeable stress on our most valuable asset, our people. The Air Force is stretched thin, standing up several expeditionary bases overseas while at the same time defending the skies over the U.S. with numerous aircraft on ground and airborne alert. Our people have risen to the occasion in winning this war. We will maintain the Air and Space Expeditionary Force (AEF) structure throughout this effort to the maximum extent possible. However, everyone in the Air Force realizes the mission has changed and the requirement to deploy for longer periods of time may increase.

The Expeditionary Air and Space Force—Sum of the Parts

Often misunderstood is the difference between the elements that collectively define the Expeditionary Air and Space Force. Whereas the EAF is a construct and is the Total Air Force, the AEFs are a subset and represent the core of our deployable combat power and forward presence capability. The EAF also enables the Air National Guard and the Air Force Reserve to participate more heavily in Air Force expeditionary operations. The increased predictability of the AEF rotation cycle allows us to schedule voluntary participation well in advance. This voluntary participation currently provides about 25 percent of the aviation package and 10 percent of the Expeditionary Combat Support. This support brings both OPTEMPO relief as well as highly trained and skilled talent to the operations. This interaction lays the basis for the development of our transformational initiative, Future Total Force (FTF) (explored later).

AEF Prime consists of operational capabilities neither organically assigned to AEFs, nor incorporated in the rotational cycles. This includes regional command and control, intelligence, space, special operations, and the umbrella of deterrence provided by our nuclear forces. AEF Prime enables much of the global reachback we rely on for logistics and analysis.

AEFs are not individual organizations, autonomous fighting forces, or units. Instead, our 10 AEFs represent buckets of capabilities the Air Force can draw upon to satisfy the requirements of theater commanders—flexible, responsive, adaptable. A nominal AEF has about 12,600 people supporting 90 multi-role combat aircraft, 31 intra-theater airlift and air-refueling aircraft, and 13 critical enablers. The enablers provide command, control, communications, intelligence, surveillance, and reconnaissance, as well as combat search and rescue. AEFs are composed of squadron and sub-squadron elements, which are on-call for a period of 3 months in a 15-month cycle. If deployed, forces from AEFs make up Air and Space Expeditionary Task Forces (AETF). Finally, we have two Air and Space Expeditionary Wings (AEWs) that provide crisis response capability beyond what the two in-cycle AEFs can cover. They also contain unique capabilities, such as stealth aircraft, that are not distributed across the ten AEFs.

Air Force Reserve Command made major AEF contributions in 2001 having met virtually 100 percent of both aviation and combat support commitments, while also deploying 14,000 plus personnel in volunteer status in the current 15-month AEF cycle (December 1, 2000–February 28, 2002). The challenge for 2002 will be to meet

ongoing AEF commitments with volunteers from a Reserve Force which has had a large portion of its operations and combat support mobilized for homeland defense and the war on terrorism.

The Air National Guard alone contributes nearly 25,000 men and women every 15 months to the AEF rotations. During AEF cycles one and two thus far, Guard units provided over 20 percent of the total force aviation packages and nearly 10 percent of all expeditionary combat support requirements.

EAJ Mobility provides the ability to deploy and sustain expeditionary forces. It includes airlift and air-refueling capabilities—the linchpin of power projection. Many mobility units accomplish the AEF role when specifically assigned to an AEF eligibility period and the EAJ Mobility role all other times.

EAJ Foundation consists of support capabilities not organically assigned to AEFs. This includes acquisition, logistics, health care, education, and training. Due to the expeditionary nature of the Air Force, individuals normally assigned to an EAJ Foundation organization can still be assigned to an AEF and deploy to contingency operations during their 3-month eligibility period.

The EAJ is a force structuring mechanism because it frames Air Force modernization, recapitalization, and transformation efforts. The AEFs and EAJ Mobility provide the rotational basis for steady state expeditionary operations. Therefore, current and future programs must ensure adequate capability in the EAJ to respond to global contingencies while providing predictability and stability for our people.

EAJ Today

Our current level of commitment exceeds the capability we have available in our two on-call AEFs and one on-call AEW. In career fields such as security forces, engineers, communications, and information, and medical, we have reached into future AEFs to source enough people to meet the current requirement. Low Density/High Demand (LD/HD) assets such as Airborne Warning and Control System aircraft (AWACS) and special operations aircraft have deployed almost their entire inventory to meet the war effort. We have been aided greatly in this LD/HD challenge with the deployment of NATO AWACS that have deployed to the U.S. in support of ONE. For the first time ever, the on-call AEW and portions of the remaining AEW were employed. Additionally, a large portion of the total tanker force deployed to support Air Force and Navy strikes, while our mobility forces rapidly moved thousands of airmen and support equipment overseas allowing us to quickly engage the enemy on our terms, not theirs.

Fully Capable AEFs

Providing the flexibility needed for full spectrum operations requires continued efforts to round out capabilities of our AEFs to make them inter-changeable. Currently, our 10 AEFs are not all the same. For example, only three of the AEFs have precision, standoff strike capability, and only nine have an F-16CJ squadron for suppression of enemy air defenses. Until the disparity is rectified, the EAJ construct will have limits—many LD/HD and stealth systems remaining tasked at maximum levels.

As the EAJ continues to mature and technologies advance, we will expand the capabilities each AEF can provide. With enhanced intelligence, surveillance, and reconnaissance (ISR) we will enlarge the battlespace an AEF can control; improve our ability to do real-time targeting; and dramatically increase the number of targets an AEF can engage. Finally, we will continue to improve our expeditionary combat support capabilities—effective, responsive logistics are the key to sustaining expeditionary forces and operating from austere locations.

Reflection and Resolution

After a morning of terror on September 11, there was reassurance. Aircraft over American cities lent calm rather than fear, for they were the Active, Guard, and Reserve Air Force keeping watch. We reacted within minutes of the attacks to establish a defensive posture and to prepare our offensive forces, just as we spent 2001 reacting successfully to humanitarian and combat operations around the globe. While meeting the requirements of the new war on terrorism, we will continue our transformation journey. The capability to deliver massed, discriminate, and precise effects anywhere in the world within minutes, and the persistent ISR to evaluate actions are within reach for America's air and space forces. This is the contribution of the Air Force to the Nation—asymmetric capabilities that assure, dissuade, deter, or decisively defeat.

READINESS

Though no organization in America was ready for the attacks of September 11th, none was more ready for the immediate aftermath than the Total Air Force team. From humanitarian to combat operations, the operational demands before the attacks were tremendous. Though significant milestones were reached in terms of reducing the effects of high tempo operations, the advent of war placed many of those gains on hold. The war on terrorism has disrupted the AEF schedules, which will create training, organization, and resource impacts in the near future. Unaffected though, is our objective of 10 fully capable AEFs—each a flexible, identical cross-section of capabilities for the Joint Force Commander to employ. America's competitive edge is due in large part to its emphasis on realistic, comprehensive training, and we must continue to ensure our forces get that training. Equally important is ensuring our personnel have the resources needed to accomplish their jobs.

Recapitalization

Our fielded forces have aged to the point that they will not be able to compete with emerging and future threats. In order to deal with the global security environment, the Air Force must rebuild its aging infrastructure and modernize its outdated weapon systems. Higher priorities, however, require that we pursue a structured recapitalization process that will ensure tomorrow's warfighters have the advanced tools, technology, and equipment needed to preserve America's air and space dominance.

The budgetary constraints and spending reductions mandated in the 1990s caused the Air Force to seriously underfund modernization and infrastructure improvements. For example, in 1990 the Air Force purchased 257 aircraft; by 1996, that number had fallen to 30. This dramatic cutback in hardware acquisitions signaled an unavoidable shift in USAF priorities. Modernization stalled in order to maintain core operational capabilities and keep the fleet of older aircraft flying. Unfortunately, this financially driven reprioritization placed the Nation's mid- and long-term air power readiness at significant risk.

We now face a dangerous situation. Our aircraft fleet is getting older, less capable, and more expensive to maintain—all at the same time. Reversing this negative trend requires the Air Force to structure its recapitalization plans to avoid large-scale procurement spikes and critical modernization gaps.

The recapitalization of our airframes and weapons systems is only a partial solution. The Air Force needs to upgrade its infrastructure and physical plant, which include sustainment, restoration, modernization, transportation, support equipment, and communications systems. At the same time, the Air Force must be prepared to conduct real-world operations on a global scale. While recapitalization is important, we can never forget investing in our people. The Air Force needs to take particular care in preserving this resource and expanding its capabilities. With the help of Congress, we have made considerable progress in addressing pay, benefits, and quality of life issues, but more remains to be done.

Understanding the range and nature of Air Force capabilities is a prerequisite to comprehending the readiness and transformational requirements. Securing our task forces' potential capabilities demands insightful and bold initiatives. How comprehensively we elevate the systems, processes, and people will determine how effectively America will be able to operate on the global stage in the decades ahead.

Core Competencies—Air and Space Superiority

Air and space superiority is the ability to control the entire vertical dimension, from the surface of the earth to the highest orbiting satellite, so the joint force has freedom from attack and freedom to attack. This is the essential first step in achieving battlespace dominance. As was true with operations in the 20th century, dominance of the vertical dimension will remain the most critical capability for 21st century Joint Force.

Air Superiority

The Air Force is investing in a range of systems encompassed in the entire F²T²EA kill chain. Among the air superiority assets that contribute to this targeting and attack process are the legacy air-to-air platforms. While we await the fielding of new systems, we strive to maintain the viability of our current assets. The F-15 and F-16 programs continue to pursue modernization of radars, engines, and enhanced combat capability to ensure near-term fleet maintenance and air superiority in air-to-air combat environment. Finally, key weapon advances rest with continued development and production of the Joint Helmet Mounted Sight as well as the AIM-9X and AIM-120 next-generation air-to-air missiles. While modernization of current systems is required to make them as capable as they can be, our greatest advantage

with current systems is our robust training and the availability of ranges to conduct that training.

Self-defense against enemy air defense systems is a key element to ensure air superiority. Several electronic warfare programs support this important capability. The Joint Services Electronic Combat Systems Tester meets our operational requirement for a mobile verification system to confirm installed electronic countermeasures systems on F-15, F-16, and A-10 are operable. It tests end-to-end electronic combat capabilities, identifies system problems before takeoff, and provides the highest level of confidence to the warfighter that the EW suite is operational.

Comet Pod is a new infrared (IR) countermeasures system designed to provide covert, preemptive protection for the A-10 against IR surface-to-air missiles (SAMs). Fielding this system will greatly enhance survivability of the A-10 in its low-altitude close air support role. Additionally, the Advanced Strategic and Tactical Expendable program addresses multiple Combat Mission Needs Statements and provides accelerated ramp-up for production of the MJU-46 covert IR flare. This operational requirement acceleration responds to today's air war threat in Afghanistan and currently provides protection to special operations aircraft in the combat zone.

The AF leads the way in Radio Frequency (RF) Towed Decoys on fighter and bomber platforms. These countermeasures provide protection against advanced SAM threats and increase the viability and lethality of current platforms to conduct operations in the modern RF threat arena. These defensive systems have proven invaluable in combat over the last decade, and will continue to add to our legacy force capabilities.

Combat Search and Rescue (CSAR)

The CSAR mission provides friendly forces protection and assurance by recovering downed aircrew members or other persons in isolated locales and returning them to friendly control. Primarily charged with supporting combat personnel, CSAR continues to play an important role in civil search and rescue activities. The aging nature of the CSAR fleet, however, increasingly jeopardizes the Air Force's ability to accomplish the CSAR mission. Moreover, CSAR assets lack appropriate compatibility with our advances in strike, command and control, intelligence, surveillance, and reconnaissance systems, though some advances in information fusion have been completed.

Other improvements are forthcoming. Air Force Reserve Command (AFRC) will modify nine HC-130s with the APN-241 ground map radar, which enhances position awareness and increases system reliability. Additionally, AFRC is beginning the upgrade of the forward-looking infrared for the HH-60G helicopter fleet.

Space Superiority

Space superiority ranks with air superiority as a top priority. The ability to exploit and assure U.S. access to space assets while denying the same to our adversaries is of great importance, and as the ultimate high ground, space provides America with military advantages that cannot be duplicated.

Space Commission

In 2001, the Secretary of Defense named the Air Force as Executive Agent for Space in his implementation of Space Commission recommendations. This made the Air Force responsible for department-wide planning, programming, and acquisition of space systems. Consistent with the National Reconnaissance Office's (NRO) long standing approach, the Air Force will manage space systems with a "cradle to grave" philosophy, integrating systems acquisition with operations. To accomplish this, the Space and Missile Systems Center has been transferred from Air Force Material Command to Air Force Space Command. The Under Secretary of the Air Force is now dual hatted as the Director of the NRO, and will have acquisition authority for all Air Force and NRO space systems, as well as Milestone Decision Authority for all DOD space programs. This will allow a comprehensive review of all space systems, to determine the optimal method of satisfying national/military requirements. The first National Security Space Program Assessment was accomplished this year, comparing DOD and NRO program budgets against existing plans. This assessment will be used in drafting the first National Security Space Plan, due in mid-calendar year 2002.

Spacelift Range System (SLRS)

Achieving and maintaining space and information superiority requires an operational space launch capability that can deploy satellites to orbit with speed and flexibility—the high ground of military operations. The Spacelift Range System modernization program is replacing aging and non-supportable equipment to im-

prove reliability and efficiency; reducing the cost of operations and standardize equipment on the eastern and western launch ranges.

SLRS modernization follows a phased approach. To date, the completion of new downrange satellite communications links, a new fiber optic network, and new range scheduling systems are providing government and commercial users more flexibility at the spacelift ranges. In 2001, these improvements enabled the rapid launch of three systems in just 4 days using Cape Canaveral AFS equipment—an unprecedented feat for America’s spacelift ranges. The next phase replaces old, base-unique systems with modern, standardized range safety, flight operations and analysis, communications, tracking, telemetry, planning and scheduling, and meteorological systems. Once completed, the SLRS modernization program, coupled with the Evolved Expendable Launch Vehicle (EELV) program, will meet the future launch demands of national security, civil, and commercial payloads.

In addition, Air Force spacelift ranges are central to supporting the Department of Defense’s cooperation with the National Aeronautics and Space Administration (NASA) in the development of technology, operational concepts, and flight demonstration for the next generation of reusable launch vehicles. This cooperation also offers the basis for the evolution and future development of reliable, rapid, and assured access to space for air and space vehicles.

Information Superiority

Information systems are integral to every mission of the Air Force. Success in achieving superiority in this domain requires an effects-based approach, superior battlespace awareness, well integrated planning and execution, and properly trained and equipped information operations (IO) organizations. Information superiority means that our information systems are free from attack while we have freedom to attack an adversary’s systems.

Information is both a critical capability and vulnerability across the range of military operations from peace to war. In coordination with Joint Forces, the Air Force engages daily in conducting IO functions across this spectrum of military operations. We provide information superiority to our Air Force commanders and Joint Forces CINCs, as well as to friendly multinational forces by conducting information operations in the air, space, and information domains.

Command and Control, Intelligence, Surveillance, and Reconnaissance (C²ISR)

Currently, many military operations are limited in the area of C²ISR capabilities, which increases the amount of time it takes to locate and destroy many targets. While we are aggressively pursuing and fielding solutions to streamline this process, some of our current C²ISR systems, which our forces rely on, are vulnerable to adversary manipulation. The challenge still exists to improve our own ability to disrupt the C²ISR systems of our adversaries. Of further concern to our C²ISR capabilities is limited radio frequency spectrum availability. Spectrum is the medium that supports the mobility, dispersion, and high tempo of operations. To meet this critical need for spectrum we must develop a strategy aimed at sustaining expanding spectrum access as we face evolving national security responsibilities.

Our operational and tactical command and control airborne platforms and ground systems organize and direct efforts to create desired effects, whatever their form. Our C² assets include the air and space operations center (AOC) with its decentralized component control reporting centers (CRC) and Theater Battle Management Core Systems (TBMCS); the AWACS; the Joint Surveillance Target Attack Radar System (JSTARS); and the Multi-Platform Radar Technology Insertion Program (MP-RTIP).

The other half of C²ISR is central to achieving battlespace superiority—knowledge. ISR assets gather and processes the data into decision-quality information. Currently, our limited numbers of airborne ISR systems are in extremely high demand. The RC-135 Rivet Joint, U-2, Distributed Common Ground System (DCGS), Predator, and Global Hawk UAVs have proven indispensable during OEF and the expanding war on terrorism by providing real-time target data, threat warning, and battle damage assessment.

The CRC is the JFACC’s ground tactical execution node for C² and battle management. It provides wide-area surveillance, theater air defense, identification, data link management, and air battle execution. The current system was developed in the 1970s and must be replaced. The CRC replacement, the Battle Control System, will exceed year 2010 requirements for time-critical targeting, open system architecture, small deployment footprint, remote operations, multi-sensor fusion, and AEF responsiveness.

Air and Space Operations Center (AOC)—The Falconer

As the primary element of the Theater Air Control System, the AOC is responsible for planning, executing, and assessing the full range of air and space operations. It is the premier operational system at the disposal of the Joint Forces Air Component Commander (JFACC). By fusing the data from a vast array of C² and sensor systems, the AOC creates a comprehensive awareness of the battlespace so the JFACC can task and execute the most complex air and space operations across the entire spectrum of conflict.

Especially significant among these operations is time-critical targeting. This is the development of swift reaction to the threat within theater battle management. Accomplishing this requires combining C², rapid intelligence collection, analysis, and dissemination with positive control of airspace and the tasking of combat forces to coordinate the entire air battle with joint and coalition partners and component commanders. It is the ultimate goal of the targeting process—to reduce the F²T²EA cycle from hours to minutes.

The Air Force has long understood the need to address standardization of command and control of air and space forces. The last decade witnessed the AOC as equivalent to a “pick up game,” requiring on-the-job training and hundreds of individuals working long hours to produce an air tasking order. Throughout 2001, we aggressively addressed this problem and the Falconer AOC is now on path to becoming an efficient weapon system. Our focus will be refining the AOC into a standardized weapon system run by operators formally trained in C² operations. We must also improve the weapon system’s modularity, scalability, and interoperability to meet requirements ranging from Major Theater War (MTW) to a Humanitarian Relief Operation (HUMRO) or Non-combatant Evacuation Operation (NEO).

If there are adequate resources to develop Advanced Technology AOC, we will “right-size” the AOC to meet each mission’s requirement. The system will be interoperable with internal and external U.S. National, Allied, Coalition, and Joint Nodes. Utilizing emerging technologies to maximize reachback, we will dramatically reduce the footprint of the AOC while enhancing JFACC decision processes and timelines, and reduce costs. Supporting combat operations during Operations Noble Eagle and Enduring Freedom validated our strategic vision for C² systems. We will continue to develop the AOC, which sets the standard for new Air Force capabilities-programming efforts, and keep it on course to revolutionizing the operational level of warfare.

The “engine” of the AOC is the TBMCS. It is an integrated, automated C² and decision support tool that offers the senior air and space commander and subordinate staffs a single point of access to real- or near-real-time information necessary for the execution of higher headquarters taskings. TBMCS supports a full range of functions including threat assessment, target selection, mission execution, battle damage assessment, resource management, time-critical target identification and prosecution, and defensive planning. During ONE and OEF, TBMCS was rapidly deployed supporting both CENTCOM and NORAD operation centers. TBMCS will evolve into an open-ended architecture capable of interface with a variety of joint and coalition data buses, displays, and links.

The AWACS remains the premier air battle management and wide-area surveillance platform in the world. Still, aging aircraft issues, obsolete technologies, and the proliferation of advanced adversary systems necessitate several upgrade programs. This year, one third of the AWACS fleet completed an improved radar system upgrade, which will reach full operational capability in fiscal year 2005. The next computer and display upgrade will replace the 1970 vintage processors with an open architecture system. Finally, a satellite communications access program will provide improved connectivity with regional and national C² centers.

JSTARS provides battle management, C², and ground moving-target detection. We will replace the on-board computers with commercial off-the-shelf equipment by 2005 under the JSTARS Computer Replacement Program (CRP). The CRP is the foundation of all JSTARS communications and sensor upgrades, and should reduce life cycle costs and minimize the number of obsolete parts.

Another 707-airframe C²ISR asset is the RC-135 Rivet Joint—the premier aircraft in its class. We continue to modernize the Rivet Joint’s sensors using an evolutionary, spiral development program. Recapitalization and modernization efforts promise to keep the RC-135 and U-2 viable well into the 21st century. As we look to the future, we are examining the growth of the Rivet Joint as part of the Multi-sensor Command and Control Constellation. Although the U-2 is not currently in production, we continue to modernize the aircraft with updated sensors and aircraft modifications to support our ongoing mission needs. Advanced imagery sensors will allow the U-2 to collect top-notch data for the battlefield commander. Aircraft modifications, such as cockpit, defensive, and power system upgrades will ensure U-2

survivability and viability. Air Force DCGS continues to provide robust processing and reporting of the U-2, Global Hawk, and Predator collected data. System modifications/upgrades and increase in capacity will ensure continued delivery of timely intelligence to enable time critical target prosecution.

Unmanned Aerial Vehicles (UAVs) provide unmatched access for information, surveillance, and reconnaissance missions. Their capabilities expand ISR collection coverage while reducing the need to place our people in harm's way. We are committed to the production and fielding of Global Hawk as the next generation of high altitude airborne ISR platform. We have transitioned Global Hawk from an Advanced Concept Technology Demonstration (ACTD) program to a formal acquisition program. In the spring of 2001, Global Hawk successfully completed a deployment to Australia, where it supported maritime reconnaissance and achieved a number of UAV aerial firsts, including the first trans-Pacific crossing.

Due to this success, and a high level of confidence in the platform, Global Hawk was deployed in support of OEF. The development of advanced sensors will enable Global Hawk to support the time critical targeting mission more completely. Finally, demand for the older Predator UAV remains high. The successful weaponization of Predator holds the promise of significantly shortening the time critical targeting timeline. Based on the tremendous successes of Predator A, testing is underway on an improved version, the larger Predator B.

Air Force weather satellites enable information superiority every day during joint operations around the globe. The Defense Meteorological Satellite Program (DMSP) constellation provides global weather imagery and other environmental data to support mission planning. Augmented with civil satellites, joint forces are provided timely, accurate pictures of the weather affecting operations. The Air Force is modernizing environmental data collection with the new National Polar-orbital Operational Environmental Satellite System (NPOESS). In conjunction with the Department of Commerce, development of the NPOESS will provide the Nation a consolidated system for all national weather monitoring needs. NPOESS will cost the DOD significantly less than building and fielding a DOD-unique follow-on system and will provide enhanced environmental monitoring capability to support emerging weapons systems and concepts of operations.

The Multi-Platform Radar Technology Insertion Program (MP-RTIP) is developing a scalable X-band electronically-scanned array (ESA) for use on a variety of platforms for air-ground surveillance, including a future 767 manned, wide-area surveillance platform, the Global Hawk, and potentially a NATO manned platform variant. On the 767 platform this array would provide 5 to 10 times the air to ground surveillance capability of current JSTARS, reduce target revisit times, improve moving-target track capability, and enhance radar resolution. Furthermore, MP-RTIP on a 767 is envisaged as the first development spiral toward achieving a Multi-sensor Command and Control Aircraft (MC²A) capability as part of an over-arching and transformational Multi-sensor Command and Control Constellation (MC²C) to support future employment of the task forces addressed later in the text.

Communication

Achieving information superiority depends considerably on the availability of a robust, worldwide communications capability. Communications are critical to the joint fighting forces deployed worldwide. We are modernizing Military Satellite Communications (MILSATCOM) systems to keep pace with this demand. Inseparable from such modernization is Tasking Processing Exploitation and Dissemination (TPED). TPED describes how information is transferred among our numerous systems and highlights bandwidth as a serious topic. Bandwidth is a critical parameter—more is better—defining how much and what kind of information we can disseminate. Over the next 10 years, our need for reliable, redundant, and secure communications is expected to increase 15 to 20 times beyond the current capacity. The MILSATCOM systems in use today simply cannot meet that demand and supply CINCs with sufficient protected coverage to adequately support the warfighter. Further, in an environment of extremely high worldwide demand and competition, commercial providers cannot be leveraged for they lack the protected bandwidth, security, and coverage necessary to fully support military operations.

Despite shortcomings, the MILSATCOM system is making significant contributions to current, daily operations. The scope and speed of joint operations, including OEF, simply would not be possible without MILSATCOM systems, notably the Defense Satellite Communications System (DSCS) and the Military Strategic and Tactical Relay System (Milstar). In fiscal year 2001, we successfully launched one DSCS and one Milstar satellite. Additionally, a complete modernization of satellite communications is underway. Wideband Gapfiller Satellites (WGS) are low-cost, high bandwidth communications satellites intended to greatly increase the on-orbit bandwidth

available to the warfighter. WGS satellites will help bridge the requirements gap until the Advanced Wideband System (AWS) is brought on-line. Similarly, the Milstar constellation is planned for replacement beginning in 2006 by the new Advanced Extremely High Frequency (AEHF) satellites. The Air Force awarded a System Development and Demonstration contract in November 2001 to design the AEHF satellite system.

To leverage the full capability of our new technologies, we are combining our efforts with the other services to form the joint Global Information Grid (GIG)—a globally interconnected, end-to-end set of information capabilities and associated processes that allow warfighters, policymakers, and support personnel to access information on demand. Currently as the AEF deploys to support combat operations, it connects to the global information grid via the Theater Deployable Communications (TDC) package. This package is replacing legacy deployable AF communications equipment with scalable, lightweight, and reliable transmission, networking, and network management equipment. TDC allows timely reachback to the U.S. for intelligence, logistics, and people support that otherwise would have to deploy forward. During OEF operations, we successfully deployed TDC to support combat operations, demonstrating that TDC is the capability needed to support AEF communication requirements.

Contributing to the GIG, the AF is building an enterprise architecture ensuring our diverse projects and initiatives are closely integrated to deliver maximum capability to the warfighter. In support of the enterprise architecture, the AF “infrastructure” architecture facilitates system integration by providing timely and cost effective communications and information technology capabilities. The AF infrastructure leverages commercial and government developed technologies and ensures these technologies are controlled and integrated.

To provide our people better access to information and applications needed for their specific missions, we have fielded additional capabilities through the Air Force Portal. The Air Force Portal is envisioned as the single access point for practically all our information needs. Leveraging commercial successes in web-enabled information technology and communications, our members now have access to the Air Force Portal almost anywhere in the world.

Information Warfare (IW)

Multi-faceted information warfare planning and execution is another challenge of information superiority. In the effort to create specific effects to accomplish campaign objectives, the Air Force closely coordinates IO plans between and among supported and supporting commands to prevent redundancy, mission degradation, or fratricide. The numerous organizations participating in these coordination efforts include representatives from the COMAFFOR for Computer Network Operations and the Air Intelligence Agency, to IO squadrons and IW flights. To enhance the effectiveness of these organizations, we specifically designed tools for the IW planning and testing efforts. In an effort to normalize IO as a warfighting asset, we integrated AIA into the Air Combat Command, the IW lead for the Combat Air Forces. They directly support the Joint Force Commander through the JFACC/COMAFFOR.

We continue to make every effort to define requirements and layout a viable long-term strategy/roadmap to provide IW capability to the warfighter. The IW MAP has become a leading edge planning tool for the Air Force in this arena. Its expressed purpose is to: (1) define, document, and advocate Air Force IW requirements; (2) integrate those requirements into the Air Force Capabilities Investment Strategy; (3) identify solutions meeting validated IW needs; and (4) provide IW Mission Area expertise to the warfighter and to the Air Force corporate process. Subsequently, the MAP helps to focus disjointed efforts, reduces duplication, promotes integration among architectures, and enhances operations.

Information Assurance (IA)

The Air Force maintained a robust IA capability through a “Defense in Depth” strategy that integrated people, operations, and technology for multi-layered, multi-dimensional protection. People were trained to do the IA mission and protect the network. We changed policies and procedures to ensure IA operations are effective and efficient. We also implemented Finally, technological advances to provide physical protection to our information weapon system. Consequently our IA posture has never been better.

Training initiatives included a year long IA Campaign that focused our attention on such corporate issues as IA roles and responsibilities, network threats and countermeasures, computer network defense, and EAF web security which significantly improved our collective IA knowledge and capability. We also continued our empha-

sis on individual certification for network operators and maintainers through the development of a Job Qualification Standard toward mission-ready, deployable people.

Addressing procedures, we implemented a Time Compliance Network Order (TCNO) process. TCNO allows senior leadership to track and ensure completion of critically important computer security configuration changes. This resulted in a ten-fold reduction of network infections attributed to malicious code attacks from 2000 to 2001. Another important operational initiative is the deployment of Scope Network teams to our installations to fine-tune base-level networks. Scope Network's mission is to optimize and tune networks and firewalls and ensure their proper configuration. They deploy throughout the year to measure, analyze, train, and mentor at the base level.

Finally, our primary IA technology initiative is a layered equipment suite to discourage hackers and filter viruses as well as provide tools to identify vulnerabilities like the Combat Information Transport System (CITS), and the Network Management System/Base Information Protection (NMS/BIP). These systems provide a standard tool suite to each Air Force installation.

The requirements for global-level detection and early warning of natural disasters, conventional military or chemical, biological, radiological, nuclear and high-yield explosive (CBRNE) aggression remain as critical as ever. At the same time, September 11 introduced a new category of threat that will challenge the ability of America's C⁴ISR networks to cope with strategic-level surprise, fait accompli or limited objectives strategies, among others. Information superiority, the mastery of prediction, assessment and employment of data, is arguably our Nation's most pressing challenge.

Global Attack

Global Attack is the ability to create desired effects within hours of tasking, anywhere on the globe, including locations deep within an adversary's territory. It also includes the ability to retarget quickly against objectives anywhere, anytime, for as long as required.

Among Air Force programs supporting these capabilities is our bomber fleet. Our B-1, B-2, and B-52 bombers provide a global rapid response, precision and standoff strike capability, 24/7 battlespace persistence, and a level of time-critical targeting (TCT) capability. The new transformation era reinforces and re-emphasizes our ongoing basic bomber modernization plan—increase lethality, survivability, flexibility, supportability, and responsiveness.

All three platforms now carry the highly accurate 2000-pound Joint Direct Attack Munition (JDAM), and are all being fitted to carry new standoff precision guided weapons. In addition, future integration programs will see the inclusion of smaller precision weapons. To improve their survivability, bombers are receiving a range of upgrades to include defensive system, situational awareness and electronic counter-measure upgrades. To enable attack of time-critical targets, the Air Force is upgrading bomber avionics and communication systems and linking them directly with remote sensor and targeting systems.

To enhance our ability to kick down the door in remote theaters and clear the way for follow-on forces, the Air Force is planning for a mix of new generation manned and unmanned, air superiority and ground attack aircraft. However, until the F-22, Joint Strike Fighter (JSF), and Unmanned Combat Aerial Vehicle (UCAV) become an operational part of our inventory, we will continue to rely heavily on our legacy fighters—the F-15, F-16, F-117, and A-10—to provide a potent mix of air-to-air and air-to-surface capability. These platforms are all programmed to receive upgraded voice and data communication systems linking them to a joint command and control net. Programmed improvements to avionics and situational awareness systems will allow for better all-weather/night operations, combat identification and response to time-critical and moving targets.

F-15E modernization incorporates robust data-link capability and integration of smart weapons to ensure all-weather, deep strike lethality. The recent addition of Global Positioning System (GPS)-guided, precision guided munitions (PGMs) on the F-117 give it an adverse-weather capability. However, these aging platforms are growing more expensive to maintain and operate, and their combat effectiveness is expected to eventually decline as projected surface-to-air and air-to-air threats with greater capabilities emerge. The introduction of the stealthy F-22 and JSF will maintain America's technological advantage and ensure our ability to defeat next-generation threats while replacing our aging force structure with leap-ahead capabilities.

One of our Guard and Reserve's top modernization priorities is incorporating precision targeting pods into their F-16 aircraft. From 1998 through 2000, we outfitted all our Reserve units and selected Guard units with LITENING II pods. This acqui-

sition gave Guard and Reserve F-16s a critical precision strike capability while configuring these units with the system capabilities of the active F-16 force. Additionally, the Guard will join the Active Force in procuring Advanced Targeting Pod (ATP) for an initial operating capability in 2003.

Two critical F-16 programs, the Combat Upgrade Integration Details (CUPID) and the Common Configuration Implementation Program (CCIP), will bring decisive combat capability (night vision, helmet-mounted cueing, and data links) to our F-16 fleet. Additionally, the Falcon Structural Augmentation Roadmap (STAR) will ensure the F-16 fleet is structurally sound to perform its mission through its designed service life. Collaborative programs between our Active and Reserve components increase our overall procurement flexibility and close the gap in combat capability.

Intercontinental Ballistic Missiles (ICBM)

The recent DOD Nuclear Posture Review (NPR) announced a transition from the Cold War nuclear triad to a new capabilities-based triad in response to the more complex, evolving security environment. Consistent with NPR direction, the Air Force is providing for long-term sustainment of ICBM capabilities. Minuteman III (MMIII) ICBMs will be deployed through 2020 and supported by on-going life extension programs. We will begin to look at alternatives for a follow-on ICBM to be fielded as MMIII reaches the end of its service life. Peacekeeper (PK) ICBMs will be retired beginning in calendar year 2002. As the PK system is deactivated the Air Force intends to transfer some warheads currently on PK to the MMIII, thereby avoiding a costly life extension program on certain MMIII warheads. This replacement effort will ensure that the newest warhead with all modern safety features remains a part of the ICBM force, an essential nuclear strike element in the Nation's capabilities-based triad.

Precision Engagement

Our current operations emphasize the powerful advantage of being able to create precise effects rapidly. The Air Force offers tremendous capabilities to meet this national requirement from pinpoint humanitarian responses to precise weaponry. Precision is fundamental to all of our operations and, in particular, to transformational combat operating concepts. Along with information superiority and stealth, precision engagement enables our forces to identify an adversary's key centers of gravity and relay that information to strike assets, thus reducing risks by avoiding unnecessary engagements (a concept generally referred to as "parallel warfare"). Enhancing precision engagement will allow us to accomplish this cycle in near real-time. This would allow us to maximize the leverage gained from the fluid interaction of joint forces in more effective prosecution of operations.

We have made significant progress in our efforts to develop and field a new generation of weapons that can attack and destroy pin-point, hardened, and relocatable targets at night and in most weather conditions while greatly reducing the risk. By rapidly adapting new technology employed under actual combat conditions in Operations Allied Force and Enduring Freedom, we now have an array of precision weapons that can be employed from nearly all of our combat aircraft. Our high priority precision engagement programs now include the Joint Air-to-Surface Standoff Missile (JASSM), Joint Standoff Weapon (JSOW), JDAM, Wind Corrected Munitions Dispenser (WCMD), and eventually the Small Diameter Bomb (SDB).

JASSM is a precise, stealthy, cruise missile that will enable us to destroy heavily defended, hardened, fixed, and relocatable targets from outside of area defenses. JASSM program recently entered low rate initial production and will be delivered to the field in 2003.

JSOW is an accurate, adverse-weather, unpowered, glide munition. We are currently procuring two variants, the AGM-154A and AGM-154B, which are capable of destroying soft and armored targets at ranges exceeding 40 nautical miles.

JDAM employs GPS-aided guidance, incorporated in a tail kit, to deliver general-purpose bombs or penetration warheads with near-precision accuracy. We will use JDAM in all weather conditions from multiple platforms to destroy high-priority, fixed, and relocatable targets. The first operational use of a 2,000-pound JDAM was from a B-2 during Operation Allied Force, and JDAM has been used extensively during OEF. The F-22 will employ the 1,000-pound JDAM against anti-access and air defense systems. Using the 500-pound JDAM currently in development, the B-2 that carries up to 16 2,000-pound JDAMs in OAF, would be able to carry up to 80 500-pound JDAMs in future conflicts. This will provide the first step in the Air Force's transition to miniature munitions. Succeeding steps include the Small Diameter Munition (SDM). SDM, under development for the F-22, will offer standoff capabilities against the most difficult surface-to-air threats. The F-22 will carry up to eight SDMs internally.

WCMD has an inertial-guided tail kit that enables us to accurately deliver the Combined Effects Munition, Sensor Fuzed Weapon, and the Gator Mine Dispenser from medium to high altitude in adverse weather. WCMD became operational in late 2000 and has been successfully employed in OEF from the B-52.

Key to precision engagement is the GPS navigation signal used by sensors and shooters to assist in targeting the enemy with pinpoint accuracy. Successful joint operations rely on the GPS signal: search and rescue, rendezvous, and mapping are only a few examples. Rigorous upgrades to both satellites and warfighter equipment are currently in work to protect the ability of American and allied forces to employ the GPS signal on the battlefield and deny it to our adversaries while preserving civil use.

Precision capabilities allow the United States to engage in operations with dramatically reduced risk to friendly forces, significantly less costs in men and materiel, and with greater likelihood of success. The strike side of precision engagement enables us to employ one weapon per target to destroy it with minimal collateral damage and greatly increase the number of targets that can be struck per sortie.

The benefits are exponential. By minimizing the number of sorties required to strike a target, we shrink the forward footprint necessary and minimize the number of airmen, soldiers, and sailors in harm's way. Indeed over the last decade, the Nation has faced numerous engagements wherein precision has proven the method for success. From the Balkans to Kabul, combatant commanders have required precision capability, not large-scale conventional operations. However, this demand has dramatically reduced our large Cold War reserve munitions stockpiles. As current operations continue to tax existing PGM inventories, the Air Force is working to expand the capacity of our industrial base to fill preferred munitions requirements. This strategic effort, along with our continued acquisition of JDAM, JASSM, JSOW, and WCMD, will increase PGM capabilities over the next several years. The changing nature of warfare with its emphasis on precision engagement, necessitates that munitions recapitalization and development of transformational small weapons will remain among our top priorities.

Precision strike, however, is more than simply very accurate munitions. It is also the ability to generate precise effects other than destruction. For that reason we also invest in various non-lethal weapons, offensive information warfare capabilities, and directed energy weapons that enable the U.S. military to affect targets without having to destroy them. This enables effects-based operations that match precise capabilities to desired effects—the ultimate in deterrence.

Rapid Global Mobility

Rapid global mobility ensures the Nation has the global reach to respond quickly and decisively anywhere in the world. As the number of forces stationed outside the United States has declined, the need for an immediate response to overseas events has risen. Given that access to forward bases will remain critical and become increasingly risky, the rapid deployment and agile sustainment of expeditionary air and space forces will be key to our ability to operate across the spectrum of conflict.

Airlift and tanker aircraft give the United States the ability to swiftly reach out and influence events around the world. OEF and ONE have, again, shown the utility of rapid global mobility. We have also witnessed the potential need to provide critical tactical lift capability for immediate response at home. However, even with the success of these ongoing operations, the Air Force desperately needs to continue airlift and tanker modernization efforts to ensure the U.S. maintains its ability to operate globally. As part of our on-going effort to assess our airlift requirements in light of current and anticipated needs, Air Mobility Command is undergoing a comprehensive review of our air mobility force structure.

Global Air Traffic Management (GATM)

In addition to aging aircraft problems, the Air Force mobility fleet must also respond to the added requirements of a new air traffic architecture. GATM focuses on increasing system capacity and flight efficiency, while continuing to meet flight safety standards. The most critical technology elements are satellite-based navigation, increased use of data links rather than voice for pilot/controller communication, and improved surveillance that will enhance both ground and cockpit situational awareness. Incorporation of these technologies will ensure our mobility fleet maintains unrestricted access to global airspace.

An essential means to ensure the AF's ability to support its 54.5 million-ton miles per day airlift requirement is through the procurement of additional C-17s. The AF has identified a need for at least 180 C-17s, and will award a follow-on multiyear procurement contract to reach that number. A mobility tiger team with Active, Re-

serve, and Guard representation will continue to study beddown plans for these additional aircraft.

The average age of our KC-135 tankers is now over 41 years, and operations and support costs are escalating as structural fatigue, corrosion, systems supportability, and technical obsolescence continue to take their toll. To keep these aging aircraft operational, we are modernizing the avionics and navigation systems on all Active, Guard, and Reserve KC-135s. Called Pacer CRAG (compass, radar, and global positioning system), the project provides for a major overhaul of the cockpit to improve the reliability and maintainability of the aircraft's compass and radar systems. The project also meets the congressionally-mandated requirement to install the global positioning system in all Defense Department aircraft. As an added safety measure for formation flying, a traffic collision avoidance system (TCAS) will be installed. TCAS gives pilots the ability to actively monitor other aircraft and provides advance warning of potential mid-air collisions.

The ongoing war on terrorism is further stretching the tanker fleet, motivating the Air Force to consider accelerating replacement options. The Boeing 767 Global Tanker Transport Aircraft (GTTA) is a promising alternative to quickly replace the KC-135E, our least capable and most costly to maintain tanker aircraft. While considering this and other lease options, the Air Force is focused on acquiring the world's newest and most capable tanker; increasing fuel offload, increasing availability, and increasing reliability—all with far lower support cost.

The Air Force is pursuing a two-phased modernization plan for the C-5 fleet. Phase I is the Avionics Modernization Program (AMP) and Phase II is the Reliability Enhancement and Re-engining Program (RERP). C-5 AMP replaces unreliable/unsupportable engine/flight instruments and flight system components, installing GATM equipment to assure complete access to global airspace and installing navigation/safety equipment to reduce risk of mid-air and ground collisions (i.e. TCAS). C-5 RERP improves aircraft reliability, maintainability, and availability by replacing the power plant and other unreliable systems. Several C-5 aircraft will undergo multiyear testing to evaluate the potential for modernizing this aging, but important mobility asset. The results of that evaluation will determine the need for additional C-17 acquisitions or other alternative.

Modernization of the C-130 fleet is proceeding with a two-pronged approach to maintain an intra-theater airlift capability well into the 21st century. Procuring 168 new C-130Js to replace our oldest C-130s and modifying the remaining fleet will reduce total ownership costs and simplify maintenance, training, and operational employment. New C-130Js will replace 8 EC-130Es and 150 of our most worn-out C-130E combat delivery aircraft. In addition, 10 C-130Js will replace the Reserve's 10 WC-130H aircraft at Keesler Air Force Base, MS. These aircraft and crews are specially trained and equipped to penetrate severe storms while collecting and transmitting extensive meteorological data necessary to track and forecast the movement of these severe storms to a special ground station. C-130Js will also replace the Air National Guard's aging Commando Solo platform, as well as complete other Guard units. The remainder of the AF's C/AC/EC/HC/LC/MC-130 fleet will undergo an Avionics Modernization Program (C-130 AMP). This will include state-of-the-art avionics and a new "glass" cockpit that will eliminate the need for a navigator in the combat delivery aircraft. Along with increased reliability, this modernization will make the fleet compliant with the GATM and the DOD's navigational safety requirements.

Rapid global mobility is also dependent upon expeditious airfield support. Moving aircraft tails in-and-out of a field quickly can determine success or failure of an operation. The Air Force is procuring the Tunner (60K) and Halvorsen (formerly next generation small loader or NGSL) loaders to replace older equipment, providing a new capability to interface directly with all military and commercial cargo aircraft. The Tunner is optimized for high volume to support operations at major aerial ports while the Halvorsen is C-130 deployable to support mobility operations at forward, austere bases.

Large Aircraft Infrared Countermeasures (LAIRCM)

The Air Force has begun a new self-protection initiative to counter man-portable air defense systems (MANPADS). LAIRCM will use state-of-the-art technology to provide an active IR defense for the AF's airlift and tanker aircraft. LAIRCM builds on existing systems designed to defend helicopters and small, fixed-wing aircraft. It will add a laser, which provides the increased power needed to protect aircraft with large IR signatures like the C-17 and the KC-135. Operational capability is expected on the first C-17s in late fiscal year 2004. Additional airlift and tanker aircraft will be LAIRCM-modified in the future.

CV-22

The CV-22 is the Air Force designation for the special operations variant of the V-22 Osprey—a vertical takeoff and landing airplane designed for long range, rapid, clandestine penetration of denied areas in low visibility, adverse weather, and/or at night. With twice the range and speed of a conventional helicopter and state-of-the-art avionics system, the CV-22 will be able to complete most of its missions under the cover of darkness without being detected. We will use the CV-22 to infiltrate, exfiltrate, and resupply Special Operations Forces (SOF) and to augment personnel recovery forces when needed. Currently, the entire V-22 program is undergoing a major restructuring that will address technical and safety concerns. Flight tests of the two CV-22 test vehicles, suspended through 2001, will resume in 2002 and continue through 2005.

VIP Special Air Mission/Operational Support Airlift (VIPSAM/OSA)

The Air Force continues to modernize the VIPSAM/OSA fleets to provide senior leaders with improved capabilities to respond to national crises. Aging CINC support aircraft are being replaced with modern commercial aircraft with intercontinental range and robust communications (leased Gulfstream Vs, designated the C-37, and Boeing 737-700 designated the C-40B). This innovative strategy to leverage the commercial aircraft industry should be completed by fall 2002. The President's VC-25s will receive major upgrades to the passenger cabin infrastructure. Additionally, major upgrades to the communications suite will provide airborne capabilities comparable to that of his White House office. The four C-32s (Boeing 757s) will also receive advanced "office-in-the-sky" upgrades to include broadband data and direct broadcast service. As funds become available, remaining VIPSAM aircraft will be evaluated for similar upgrades.

Agile Combat Support (ACS)

Responsiveness, deployability, and sustainability—the cornerstones of American expeditionary operations—are the mandate of agile combat support. The basic objectives established set to achieve these goals remain intact. The Air Force established set objectives to elevate the capabilities of the ACS elements by developing lighter, leaner, and more rapidly deployable forces; creating more responsive planning and execution capability; executing improved agile combat support command and control; and assuring an agile, responsive, and survivable sustainment capability.

While progress has been made toward achieving these objectives, much of the deployment strain in support of OEF has fallen on our expeditionary combat support forces. Some high-demand support areas have exceeded their on-call capabilities in current AEF rotation cycles, as a result of our surge mode activities, which are likely to continue for some time. Consequently, we are continuing to make gains in right-sizing deployment teams so they are postured efficiently and effectively for expeditionary needs. We are placing high emphasis on the development of expeditionary site planning tools that provide the means to tailor our deployment capability based on assets pre-positioned in the theater.

Reconstituting our current bare base systems and wartime stocks, as well as developing and acquiring bare base assets and other types of support equipment that are "lighter and leaner" and more rapidly deployable are also integral to achieve force responsiveness. Essential investments in infrastructure and pre-positioning are mandatory ingredients of improved reception and beddown capabilities at our fighter and bomber forward operating locations (FOLs).

The fielding of the Integrated Deployment System at all of our AF Wings has improved the responsiveness of our Wing deployment process. Our information technologies must continue to mature with expansion of such capabilities as the virtual logistics suite hosted on the Air Force Portal. These essential components provide real-time situational awareness for ACS command and control that leverages logistics and combat support across simultaneous operations in multiple theaters that now include the CONUS. The CSAF's Logistics Review (CLR) and ongoing logistics transformation are reengineering our logistics processes to achieve an agile, effective, well integrated logistics chain that is responsive to AEF requirements.

Whether forward deployed in AEF operations or completing homeland security missions, we must be prepared to operate under any conditions. Protecting critical bases of operations and defeating CBRNE weapons and their means of delivery is one of the most complex challenges facing the DOD. Our balanced response to the proliferation of these weapons, integrates the four pillars of counterproliferation—proliferation prevention, counterforce capabilities, and active and passive defense measures.

Our counter-NBC operational readiness initiative sets Air Force-wide standards for readiness, identifies shortfalls, and develops capabilities to effectively cope with

CBRNE attacks. This initiative includes a counter-NBC roadmap and an enhanced counter-chemical warfare CONOPS. The roadmap is an innovative investment strategy that cuts across Air Force plans and programs to increase counter-NBC visibility, while offering enhancements for effective air and space operations in NBC environments.

Regardless of contamination, combat, or humanitarian settings, the medical service plays an important role in agile combat support. Through training initiatives and innovation in field systems this year, AFMS has raised the bar on its capabilities. The results of these efforts are the addition of state-of-the-art equipment and training facilities which guarantee AFMS' ability to respond effectively when the Nation calls.

One example is EMEDS, which is a lightweight modular medical system that allows the AFMS to tailor its response to each situation. Another revolutionary disaster response system is the Lightweight Epidemiological Advanced Detection and Emergency Response System (LEADERS), designed to enhance the current medical surveillance process and provide the earliest possible detection of covert biological warfare incidents or significant outbreaks of disease. The Air Force will continue to work with its civilian counterparts to develop and fine-tune this technology over the coming year.

Along with developing relevant facilities and equipment, the AFMS is expanding its training capabilities through the development of the Coalition Sustainment of Trauma and Readiness Skills (CSTARS) program. CSTARS creates learning opportunities in which civilian academic centers serve as training platforms to provide clinical experience to help sustain necessary readiness skills for AFMS providers. The CSTARS arrangement allows for synergistic relationships between academic medical centers and military medical assets, while simultaneously improving wartime readiness and homeland security capability. Finally, AFMS training also extends to allied and friendly nations. The Institute of Global Health (IGH), located at Brooks AFB, Texas, is a worldwide educational program for medical providers to develop and improve their medical response skills. Programs are tailored to the host nation's infrastructure and resources and are taught on-site.

This cross-section of examples of initiatives that will help achieve the four ACS objectives are producing meaningful results. There is, however, more to be done to better prepare our ACS capability for supporting the EAF vision. For example, we need to fill readiness shortfalls in key logistics resources strained by expanded operations including people, skills, spares, munitions, bare base assets, vehicles, etc. We need to improve our capability to rapidly develop deployment and sustainment plans for fast-breaking contingencies. Enhancements need to be made to our ACS command and control capability to make it more responsive, better integrated, and sufficiently robust to support AEF needs worldwide. Finally, modernization of equipment and the tools essential to complement skilled personnel require investments in R&D in science and technology initiatives that will help reduce our "footprint" while improving our ACS capability.

Additional Readiness Concerns

Facilities and Infrastructure

Air Force installations and facilities that are available when and where needed, and with the right capabilities, form the foundation supporting current and future operational requirements and readiness. Our installations and facilities are the platforms from which we launch and recover Air Force and joint weapon systems while simultaneously providing work and living environments for personnel and their families. For example, bases like Whiteman AFB, Missouri and Ramstein AB, Germany, are important nodes in the global network that sustains OEF operations while also sustaining thousands of airmen, dependents, and their communities.

Regular and planned upgrades are an essential part of keeping a healthy infrastructure upon which to build and sustain air and space capabilities. In fiscal year 2002, operations and maintenance (O&M) sustainment funding precluded fully maintaining Air Force facilities and infrastructure and will increase the backlog of necessary repairs. In the near term, the Air Force facilities recapitalization rate falls short of DOD's 67-year facilities recapitalization goal. In fiscal year 2002, our military construction (MILCON) and O&M restoration and modernization accounts allowed us to achieve a recapitalization rate of 163 years. With congressional assistance, we were able to reduce our fiscal year 2002 rate to 118 years.

In the fiscal year 2003-2007 Adjusted Program Objective Memorandum we were able to fully fund O&M sustainment across the FYDP and achieve a restoration and modernization recapitalization rate trajectory that will meet the OSD's 67-year goal by 2010. This track must be maintained. Sustaining and modernizing our facilities

and infrastructure will ensure we have the right facilities at the right time and place to support military readiness.

Vehicle Replacement Program

The Air Force vehicle fleet is in serious need of recapitalization. Underfunding of the program during the past decade has created a backlog of more than 41,000 general and special purpose vehicles that have exceeded their life expectancy. This backlog represents half of the entire Active, Guard, and Reserve vehicle fleets. The backlog continues to grow each year, despite efforts to lease vehicles and extend vehicle life expectancies through enhanced technology. Current funding is below the annual requirement. On-going operations have created a need for 879 additional leased and procured vehicles valued at \$42.4 million to support the mission. Failure to replace aging vehicles has a direct impact on of readiness and ultimately our combat capability.

Realignments and Closures

Reductions in Air Force manpower and force structure continue to outpace those in infrastructure. As a result, the Air Force continues to fund unneeded facilities while struggling to maintain its vital operational readiness. Our physical plant today is too costly, and we have too much of it. Excess infrastructure continues to waste precious dollars that could be better used for force modernization and quality of life. The Air Force needs to close unneeded installations and direct the savings into readiness areas: base operating support, real-property maintenance, family housing, and military construction at crucial operational bases. The Air Force will comply with the Secretary of Defense's guidance for conducting the Base Realignment and Closure (BRAC) process in 2005, as authorized in the 2002 National Defense Authorization Act.

Environmental Leadership

The Air Force continues to be a leader in the stewardship of our environment through compliance, pollution prevention, resource conservation, and environmental restoration. We have achieved the Defense Planning Guidance goal for 2002 for the environmental restoration program, to have cleanup remedies in place for 50 percent of our active installations high-risk sites. The next goal is to have remedies in place for 100 percent of the high-risk sites by the end of 2007. We are on track to achieve that goal, as well as having remedies in place for all medium risk sites by the end of 2011 and all low-risk sites by the end of 2014.

The Air Force has a tremendous range of flexible, rapidly responsive capabilities—the skill sets that allow us to meet any mission requirement. Constant improvement will require innovation, creativity, and re-assessment, but also the funding support to recapitalize critical components.

Towards Developing Systems

Experimentation and Wargames

We conduct experiments and wargames to evaluate near- and far-term air and space capabilities and operational concepts. Joint Expeditionary Forces Experiment (JEFX) is the Air Force's large-scale experiment, which is fully integrated with Joint Forces Command's Millennium Challenge series of experiments. It is a live and constructive event focused on improving time critical targeting; command and control of intelligence, surveillance, and reconnaissance; and alliance participation in an open-floor Combined Air and Space Operations Center. The Global Engagement (GE) wargame is held every other year to explore the potential capabilities of joint air and space power and future concepts 10 to 15 years into the future. GE-V demonstrated air and space power's unique capability to ensure access to operational areas where the enemy employs robust anti-access strategies. In August 2001, we completed a year of post-game analysis from GE-V. This analysis showed the Air Force is on the right vector toward the future in the area of force capabilities and is making great strides in addressing time critical targeting requirements. GE-V also provided substantive recommendations for improvements in space control, information operations, and forward logistic support.

Planning is underway for the next Global Engagement (GE-VI), scheduled for November 2002. This game will explore mid-term joint/combined operational concepts, such as rapidly dominating the battlespace and setting conditions for transitioning to sustained joint operations.

During odd-numbered years, we conduct the Air Force Future Capabilities wargame that takes a longer view, striving to shape our strategic vision by testing alternative concepts, systems, and force structures that may appear 20 to 25 years into the future. These wargames have produced new air and space concepts, such

as long-range standoff warfare, reach-forward C² capability, space force application, and the link between C², ISR, and target engagement, which continue to mature through follow-up analysis and subsequent wargames. We have just concluded the 2001 Futures Game that focused on defining C² and ISR for the 2020 air and space campaign; overcoming anti-access strategies; survivability of space capabilities; future transformational capabilities; computer network operations; and conducting future joint/coalition operations. Insights from this game will be developed, analyzed and investigated further throughout 2002.

Advanced Concept Technology Demonstrations (ACTDs)

ACTDs marry new operational concepts with mature technologies meeting warfighter needs in 2 to 4 years at a reduced cost. The Air Force currently has 21 ongoing ACTDs. An example is the Hyperspectral Collection and Analysis System ACTD that will demonstrate various hyperspectral sensors on operational platforms and integrate them into the existing tasking, processing, exploitation, and dissemination architecture. Another example is the Thermobaric Weapon ACTD, which provides an energetic thermobaric penetrator payload to defeat enemy tunnel facilities and weapons with two to three times the lethality of conventional high explosive payloads.

Battlelabs

Since their inception in 1997, Air Force battlelabs have developed over 120 initiatives, including the application of commercial scheduling software for the Air Force Satellite Control Network, telecommunications firewalls for base phone systems, and the use of speech recognition to reduce mission planning time. The recently commissioned Air Mobility Battlelab, with a charter to rapidly identify and assess innovative operational and logistics concepts, joined the ranks of the Air and Space Expeditionary Force, Command and Control, Force Protection, Information Warfare, Space, and Unmanned Aerial Vehicle Battlelabs.

Enhancing Fundamental Practices

Agile Acquisition

The Air Force launched agile acquisition to streamline and synchronize the business of defining, funding, developing, acquiring, testing, and sustaining the weapon systems our Air Force uses to defend America's freedom. The goal is simple: Field today's technology today. While we've had many individual successes in the past, individual successes do not translate into fundamental reform. We must get to the point where doing things smartly is not news. Agile acquisition is the strategy to achieve systemic improvement.

As a strategy, agile acquisition has three major thrusts: First, we will relentlessly attack our own processes and get rid of those steps that are not value added. Second, we are going to free our leaders to lead and demand that they take the initiative. We are going to train them to be innovative and think creatively, provide periodic refresher training, and then hold them accountable for being agents of change. Finally, we're going to offer a lot of help through our new Acquisition Center of Excellence, which opened for business on December 2001.

The acquisition reform of Lightning Bolts 2002 gives us the tools to make those changes. They will focus our acquisition efforts and, at the same time, reinforce our other initiatives to transform and improve the services and products we provide. The Lightning Bolts will also reinforce and complement the headquarters reorganization announced in December 2001 by the Secretary and Chief of Staff. In addition, the AF is an active member of DOD's Rapid Improvement Team, chartered to streamline the Information Technology system acquisition process to less than 18 months. Towards that end, we are leading prototype programs aimed at eliminating serial and redundant oversight processes, expanding participation by interested parties, and sharing accountability from program inception. Achieving agile acquisition is not a luxury; it is a requisite for success. We must provide absolutely the best and newest capabilities to our fighters in the shortest time possible. Our acquisition processes, too often seen as a roadblock to real progress, must become as agile as our warfighters.

Another key aspect of acquisition reform involves bringing the warfighter into the process early on. This is an essential element of our capabilities-based concept of operations which is discussed in a later section.

Long Term Depot Maintenance Plan

Depot maintenance is another critical element of our overall warfighting capability. The current depot posture has been influenced by the downsizing of our operational force; the reduction of our organic infrastructure; the introduction of new

technologies; and recent depot legislative changes. In order to maintain a ready and controlled source of depot maintenance, the Air Force has prepared a Long Term Depot Maintenance Plan for submission to OSD and Congress by the summer recess of Congress.

The overarching objective of this plan is to ensure that Air Force equipment is safe and ready to operate across the whole range of contingencies, from training to supporting major theater wars. Partnering with private industry is a key element of our plan and provides the best value approach for maintaining our depots. Benchmarking our depots is essential for us to understand where best to invest. Leveraging the best of public and private capabilities ensures the Air Force will take advantage of what each does best. Partnering is also the method by which we will be able to most efficiently utilize our current facilities as well as bring in technologies to support core capability requirements in the future. However, taxing programs to fund capital improvements is a contentious process. We continue to explore the concept of depot capital appropriations to smooth out the investment streams.

The Air Force Long Term Depot Maintenance Plan will provide military strength by ensuring we possess an organic "core" capability sized to support all potential military operations. It will be a living document and postures our three organic depots to continue to support the warfighter.

Organizational Experimentation—Future Total Force

In the 21st century, the U.S. Air Force anticipates deriving its strength from the flexibility and the diversity of its integrated Active Duty, Air National Guard, Air Force Reserve, and civilians more than ever before. Optimum use of Air Force component resources is critical in providing the complete potential of American air and space power. Future Total Force (FTF) efforts will include new ways to optimize the components to make the best use of our resources and people and to build on a foundation of high standards and strong cooperation among the components.

In the 1990s, the restructuring of the Air Force placed a greater emphasis on the force structure in the Air Reserve component. Today, the Guard and Reserve account for over 65 percent of the tactical airlift, 35 percent of the strategic airlift capability, 60 percent of air refueling, 38 percent of fighters, and significant contributions to rescue, bomber, and combat support missions. Additionally, the Guard and Reserve have an increasing presence in space, intelligence, and information systems. Guard and Reserve units also provide support in pilot training; radar and regional control centers manning at the Edward's Test Center, California; Test and Evaluation missions in Arizona; instructing in weapon system school houses; conducting flight check functions at Air Force depots; and helping to develop the Homeland Defense mission. Today, the Guard and Reserve components are providing day-to-day mission support. They are no longer simply a "reserve" force—their collective capabilities make operating as an expeditionary Air Force possible.

Future success will depend upon our ability to develop an even closer partnership between the components and a "seamless" integration of all assets. FTF will explore expanding the integration of our people and systems, seeking efficiencies and leveraging their individual strengths by combining operations into new organizational structures—blended units. Together, Active, civilian, Guard, and Reserve form a more capable, more efficient and more effective organization than any could provide individually.

Blended units will integrate Active, civilian, Guard, and Reserve capabilities in creative new ways, that may appear as radical departures from the past, but which have already been part of the Air Force business practice for years. Flying and support functions, for example, will be so integrated with component personnel as to be invisible to outside observers. This will focus attention on conserving valuable manpower, resources, and skills while reducing overall costs. Finally, blended units will maintain the ability to deploy rapidly and will explore new avenues toward an overall goal of providing a "best mix" of personnel for the assigned mission.

Developing blended units will not be without challenge. Out-dated laws and policies would have to change to reflect requirements in command and control, fiscal and personnel issues. Demands for more efficient use of resources (personnel and aircraft), greater flexibility and integration of personnel and administrative systems, higher reliance on the commercial marketplace skills of individuals, and rapid adjustment to changing cultural, social, and economic influences on the Air Force institution will serve to further promote blended organizations.

The Guard and the Reserve are more than just our partners in providing air and space power, they are an integral part of today's Air Force and form a special link between the Active-Duty Air Force and America's citizens. To a great extent, they are citizens first. Blended units would take advantage of that connection to the citizenry and their broad base of knowledge and experience, in both civilian and mili-

tary matters. The Air Force goal is to create a truly “seamless” force of airmen—one organization of airmen who are interchangeable but who also operate in a different status at particular periods in their air and space careers. The Air Force is committed to evolving its FTF to meet the highly complex security demands in its future.

Enhanced Homeland Security Missions

As operators of two legs of the nuclear triad, the Air Force remains at the heart of homeland security. Since its establishment in 1947, the Air Force has been actively and successfully deterring aggressors, intercepting intruders, and providing ballistic missile warning. The September 11 attacks brought homeland security to the forefront with the publication of Executive Order 13228, establishing the office of Homeland Security. The Air Force is being called upon to counter a new class of foreign and domestic terrorist threats through both defensive and offensive actions. Air defense capabilities remain on high alert to intercede and prevent further misuse of our Nation’s civil aviation assets. Expeditionary capabilities have been called upon to help destroy terrorist operatives where they live. In all actions, the air and space expeditionary force construct provides the flexibility to place forces where and when we need them.

Ground-Based Midcourse Defense (formerly: National Missile Defense)

The Rocket Systems Launch Program provided targets and interceptor vehicles for two National Missile Defense tests in 2001. Using decommissioned Minuteman IIs, simulated incoming missiles were launched from Vandenberg AFB while a Minuteman II stage two and three combination, with test interceptor on board, was launched from Kwajalein Island. In the two tests supported this year, both successfully intercepted the target vehicle, meeting a huge technical milestone in the quest for homeland missile defense.

Conclusion

Air Force capabilities provide America with a unique set of strengths—asymmetric advantages. However, today’s technological advantage is no guarantee of future success. Maintaining our current leadership position requires addressing our aging infrastructure, modernizing outdated weapon systems, and harnessing technology to achieve our vision. To be sure, this requires funding, but a significant part of the improvements rests with ingenuity. In fact, how we maximize the collective potential of our Active, Guard, Reserve, and civilian resources will affect our ability to exploit the advantages our core competencies create. Realizing this potential through better business practices, more sophisticated training methods, acquired technologies, and other innovative means will be even more challenging given our ongoing efforts in the war on terrorism. Yet the risks of failing to meet the requirements for readiness are unacceptable. Readiness is one prerequisite for American military success. Another is transformation.

TRANSFORMATION

New Impetus to Transform—The evolving geopolitical context

The terrorist attacks of September 11 have forever changed the world we live in. Now, more than ever, our military must transform to preserve the asymmetric advantages it currently enjoys—specifically, its air and space capabilities. These advantages are in danger of eroding in the face of emerging security threats, including the diminishing protection of geographic distance; the proliferation of weapons of mass destruction; rapidly advancing technologies (such as sensors, information processing, and precision guidance) available to adversaries; escalating competitions in space and information operations; greatly reduced access to forward bases; the prospect of operations in urban areas; and finally, the prominent threat of global terrorism, especially within our open borders. The demonstrated superiority of our air and space forces over Afghanistan, and the asymmetric advantage they continue to provide the Nation must not be taken for granted. Success is not a birthright, we must continue to transform to stay ahead of our adversaries.

America’s future success requires us to fully exploit our current technological dominance to seek asymmetric advantage over our adversaries. Such transformation will encompass the horizontal integration of manned, unmanned, and space assets and require us to successfully address emerging and time-critical targets. It will require digital communications at the machine level, which result in providing Joint Force Commanders with decision-quality information. The sum of this wisdom is a cursor over the target.

Transformation can include multiple technologies that enable new missions, significantly improved old systems and processes, or using existing capabilities or orga-

nizations in new ways. Ultimately, transformation will drive how the military is organized, trained, and equipped. Transformation can also involve changes in military doctrine or tactics, techniques, and procedures that determine force deployment, employment, or the way forces are led or interact with each other to produce effects. It is also important to remember that transformation extends into every aspect of the Air Force—be it warfighting or support capabilities. For example, transformation of our business systems is currently being embraced to take advantage of new technologies and processes already proven in commercial industry. These ideas and products will enhance our efficiency and increase the crossflow of information across Air Force communities.

A recapitalized force is fundamental to the realization of transformational forces. Though we are shortening acquisition cycles, new systems still take years to reach the field. Therefore transformation in the immediate future must begin by using legacy systems in new ways. We will continue to adapt and innovate in order to push the envelope of our capabilities.

Transformation—Realizing Potential Capabilities

In the 2001 QDR, the Secretary of Defense provided specific direction for military transformation. Future defense planning will shift from the previously “threat-based” approach to a “capabilities-based approach,” focusing on “how an adversary might fight, rather than specifically on whom the adversary might be or where a war might occur.” To support the SECDEF’s goals, the Air Force remains in a continued state of evolution and transformation, aggressively pursuing advanced technologies, innovative methods of employment, and bold organizational changes. Transformation is nothing new to the Air Force. It has been an innate characteristic of airmen from the Wright Brothers to airmen operating in the 21st century.

Continued AF transformation will enable the United States to defeat an adversary by giving the Joint Forces Commander the exact warfighting effects he needs, at the right place, and at the right time. AF transformations will help DOD achieve its “operational goals;” give the United States more operational flexibility and capability to address the future security environment; defeat adversaries’ asymmetric strategies; reduce friendly casualties and collateral damage; and sustain America’s current asymmetric advantages into the future.

Capabilities-Based Concepts of Operations (CONOPS)

AF warfighters are working hard to lay the foundation for the next step in our transformation to a capabilities-focused Expeditionary Air and Space Force. Our goal is to make warfighting effects, and the capabilities we need to achieve them, the drivers for everything we do. The centerpiece of this effort is the development of new Task Force Concepts of Operations (CONOPS) that will guide our planning and programming, requirements reform, and acquisition. We have identified several Task Force CONOPS that we are fleshing out—Global Strike Task Force (GSTF) is a prominent example and is the farthest along in development.

GSTF defines how the AF plans to operate when faced with an anti-access scenario. It will meet the immediate needs of our regional CINCs by leveraging our current and near-term capabilities to overcome anti-access threats like the next generation surface-to-air missiles and other defensive networks. By incorporating the stealth and supercruise capabilities of the F-22 with advanced munitions like SDB we will enable our stealth assets like the B-2s and F-117 to take apart the enemy defenses. This capability guarantees that follow-on air, space, land, and sea forces will enjoy freedom from attack and freedom to attack. Key to the success of the entire family of Air Force Task Forces will be the horizontal integration of manned, unmanned, and space ISR assets. A key component of horizontal integration is the Multi-sensor Command and Control network that will help provide the actionable, exploitable intelligence the JFC needs to make effective decisions.

What warfighting effects will the AF provide? What capabilities do we need to deliver these effects? Our family of Task Force CONOPS will provide the answers to these questions. With this focus, we then understand what key requirements are needed to support these CONOPS.

Advanced Capabilities

Manned Assets

Stealth provides the ability to fly largely undetected in hostile airspace and penetrate air defense systems. Stealth will be absolutely essential to establish air superiority in the decades ahead against rapidly improving air defense systems and fighters. The F-22, JSF, UCAVs, improved B-2 bombers, and highly stealthy standoff weapons comprise the critical stealth capabilities under development now and into the future.

The F-22, with its revolutionary combination of stealth, supercruise (i.e. supersonic-cruise without afterburner), maneuverability, and integrated avionics, will dominate the skies. The F-22 is clearly needed to counter the rapid deployment of third generation fighters to potential U.S. adversaries. In addition, when outfitted with the SDB, the F-22's ability to penetrate an adversary's anti-access airspace and destroy his most critical air defense capabilities, will enable 24 hours stealth operations and freedom of movement for all follow-on forces—fully leveraging our Nation's asymmetric technological advantages.

In 2001, flight-testing continued to demonstrate the revolutionary capabilities. Specifically, the F-22 successfully completed an AIM-120 guided missile launch, and initial radar detection range measurements (met specification requirements the first time out—an unprecedented accomplishment).

On August 14, the Defense Acquisition Board approved the F-22's entry into low-rate initial production (LRIP). Entering operational service in 2005, this transformational leap in technology is the linchpin to preserving the Nation's most important military advantage for the warfighter: the capability to rapidly obtain and maintain air and space dominance.

Acting in concert with the F-22 will be the JSF. The JSF program will develop and field an affordable, lethal, survivable, next-generation, multi-role, strike fighter aircraft for the Air Force, Navy, Marine Corps, and our allies. With its combination of stealth, large internal payloads, and multi-spectral avionics, the JSF will provide persistent battlefield stealth to attack mobile and heavily defended targets. Furthermore, JSF planned reliability and maintainability will enable an increase in sortie generation rate and mission reliability, and will reduce the logistics footprint as compared to legacy aircraft.

On October 25, 2001, the Secretary of Defense certified to Congress that all JSF Concept Demonstration Phase (CDP) exit criteria had been accomplished; the technological maturity of key technologies was sufficient to warrant entry into the System Development and Demonstration (SDD) phase; and both CDP contractors achieved greater than 20 hours of short take-off, vertical landing (STOVL) aircraft operations. On October 26, 2001, the JSF program officially entered the SDD phase with the award of contracts to Lockheed Martin for the airframe and Pratt & Whitney Military Engines for the propulsion system. During the SDD phase, the program will focus on developing a family of strike aircraft that significantly reduces life cycle cost, while meeting the services' operational requirements. The program will use a block upgrade approach, based upon an open system architecture, which addresses aircraft and weapons integration and supports the services' Initial Operational Capability (IOC) requirements in the 2010–2012 timeframe.

International partners will share the cost of JSF development. The United Kingdom signed an agreement in January 2001 to contribute \$2 billion to the SDD program, and negotiations are underway with other potential international partners. International participation in JSF will result in substantial benefits to the United States in such areas as future coalition operations and interoperability; financial savings; appropriate U.S.-foreign industry technology sharing; and strengthening political-military ties with our allies.

For ballistic missile defense, one of the most important manned assets is the Airborne Laser (ABL). ABL is a transformational boost-phase intercept weapon system that will contribute significantly to our multi-layered missile defense architecture. Structural modification of a 747 aircraft, the first of two ABL prototypes, was completed in calendar year 2001. In calendar year 2002, ABL will begin an intensive period of subsystem integration and flight testing, progressing toward a lethal demonstration against a ballistic missile. The ABL program was transferred to the Missile Defense Agency in October 2001 and will return to the Air Force for production and deployment. The ABL will also provide critical data for the development of a Space Based Laser (SBL).

Unmanned Assets

Unmanned Combat Aerial Vehicles have the potential to provide revolutionary suppression of enemy air defenses (SEAD) and strike capabilities to future joint force commanders. Our UCAV X-45 system demonstration program with DARPA will demonstrate the feasibility of UCAVs to affordably and effectively accomplish these missions in the high threat environments of the 21st century. The first demonstration aircraft test flights will begin in 2002. UCAVs will eliminate the operator from harm's way for high-risk missions and, in conjunction with manned platforms, be a crucial enabler for GSTF and other Air Force Task Forces.

Space Based Assets

Maintaining and developing space superiority is critical to the transformation of the U.S. military to meet the challenges ahead. At the forefront of this development is leveraging the resident expertise of our space warriors, and integrating their cultural strength and wisdom with air forces in order to achieve maximum operational effects. The ability to exploit and deny access to space is of great importance in this new era where dominance in information systems may determine battlefield success or failure. The Air Force is investigating or pursuing revolutionary new capabilities to ensure adequate space situational awareness (in addition to traditional space surveillance) as well as defensive and offensive counterspace capabilities.

We are transforming our space situational awareness with a much needed improvement to the Nation's missile detection and warning capability. The highly accurate Defense Support Program (DSP) satellite system on orbit today was developed over 30 years ago to provide strategic missile warning. Modernization to meet 21st century warfighter needs is critical. The new Space Based Infrared system (SBIRS) provides a single architecture for the Nation's infrared detection needs—a "system of systems"—meeting our security requirements for 24/7 strategic and tactical missile warning, missile defense, technical intelligence, and battlespace characterization. This transformational space system consists of two primary components: SBIRS-High and SBIRS-Low. SBIRS-High includes four satellites in Geosynchronous Orbit (GEO) and two in a Highly Elliptical Orbit (HEO) that will work hand-in-hand with the 20–30 Low Earth Orbit (LEO) satellites being developed through the Ballistic Missile Defense Organization's (BMDO) (since renamed the Missile Defense Agency (MDA)) SBIRS-Low program. Both programs currently are under review. SBIRS-High has experienced unacceptable cost growth and is being considered for restructuring. SBIRS-Low may be delayed as the state of the program's maturity is being evaluated.

Air Force Satellite Control Network (AFSCN)

AFSCN is a global system of control centers, remote tracking stations, and communications links used to establish initial contact with all deploying military satellites, and to control early checkout operations. In addition, the AFSCN enables common satellite operations such as telemetry, tracking and commanding, mission data receipt and relay, and emergency satellite recovery. We also use the AFSCN to update the navigational database of GPS satellites, which ensures effective support to the warfighters. In fiscal year 2002, we initiated an AFSCN modernization program using commercial off-the-shelf equipment. It is critical that we continue this effort since much of our current infrastructure is so old that spare parts no longer exist. Moreover, since nearly 50 percent of the total AFSCN workload supports National requirements, the system's viability is essential. Preservation of both the AFSCN infrastructure and the frequency spectrum it uses for military satellite operations is vital to successful national security space operations.

Launch Systems

Our heritage launch systems continue with a 100 percent success rate this year. The Evolved Expendable Launch Vehicle (EELV) will build on past successes while transforming today's fleet of Delta, Atlas, and Titan space launch vehicles into low-cost, efficient space transportation systems. The EELV will deliver navigation, weather, communications, intelligence, early warning, and experimental satellites to orbit on time and on budget to meet warfighter needs. Boeing Delta IV and Lockheed Martin Atlas V rocket families are currently in Engineering Manufacturing and Development to provide launch services beginning next year through the year 2020 and beyond. Our partnership with industry will meet military, government, and commercial spacelift requirements at 25 percent to 50 percent lower costs than current systems.

Space-Based Radar (SBR)

From the ultimate high ground, space-based ISR will provide near continuous overflight of enemy targets to complement airborne and ground-based sensor platforms. SBR will revolutionize battlespace awareness by providing deep-look, wide area surveillance of areas in a manner unaffected by political sensitivities and most denial efforts—absolute leap-ahead technology. Persistent ISR will be achieved with day/night, all weather detection and tracking of moving and fixed targets; improved mapping, charting, and geodesy; and responsive targeting data from sensors to shooters. Due to its basing mode, SBR can provide the Nation a non-provocative, long-range capability to enable early situational awareness in advance of hostilities and throughout the spectrum of conflict. This will allow us to tighten the timelines

for prompt attack of both anti-access systems and enemy centers of gravity. SBR is being designed to fit into the portfolio of other ISR assets.

Information Warfare (IW) and Information Assurance (IA)

Of primary importance to IW operations is the horizontal integration of manned, unmanned, and space systems to achieve the machine-to-machine interface of command and control, communications, computers, intelligence, surveillance, and reconnaissance (C⁴ISR) systems. This integration provides executable decision-quality information to the commander in near-real-time. Second is our ability to protect these systems from adversary manipulation through defensive information warfare. Third, is the ability to deny adversaries these same capabilities through offensive information warfare.

Information superiority enables our military to achieve “decision cycle dominance” and allow us to act and react much more rapidly and effectively than our adversary—creating transformational military advantages. While technology will never completely overcome Clausewitz’s “fog of war,” achieving information superiority as described here could certainly minimize it for us and maximize it for our adversary.

Information superiority also yields additional benefits. First, a reduced forward deployment requirement expedites the time to begin effects-based operations and reduces the number of personnel and equipment exposed to threats. Second, by avoiding massive attrition tactics, it would result in far fewer casualties and collateral damage. Third, under the right circumstances, effective offensive information warfare capabilities, which include computer network attack, military deception, public affairs, electronic warfare, and psychological operations (PSYOP), could prevent the need for destruction by influencing our adversaries to capitulate before hostilities begin. This latter possibility will be crucial in many of the environments the military will have to operate in the future, such as urban areas and various military operations other than war, in which employing highly destructive kinetic weapons would not be desirable.

In the future, the Air Force will field C⁴ISR capabilities that enable dynamic assessment, planning, and the rapid execution of global missions. The system will be tailorable across the spectrum of operations and be horizontally and vertically integrated across components, functions, and levels of command. Joint Force Commanders will be able to exploit knowledge and awareness to use the right tools at the right time in the right way—and do it all faster and with higher fidelity than the adversary.

Predictive Battlespace Awareness (PBA)

PBA involves those actions required to understand our adversaries to the extent of being able to accurately anticipate his actions before they make them. This includes understanding how our adversaries organize and employ their forces. It means knowing their centers of gravity, capabilities, and weaknesses. PBA is an ongoing intelligence effort which begins long before forces are deployed. Ultimately, PBA allows finite ISR assets to be focused on confirmation of anticipated actions instead of the more time-consuming discovery.

Communication Enhancement

We are now transforming the way information technology is used in the Air Force as we implement the One Air Force . . . One Network initiative. This enterprise-wide approach to IT will allow more responsive and more robust service to the whole Air Force. In addition, Global Combat Support System-Air Force (GCSS-AF) will integrate combat support information systems, thus removing the business inefficiencies resulting from numerous, independent stand-alone systems. With GCSS-AF, the Air Force will finally have the means to provide an enterprise view of combat support information. GCSS-AF, through the Air Force Portal, will provide the warfighter, supporting elements, and other Air Force members the means to seamlessly integrate agile combat support information necessary to efficiently field and sustain our Air and Space Expeditionary Forces.

Another piece of integration is the Joint Tactical Radio System (JTRS). We aggressively accelerated development of this enabler of machine-level, digital conversations between our C²ISR and strike platforms so that the “sum of our wisdom” results in a cursor over the target. JTRS will also provide a flexible and adaptable information exchange infrastructure, which moves the joint force forward in getting operators and commanders the timely decision-quality information needed in today’s warfighting environment.

Precision Engagement

The small diameter bomb, the first “miniature” munition in development, will provide an evolutionary capability in kills per sortie. The SDB weapon will use a com-

mon carriage system for fighters and most bombers, to carry at least four and potentially up to 12 SDB weapons per 1,760 data bus aircraft station. This will allow a fighter-size platform to carry 16 or more SDBs and a bomber to carry up to 288. We will employ the SDB from low-to-high altitude, from standoff or direct attack ranges, and in adverse weather conditions. Each SDB weapon will employ GPS-aided guidance and be independently targeted. The Phase I SDB will have a capability against fixed or stationary targets, while the Phase II SDB will add a seeker with Automatic Target Recognition to provide a capability against mobile and relocatable targets.

To increase our capability against time-critical and moving targets, we are experimenting with existing and miniaturized versions of precision weapons on UAVs. The range and loiter time of the "hunter-killer UAV" coupled with the direct feed of real-time targeting data, will increase our opportunities against moving targets—tightening our decision cycle and maximizing our warfighting effects. What these systems and our other advancing capabilities indicate is that we are within range of our goals of persistent ISR, the finding to targeting to assessing within minutes cycle, and fidelity in the integration of our systems. We seek near instantaneous attack capabilities once a target is approved for attack.

Innovation and Adaptation

All of the new systems and technologies in the world cannot supplant ingenuity. Whether modifying current systems, developing streamlined efficiencies in organizations, or simply thinking creatively, innovation and adaptation are at the heart of any transformation, and embedded in Air Force heritage. The same visionary essence behind the flight at Kitty Hawk works today to link emerging technologies with dynamic future concepts of operation. The driving spirit of innovation in past times of war exists today in the impetus to evolve our air and space capabilities and elevate the security of the Nation. Innovation and adaptation will be tremendously important again in fiscal year 2003, and they will resonate in all the systems we develop, in our fundamental practices, how we organize and even in our evolving roles and missions in homeland security.

The prerequisite to achieving the transformation force outlined in the QDR is our commitment to a strong science and technology (S&T) program. S&T is the critical link between vision and operational capabilities. We continue to invest in a broad and balanced set of technologies derived from basic and applied research, and advanced technology development on a continuum of maturity levels from short- to long-term. This time-scaled approach keeps emerging capabilities in the pipeline and fosters revolutionary developments.

The Air Force S&T community is working closely with operators and strategic planners to explicitly link research activities with our core competencies, critical future capabilities, and future concepts of operation. This effort has produced eight short-term goals and six long-term challenges to focus our S&T investment. The short-term S&T objectives are focused on warfighter priorities in the following areas: Target Location, Identification, and Tracking; Command, Control, Communications, Computers, and Intelligence; Precision Attack; Space Control; Access to Space; Aircraft Survivability and Countermeasures; Sustaining Aging Aircraft; and Air and Space Expeditionary Force Support. Long-term S&T challenges also involve revolutionary capabilities in Finding and Tracking; Controlled Effects; Sanctuary; Rapid Air and Space Response; and Effective Air and Space Persistence. Successful pursuit of these challenges and objectives will meet the transformation goals of the Air Force and maintain our air and space dominance today and well into the 21st century.

Our new homeland security environment will necessitate both traditional and non-traditional responses, with significant coalition, joint, and interagency involvement. Whatever the threat, the AOC provides the critically important real-time predictive battlespace awareness for decision-makers. The Air Force will work closely with the other agencies to form a tightly knit web of resources that will be readily available to answer the call. In this way, Homeland Security efforts will be interwoven and fundamentally aligned with the Air Force's top priorities.

Additionally, Air Force counterair and ISR capabilities are significant contributors to the multi-layered missile defense system, incorporating air and space-based elements that provide effective, affordable, global protection against a wide range of threats. Future space capabilities such as the SBIRS will greatly enhance our ability to track and engage ballistic missiles while space-based radar technologies will identify and track fixed and mobile ballistic missile launchers. Finally, the ABL will engage ballistic missiles in their boost phase, while the F-22, working with advanced ISR systems, will defend against cruise missiles.

Consequence Management

The Air Force has played an important role in consequence management. We have provided critical resources such as airlift, command and control, and disaster preparedness response forces to other lead agencies and the Joint Forces Civil Support Teams. The AFMS is acquiring a variety of modular packages that can be used to support civilian authorities requesting our assistance at home or abroad. Within 2 hours of notification, the Small Portable Expeditionary Aeromedical Rapid Response (SPEAR) teams deploy ten specialists with the capability to provide a broad scope of care, including initial disaster medical assessment, emergency surgery, critical care, and patient transport preparation. This will increase the state medical response capability for homeland security. Additionally, Air National Guard men and women both command and contribute to the Nation's current Civil Support Teams—including critical mobility requirements that support the air transportation of these teams to sites of potential CBRNE or WMD attacks.

In the QDR, the Secretary of Defense identified Homeland Security as a top priority for the Department of Defense. The Air Force has a role in each aspect of preventing, protecting from, and responding to attacks against our homeland. The Air Force has a robust array homeland defense capabilities today and will improve and transform as necessary for the future. As in the past, we stand ready today to contribute these unique capabilities and develop new technologies to aid our national command authorities in combating threats or attacks to our homeland.

Conclusion

The same relative advantages of speed, flexibility, range, lethality and the like that have defined air power since its inception also define the collective talents of airmen—military and civilian alike. The partnership among all of the components of the Air Force is elevating the Nation's air and space capabilities to even greater heights than ever conceived. Yet we are not satisfied. We will continue to aggressively pursue our critical future capabilities through every avenue, drawing on all of our resources, and finding no satisfaction in compromise. While funding is critical to securing new and revitalized systems, the Air Force is focused on the source of the most exponentially beneficial results—our innate skill at integration, innovation, and visionary implementation of ideas and processes. Ultimately, it is from our airmen, our most essential resource of people that transformation will accelerate, accelerate and continue.

PEOPLE

“People are a priority” is not just a slogan in the Air Force, it is an imperative. Historically, the Air Force has been a retention-based force and continues to be so today. We rely on recruiting and training technically and mechanically gifted individuals to develop and operate our advanced air and space systems. Though we exceeded our fiscal year 2001 recruiting and accession goals, there are some critical skills in need of special attention—scientists and engineers in particular. We must take action now to address these and other developing personnel gaps in the uniformed and civilian Air Force alike.

Before September 11, we were deploying our people at a rate three times higher than we were a decade earlier. Though we were narrowing the gap between force structure drawdowns and increased commitments, the marker has been shifted significantly and we anticipate a growth in requirements. The addition of Operations Noble Eagle and Enduring Freedom and the creation of new homeland security requirements to an already strained personnel tempo (PERSTEMPO) warranted an assessment of our total manpower requirements. We are working with our sister services and OSD on this issue.

Recent events have accentuated the contributions our Total Force—Active Duty, Air National Guard, Air Force Reserve, and civilians—brings to our National Defense team. We must now size this force appropriately to meet new demands by capitalizing on positive recruiting results, honing retention programs, and examining closely tasks that might better be performed by civilians, of members of the Guard or Reserve. To attract and retain the best people in a high-technology world, we will accelerate our efforts to develop, educate, train, and compensate our people to continue to lead the world as a technologically superior military force.

Retention is more than a quality of life issue. It involves letting our people know that what they are doing matters. It is about instilling our Airmen with pride in a mission well done. At the end of their careers they will remember being part of a team that made a difference. To this end, we have initiated a major “re-recruiting” program.

Recruiting

The Air Force exceeded fiscal year 2001 enlisted recruiting goal of 34,600 by almost 800. We still require 99 percent of our recruits to have high school diplomas and nearly 75 percent to score in the top half of test scores on the Armed Forces Qualification Test. In addition, we brought 1,155 prior-service members back on Active Duty, nearly double the number from fiscal year 1999.

We must enlist airmen whose aptitudes match the technical requirements we need. In fiscal year 2001 we implemented targeted recruiting programs for mechanically skilled recruits. These efforts paid off, allowing us to exceed our recruiting goal for these skills by 763. We did, however, fall short of our recruiting goal by 203 in the general skill area. This includes the security forces career fields, which have become vital in light of current operations.

The Air Force is postured well to increase recruiting goals to meet new requirements. Previously approved increases in advertising, a more robust recruiting force with broader access to secondary school students, and competitive compensation prepares the Air Force to meet future recruiting challenges. We budgeted \$77 million for recruiting advertising in fiscal year 2002, which is nearly five times the amount from fiscal year 1998. For fiscal year 2002, we programmed an additional \$9 million for the enhanced initial enlistment bonus program, and the prior service reenlistment program, up from \$123.8 million in fiscal year 2001. These bonus programs help to recruit hard-to-fill critical skills and to encourage recruiting during historically difficult recruiting months.

Officer recruiting faces many of the same challenges as enlisted recruiting. However, we continue to draw America's best and brightest, even given the lure of a competitive job market. In the ROTC program, we implemented several initiatives to attract more candidates, offering contracts to freshmen cadets rather than waiting until their sophomore year, and a 1-year commissioning program to attract both undergraduate and graduate students. Overall in fiscal year 2001, we achieved 105 percent of our line officer accession target, up from 97 percent in fiscal year 2000. Recent legislation, which increased the maximum age for appointments as cadets into Senior ROTC scholarship programs, further increases our recruiting opportunities. We are also examining changes to the program to reduce attrition during the ROTC cadet years.

Of particular concern, however, is the area of military and civilian scientists and engineers. We fell short of our accession goal for these groups by nearly 250, and have begun an all-out effort to plus up recruitment and target retention of these critical specialties. For example, in fiscal year 2003 we begin a college sponsorship program to attract scientists and engineers from universities where there is no ROTC program. Thanks to prompt congressional action, we have the authority to implement bonuses, adjust funding to create retention allowances, and work toward implementing special salary rates for the most difficult to retain fields. At the December 2001 Scientist and Engineer Summit, the Secretary and the Chief of Staff embraced these and other initiatives to remedy the accession challenge. The Air Force recognizes the great need for these bonuses and has programmed funds accordingly. However, funding levels were cut during the appropriations process.

We have also found recruiting health care professionals especially difficult. Many medical, dental, nurse, and biomedical specialties are experiences critical shortages. For example, only 80 percent of our clinical pharmacy positions are currently filled. We are now reviewing accession initiatives for pharmacists.

In fiscal year 2001, the Air Force Reserve exceeded its recruiting goal for the first time in 5 years—accessing 105 percent of their target. However, there are significant challenges ahead in recruiting citizen-airmen. Historically, 30 percent of Reserve accessions come from eligible members (i.e. no break in service) separating from Active Duty. In fiscal year 2002, recruiting will have to make up that part of the goal, more than 3,000 people, from other applicant sources until stop loss is lifted. Once lifted, we expect there will be challenges in filling many vacated positions. One of the biggest challenges for Reserve recruiters this year is Basic Military Training (BMT) quotas. While recruiting services increased emphasis on enlisting non-prior service applicants, BMT allocations have not kept pace. This problem is forecasted to worsen this year as a result of stop loss. Reservists are working diligently to increase BMT allocations and explore solutions to address BMT shortfalls.

The Air National Guard has placed recruiting and retention emphasis on Air Force Specialties where shortages exist by offering enlistment and reenlistment bonuses, Student Loan Repayment Program, and the Montgomery GI Bill Kicker Program. As a result, many of the Air National Guard critical maintenance AFSCs have seen real strength growth from 2 to 6 percent over the last 2 fiscal years. These incentives have contributed greatly toward enticing and retaining the right talent for the right job. Though recruiting and retention rates have increased, the

Air National Guard realizes that potential problems exist that may affect future sustained capability.

Retention

Over 128,000 Active Duty airmen, 46 percent of the enlisted force, are eligible for reenlistment in fiscal years 2002/2003. Although positive about a career in the Air Force, our people are being lured away by the availability of higher-paying civilian jobs. To sustain our readiness posture for rapid deployment, we must retain our highly trained, experienced, and skilled people. By keeping our experience, we reduce recruiting and training requirements and continue to build and maintain our technical expertise.

Retention will continue to be a priority and a challenge in the future. We are aware stop loss and the increased tempo of ONE and OEF may have a negative affect on retention and we are planning for offsets already. We must provide a robust compensation package that rewards service, provides for a suitable standard of living, ensures a high quality of life, and retains our high caliber professionals. We must continue to reduce out-of-pocket expenses incurred through frequent moves, deployments, and other temporary duty. Our airmen must view a military career as a viable and competitive option if we are to maintain an all-volunteer force. To that end, we have initiated an aggressive campaign to "re-recruit" our force, through individualized mentoring and career counseling. This effort began with scientists and engineers, as well as battle managers, and will include other critical skills in the coming months. Pilots were to be the initial focus, but the demands of ONE and OEF required that we delay the re-recruiting of this group. Congress has rallied to the Air Force's needs in all of these, and we will rely on continued help, particularly in the year ahead.

Officer retention trends continue to raise concerns. We monitor these trends through the officer cumulative continuation rate (CCR), or the percentage of officers entering their 4th year of service (6 years for pilots and navigators) who will complete their 11th year of service, given existing retention patterns. Although the fiscal year 2001 CCR for pilots increased from 45 percent in fiscal year 2000 to 49 percent, it's significantly lower than the high of 87 percent in fiscal year 1995. We have fully manned our cockpits, but our rated pilot staff manning has fallen to 51 percent. Airline hires in fiscal year 2002 will be down from over 3,000 last year to approximately 1,500 this year; however, we anticipate the hiring will surge again shortly thereafter. Therefore, we can expect the USAF pilot shortage to continue for at least the next 8 years until we fully realize the effects of the 10-year Active Duty service commitment for undergraduate flying training. We are optimistic that our "re-recruiting" effort will further enhance pilot retention and help alleviate the shortage sooner.

The mission support officer fiscal year 2001 CCR has held steady at 44 percent. However, retention rates for several high-tech specialties have decreased—scientists (36 percent), developmental engineers (42 percent), acquisition managers (40 percent), and air battle managers (47 percent). Conversely, navigator rates improved in fiscal year 2001, rising three percentage points to 72 percent. Navigators are a critical rated resource being used to fill many pilot vacancies at headquarters level. In the next few years, we expect a rapid decline in this large retirement-eligible population. We also need to retain every experienced air battle manager (ABM) we can to preserve our warfighting capability. This high-demand, low-density career field retention is negatively impacted by increased operations tempo.

The Air Force Reserve exceeded command retention goals for their enlisted airmen during fiscal year 2001. Again, it was the team effort of the members, first sergeants, supervisors, and commanders that led the Reserve to this exceptional achievement. Bonuses also continue to be an effective tool in retaining our members. The flexible Aviation Continuation Pay (ACP) program is an important part of our multi-faceted plan to retain pilots. In fiscal year 2001 we offered ACP payments through 25 years of aviation service, resulting in a substantial increase in committed personnel. Because of this success, we plan a similar design for the fiscal year 2002 ACP program, and extension of this program to navigators and ABMs.

Seventy-eight percent of our enlisted skills are now receiving re-enlistment bonuses, up two percentage points from fiscal year 2000. The authorization to pay officer and enlisted critical skills retention bonuses should help retain individuals in high demand by the civilian sector. We are initially targeting this new authority to science, engineering, and communications and information. Also, the authority to increase special duty assignment pay provides the flexibility to target our most pressing enlisted skills. The fiscal year 2002 National Defense Authorization Act (NDAA) authorizes installment payment authority for the 15-year career status bonus, and an educational savings plan to encourage re-enlistment in critical specialties. Addi-

tionally, the Air Force Reserve is studying special duty pay initiatives for senior enlisted positions, such as command chief master sergeants and unit first sergeants for future implementation.

The Air National Guard's number one priority is to increase their traditional pilot force, which has maintained a steady state of 90 percent. During the past year, the Guard continued to see an increase in ACP take rates to 93 percent. ACP has accomplished its goal by retaining qualified full-time instructor pilots to train and sustain our combat force. The Guard and Reserve continue to pursue substantial enhancements to the Aviation Career Incentive Pay (ACIP) and Career Enlisted Flyer Incentive Pay (CEFIP) to increase retention in the aviation community, as well as attract/retain individuals to aviation. These initiatives, which affect over 13,343 officers and enlisted crew members in the Guard and Reserve, are aimed at those traditional aviators who do not qualify for the ACP for AGRs and the Special Salary Rate for Technicians.

Training

Training the world's best Air Force is challenging in today's rigorous, expeditionary environment. Increased accessions stress our training facilities and personnel. During surge periods, we operate at maximum capacity by triple-bunking students in two-person dorm rooms. We are currently seeking funds to improve the training infrastructure.

Lower than required enlisted retention rates are increasing our training burden. Also, fewer experienced trainers are available to train 3-level personnel. Despite these challenges, our technical training schools have been able to meet their mission. We increased our use of technology and streamlined the training processes to produce fully qualified apprentices ready to support the warfighter.

Even with the EAF, our tempo can make educational pursuits difficult. Our learning resource centers and Advanced Distributed Learning initiatives address this situation by offering deployed personnel education and testing opportunities through CD-ROM and interactive television. Additionally, we have joined with the other services, the Department of Labor, and civilian licensing and certification agencies to promote the recognition of military training as creditable toward civilian licensing requirements.

Defining the Air Force's institutional training and educational requirements for leadership development allows the services to weigh resource decisions better and to emphasize to our people the institution's investment in their careers. The Air Force is pursuing leadership development and career mentoring strategies, to prepare the Total Force for the 21st century. These competency-based strategies are focused on understanding the leadership needs of our transforming force and creating a development process that will better prepare airmen to serve and lead. The Air Force is examining more deliberate career broadening, emphasizing two categories of competencies—occupational (what we do) and universal (who we are). We are also examining potential changes to the professional growth of officers including the rationalization of advanced degrees and professional military education. Force readiness, sustainability, and mission performance all depend on selecting, training, and retaining the best individuals with the necessary skills, as well as motivating every member of the service and taking care of Air Force families.

Civilian Workforce Shaping

Today, less than 10 percent of our civilians are in their first 5 years of service. In the next 5 years, more than 40 percent will be eligible for optional or early retirement. Historical trends indicate that approximately 33 percent of white-collar employees and 40 percent of blue-collar employees will retire the year they become eligible. In addition, downsizing over the past decade skewed the mix of civilian workforce skills, compounding the loss of corporate memory and lack of breadth and depth of experience.

While we are meeting mission needs today, without the proper civilian force shaping tools, we risk not being ready to meet tomorrow's challenges. To help shape the civilian workforce, it is imperative that we fund civilian force development initiatives to include skill proficiency and leadership training, and tuition assistance programs. The fiscal year 2002 NDAA did authorize the payment of expenses to obtain professional credentials.

In addition, management tools are essential in shaping the force by opening the door to new talent so we can gather the right skill mix. These initiatives include pay comparability and compensation, a streamlined and flexible hiring process, recruiting incentives for technical skills and student employment programs. Also, the fiscal year 2002 NDAA provided the authority for a pilot program allowing for payment of retraining expenses and extended the use of Voluntary Separation Incentive

Pay (VSIP) and Voluntary Early Retirement Authority (VERA) for workforce restructuring. To incentivize key senior personnel to accept critical positions, we continue to support implementation of a last move home benefit.

Quality of Life

Quality of life ranks as one of the Air Force's top priorities, so our quality of life initiatives attempt to balance the intense demands we place on our mission-focused Total Force. With continued congressional support, the Air Force will pursue adequate manpower; improved workplace environments; fair and competitive compensation and benefits; balanced deployments and exercise schedules; safe, affordable, and adequate housing; enhanced community and family programs; improved educational opportunities; and quality health care, as these have a direct impact on our ability to recruit and retain our people and sustain a ready force.

The fiscal year 2002 NDAA provided for the largest raises for mid-level and Senior NCOs (7 percent–10 percent) to improve pay based on their education and experience levels. Junior enlisted members received a 6 percent–6.7 percent pay raise and captains and majors received a 6 percent–6.5 percent raise while all other personnel received a 5 percent raise. Basic Allowance for Housing rates effective January 1, 2002 will be based on 11.3 percent out-of-pocket for the National Median Housing Cost for each grade and dependency status. Additionally, the fiscal year 2002 NDAA authorizes several additional travel and transportation allowances that will reduce out-of-pocket expenses for our military personnel.

Higher priorities have led to a deferral of much-needed infrastructure sustainment, restoration, and modernization of the workplace. Together with spare parts and equipment shortfalls, budget limitations impede successful execution of mission requirements, cause lost productivity, and negatively impact quality of life. It will take increased funding levels focused on infrastructure restoration and modernization to allow us to optimize the condition of the workplace environment and, furthermore, help eliminate the risk to our near- and long-term readiness.

Providing safe and adequate housing enhances readiness and retention. The Air Force Dormitory Master Plan and Family Housing Master Plan identify and prioritize our requirements, while DOD is championing the reduction of out-of-pocket housing expenses by fiscal year 2005. We project significant improvements in our military family housing by reducing our inadequate units from 59,000 at the beginning of fiscal year 2002 to 46,000 at the beginning of fiscal year 2003, and with the help of privatization efforts underway, eliminating inadequate units by 2010. During fiscal years 2001–2004 we plan to privatize over 21,000 housing units at 26 installations. Similar improvements are being made in our unaccompanied housing, where more than 1,600 dormitory rooms will be constructed as a result of the 2002 program.

The Air Force continued to set the standard in providing quality childcare and youth programs. In addition to 100 percent accreditation of Air Force child care centers, the Air Force achieved 100 percent accreditation of all of its before- and after-school programs for youth 6–12. In fiscal year 2001, the Air Force expanded the extended duty childcare program for members required to work extended duty hours and in fiscal year 2002 will test using this program for members working at missile sites and those who need care for their mildly ill children. Many youth initiatives implemented in fiscal year 2001 are part of the affiliation of the Air Force's youth program with the Boys and Girls Clubs of America.

The Air National Guard also identifies childcare as a readiness issue. With increasing demands from commanders and family members, the ANG formed a Childcare Integrated Process Team (IPT) to study innovative childcare options. The IPT yielded a website developed for internal use by ANG field units to pursue childcare alternatives in relationship to the unit's location, demographics, and legal issues. Additionally, the Guard has proposed a cost-sharing pilot program based on the Air Force childcare cost model.

Tremendously important to child and family quality of life are the commissaries and exchanges. The Air Force continues to support these benefits as vital non-pay compensation upon which Active Duty, retirees, and Reserve component personnel depend. Commissaries and exchanges provide significant savings on high quality goods and services, and a sense of community for airmen and their families wherever they serve. As a result, commissaries and exchanges are cited as a strong influence on retention and a highly valued component of quality of life.

Additionally, lodging facility improvements and temporary lodging facilities have become a higher quality of life priority. Constructing facilities in sufficient quantity and maintaining existing facilities not only supports our members and families in TDY and permanent change of station status, but also yields significant savings in travel costs and ensures force protection. All new construction and renovations meet

the recently adopted VQ standard—"one size fits all ranks"—mirroring the industry standard of 280 square feet per room with private baths for all grades.

Physical fitness is unquestionably a force multiplier, and investment in fitness facilities, equipment, and programs directly impacts readiness. An independent assessment of our fitness centers documented a requirement of \$645 million for construction and renovation at Active Duty and Reserve bases. The Air Force committed \$183 million in fiscal years 2000–2005 quality of life funding and has steadily increased annual MILCON funding, including \$52 million this year.

Meanwhile, today's Air National Guard member families are in immediate need of dedicated full time family readiness and support services—specifically information referral support and improved communications and education capabilities. The Air National Guard has developed a program solution in fiscal year 2001 to fund a full-time contracted family readiness program at each Wing and Combat Readiness Training Center. While funding for fiscal year 2002 has been added in the fiscal year 2002 Supplemental Appropriations, there is no sustained funding in the FYDP. Properly funded and resourced, the ANG family readiness program will significantly enhance mission capabilities by reducing pressures on personnel and their families and improving their quality of life.

Healthcare

The recent implementation of DOD health care initiatives, such as TRICARE for Life, provided the missing link to the Air Force Medical Service's population-based health care strategy. Now, the AFMS has the foundation to provide whole care to its beneficiaries. The TRICARE Senior Pharmacy Benefit, started April 1, 2001, brought an expanded benefit to the Air Force's retired population. TRICARE for Life, the program that makes TRICARE second payer to Medicare, and TRICARE Plus, the program that allows seniors to enroll in a primary care program at selected MTFs, both began concurrently on October 1, 2001. These new programs will undoubtedly enhance the quality of life for the Air Force's older retiree population. TRICARE Plus will also strengthen the AFMS's medical readiness posture by expanding the patient case mix for our providers.

The AFMS continues to make great strides in its population health initiatives and customer satisfaction. Central to the AFMS's population health plan is its Primary Care Optimization program, which improves clinical business processes through maximizing medical support staff skills and duties and through robust information management that supports effective decision-making. The Primary Care Manager by Name program provides much-needed continuity of care and, ultimately, better patient management by providers. Other population health initiatives include the Air Force Suicide Prevention program, which has served as a model for DOD and the Nation in their efforts to address this significant public health issue. As a result of AFMS' initiatives, health care customer satisfaction continues to rise in the Air Force. According to the latest Customer Satisfaction Survey Results, 90 percent of the Air Force's enrolled beneficiaries indicate they would enroll or re-enroll in TRICARE Prime if given the option. The overall satisfaction with clinics and medical care exceeds national civilian HMO averages.

Conclusion

The Air Force implemented structural and cultural changes via EAF concept to enhance responsive force packaging, as well as to provide more stability/predictability in deployment and home station scheduling. We must continue to address force-wide balanced tempo issues with manning, infrastructure and equipment, training, recruiting and retention, and mission requirement assessments. High OPSTEMPO has taken its toll: our people are still deployed three times more often than prior to Desert Storm—based on a force 60 percent its former size. Air National Guard and Air Force Reserve participation has steadily increased since Operation Desert Storm, which has created unique challenges for Guardsmen and Reservists balancing civilian careers with increased military requirements. Trends show demand for air power will only increase; EAF holds promise by giving airmen predictability and stability. We must also take care of our families with adequate housing programs, medical facilities, and base support services. Our efforts continue to pay off, yet they must be actively renewed and revitalized—flexible enough to adapt to new circumstances and demands in a changing world.

CLOSING THOUGHTS

The events of September 11 reaffirmed the importance of the Air Force's current focus on people, readiness, and transformation. Our future success hinges on our ability to recruit and retain highly qualified airmen, to provide these dedicated war-

riors with the resources required to accomplish their mission, and to continue to explore new and innovative approaches to the art of warfare.

While the world's security environment changed dramatically, one thing that remains constant is America's need for global vigilance, reach, and power. That is your Air Force Vision, and what we strive to deliver every day. Fully exploiting our advantages in air and space capabilities is not an option—the risk of failing to do so is too great. We must remain the dominant air force in the business of global reconnaissance and strike (attack and mobility).

Through recapitalization efforts, we hope to maintain the fundamental basis from which to perpetuate our transformation journey. This is a daunting task, and it cannot be achieved without substantial costs. Integration of systems, mastering real-time targeting, and the exploitation of new CONOPs, are more than mere objectives, they determine our ability to project power in tomorrow's battlespace.

With America's continued support, the United States Air Force is poised for unprecedented success. The future holds sober challenges for America's military forces. Some may find easy remedy, while others will require tremendous sacrifice. In whatever scenarios lie ahead, the United States will be able to look to the Air Force for asymmetric capabilities that ensure our dominance of air and space. These capabilities, when employed in joint warfighting operations, will prove to be the resident military strengths that will enable America to assure, dissuade, deter, or decisively defeat the adversaries of freedom.

Chairman LEVIN. General Jumper, thank you. Thank each of you for your very helpful testimony and for your leadership. We will have 6 minutes for our first round of questions.

First, I would like to ask each of you about the Quadrennial Defense Review of last year, which moved us away from the requirement to be able to conduct two nearly simultaneous major theater wars. It is not apparent to me, at least yet, what changes in requirements or in priorities among requirements have resulted from that change. Can each of you briefly tell me what changes in priorities your services have as a result of the new guidance?

General Shinseki.

General SHINSEKI. Mr. Chairman, I would offer that much of the Army's move toward the QDR's new approach to strategy we took on about 2½ years ago. We looked at our ability to deliver our capabilities rapidly to a variety of places we were asked to go in the 1990s, and frankly, we had a tough time getting there. Once we got there it was tough to sustain that over a period of time, and the places we looked at were the places we were asked to pay attention to, such as the Koreas, China-Taiwan, India, Pakistan, Iran, Iraq, and the Balkans. We are still engaged 6 years after going into Bosnia, and then even looking across places like Chechnya, where a pretty good-sized army was having a tough go.

When we put those locations on the globe, it describes a large area around which we had very little capability. It is the area that is circumscribed by those conflicts, the Caspian Basin, and when we put our finger in the middle of that area and asked whether we could get there or not, at least in the Army's perspective, we could not sustain ourselves. Whether we would go or not, or we wanted to go or not, when we asked ourselves 2½ years ago whether we could go or not, the answer was no.

Then it led to other questions about what capabilities would be needed to get there, and if you developed those capabilities, then you could get just about any place else. That is what led us 2½ years ago to begin our own efforts to transform.

Chairman LEVIN. Thank you.

Admiral Clark.

Admiral CLARK. The way I interpreted the guidance, instead of two major theater wars, it included always a very heavy force. It included regime change all the way to the capital. This is the way it has been described by Secretary of Defense, a 4-2-1 force: deter in four areas; quickly take on an adversary in two areas with minimal reinforcement; and do one major war that talks about going all the way to the capital.

The way I interpret that for our forces meant we have to be more forward and have a more dispersed force. It means a total and complete examination in my ISR assets, and we are conducting that.

I talked to John Jumper about how we are going to team in the future, with Jim Jones about how we are going to shape our force, because our Air Force is combined. We need long-dwell systems to make the future work. Instead of just building a force that is netted from the ground up, from the seabed to space, we need a more distributed force, as well as manned and unmanned vehicles.

General Jones and I are going to fundamentally restructure the amphibious readiness group to an expeditionary strike force that will have more striking capability. I will move more striking power on the naval side of that. We need an amphibious plan that then supports this in the future. That is the LHA(R), which we are building the analysis of alternatives to do that right now, and is due out this year.

Finally, I would say that in order to deter in four places, the Navy-Marine Corps team must integrate so that we are as effective as possible. General Jones and I are working proposals, and in fact have made proposals forward, and those are the major areas of the QDR that are affecting me.

Chairman LEVIN. Thank you, Admiral.

General Jones.

General JONES. Sir, very briefly, in addition to what the CNO pointed out in the Marine Corps, the biggest change has been the reemergence of the Marine Expeditionary Brigade as a central war-fighting piece, middle way, if you will, between the Marine Expeditionary Units and the Marine Expeditionary Force.

As an adjunct to that, we stood up the Marine Expeditionary Brigade, Antiterrorism Capable (AT), by combining four units that were disparate units essentially having the same commonality of mission, so much more focused application on the antiterrorism mission and investments in those accounts. It is my goal that every Marine Corps unit that deploys will have an antiterrorism capability to be of use to the joint warfighters.

Integrated logistics concepts is a revolutionary transformational way to deal with battlefield logistics. I would like to reaffirm the close partnerships with the United States Navy, and in the months ahead I predict I will be coming to members of your committee and your staff with some transformational plans that will be truly out on guard in anything the military is doing in the world. I will move to bring the Marine Corps a little bit closer to build bridges between the Special Operations Command. You know the history of Special Operations Command better than I do, and you know how the Marine Corps did or did not participate.

Originally, we signed a memorandum of agreement with the Commander in Chief, and we are building bridges to make sure

that the Nation has the full realm of capabilities needed, sea-based and land-based, in the field of Special Operations. Those are just a few of the things.

Chairman LEVIN. Thank you. General.

General JUMPER. Mr. Chairman, we are transitioning the Air Force into a rotational-based force, or expeditionary Air Force, so that we can control the OPTEMPO of our people as they are called out on these contingency operations.

Within the expeditionary force structure, we are also creating task forces that specialize in some of the most difficult things we anticipate in this capabilities-based way of looking at things, scenarios like anti-access, rapid reaction to terrorists, humanitarian relief, global mobility missions, as well as space and command and control, intelligence, surveillance, and reconnaissance (C²ISR). These are task forces that will be organized and integrated with the other services to do the specific missions that we think are going to be called for.

As part of those, we have done several things for the F-22. We have put more emphasis on its air-to-ground capability, because the F-22, by nature of its ability to go mach 1.7 without using afterburner, can penetrate quickly and deeply to help out forces, our own friendly forces in the rear, or to take out those most difficult surface-to-air missiles and other threats that other systems would have difficulty doing. This is a small-diameter bomb that will go on the F-22.

We have been able to upgrade our priority on unmanned air vehicles as we go from the A-model Predator to the ability to shoot Hellfire missiles off of the Predator UAV. Even since Kosovo we have added the capability to laser designate not only for Air Force airplanes, as I mentioned, but for any airplane with a laser weapon. We are going to request a step up into the B-model Predator, which would add more weapons stations, and it will specialize as a hunter-killer aircraft for specialized types of missions that we might do with Special Operations or other agencies.

Another example, Mr. Chairman, is the addition of the concept of the smart tanker. It occurred to me suddenly one day that the thing that is always there in a battle is the tanker force. They are there to help the Navy and refuel our airplanes and other countries' as well. By adding equipment on, we can make it an IP address in the sky and network those tankers. Anyone inside of a tanker on land, sea, or in the air can get a comprehensive picture of what the AWACS, Rivet Joint, and our other high tech sensors are seeing in a comprehensive way.

Those are a few of the examples, Mr. Chairman, of what we have done as a result of this guidance.

Chairman LEVIN. Thank you very much.

Senator Warner.

Senator WARNER. Thank you, Mr. Chairman. Gentlemen, your presentations were extraordinary. These are extraordinary moments in American history, and each of you have lived up to them by your presentations today. I think your respective troops can take great pride in your leadership.

I want to pick up with General Jumper's comment a moment ago about what is going on with the tankers. One of the reasons I men-

tioned the statistics of the casualties from World War II as compared to our losses today for whom we grieve deeply is the advancement of high technology. That has made the difference. You point out the trooper who rode up on the horse with the high tech equipment that enabled him to bring in a series of weapons systems from the B-52 to the AC-130 to the naval and Marine Corps aircraft coming in. This goes back to what our committee has been working on for several years, way prior to September 11.

Therefore, I am going to ask, based on your current budget submissions and your funding plan, do you believe the Department of Defense will reach the goal established by this committee in the National Defense Authorization Act for Fiscal Year 2001 that by 2010 one third of the U.S. military operational deep strike aircraft will be unmanned, and by 2015 one third of all U.S. military ground combat vehicles will be unmanned? Perhaps I would add not only meet, but exceed, given the lessons that we have learned from this historic conflict, a conflict which brings to mind when other members of this committee and myself have been in the Afghan region. We all come away impressed with those special operations teams of 15 individuals who go in with 1 officer and 14 sergeants.

With all deference to the Brigadier this morning, I think this may be known as a sergeant's war, so I will start with you on the subject of the unmanned vehicles in the Army.

General SHINSEKI. Senator, I would just embellish a little bit on General Jumper's story. What he failed to tell you is that to get to that hilltop where that crew was calling in fire, they spent 14 hours on horseback uphill, and for anyone who has spent a little bit of time on a horse, that is quite an accomplishment. It was also 14 hours back, and then another move to another position. So these are not just creative and good warfighters, but they are also pretty tough.

To your question, I think as you look at what the Army has put into its program both for the interim and future Objective Force unmanned vehicles, robotics are very much a part of what we are after. To your specific question whether we have met the guidance and the investments, I would like to provide you a more specific answer for the record. I would tell you that the spirit of language is very much captured in the Army's research and science and technology for that future Objective Force to achieve unmanned aerial platforms as well as ground vehicles.

Part of this is in our efforts to field Crusader, an artillery weapons system that gets a lot of discussion. There is a 3-foot separation between the three-man crew and the mechanism that fires that weapons system. But in this small gap is the connection between that crew and the ability to fight that system totally through the mechanics and controls.

Senator WARNER. On that system, I think you should reserve responses for Senator Inhofe. No one has fought harder for that system, and I accompanied him out to Oklahoma, where I saw a first-hand performance.

General SHINSEKI. I will be happy to get back to you with an answer on the robotics piece you asked about.

[The information referred to follows:]

UNMANNED VEHICLES/ROBOTICS

The Army is making great progress to achieve congressional goals for unmanned ground combat vehicles. The Army and the Defense Advanced Research Projects Agency (DARPA) are pursuing enabling technologies for both unmanned ground vehicles (UGVs) and unmanned air vehicles (UAVs). We are especially interested in opportunities to incorporate unmanned systems and capabilities in the Future Combat Systems (FCS) Transformation initiative. Our commitment to advance unmanned capabilities is apparent in the FCS Lead Systems Integrator concept that invites industry proposals for several UGVs, an armed reconnaissance vehicle, a man portable soldier UGV to extend the perception of the dismounted soldier, and a soldier "mule" UGV to transport materials and supplies. The FCS concept also has three classes of UAVs, including a man portable UAV. It is envisioned that these UAVs will perform some missions currently accomplished by manned systems.

Admiral CLARK. Senator, I understand the guidance to be one-third deep by 2010, and one-half by 2015.

The ground does not affect me, but the deep piece of this does. I think we are reaching for unmanned vehicles at speed. In this budget we reached out and added two Global Hawks. I envision moving to unmanned vehicles, and our vision is to get the ISR piece of this headed in that direction as quickly as possible.

The definition of deep could then be interpreted to be deep strike, and I will tell you that I do not envision that we will be able to meet that time line for that. For us, it is not just this piece of unmanned vehicles. We are also pursuing underwater unmanned vehicles, but I would like to provide a detailed answer to you also for the record.

[The information referred to follows:]

The Navy plans to pursue the Navy Unmanned Combat Air Vehicle (UCAV-N) program at best possible speed. The technical challenges of developing a carrier based, survivable Unmanned Combat Air Vehicle (UCAV) make 2015 a realistic IOC estimate. This IOC date depends upon an aggressive acquisition approach for the system, but also retains enhancing measures such as a robust requirements, definition process, and the maintenance of competition in the program. The Navy approach will reduce the total cost of the program and ensure the best possible UCAV-N reaches the fleet.

Senator WARNER. General Jones.

General JONES. Sir, I think we are moving quite aggressively in the aviation programs. I would have to do some research on the ground programs to see if we are apace, but my sense is that we are doing better in the air than on the land.

Senator WARNER. General Jumper.

General JUMPER. Senator, we plussed-up considerably the budget for the UCAV, which will be a jet-powered vehicle. We have your guidance, sir, and we are pressing on as quickly as we can to assure that we comply with that guidance.

Senator WARNER. Thank you. Now, Admiral Clark, let's go to shipbuilding. You are reputed to have said you envision the Navy will need 375 ships in the immediate future years, but according to our calculations, at the current budget, we may fall below the 300 figure before we start going back up again, particularly with aircraft carriers.

I am proud that they are built in my State, but the parts come from the other 49 States. The point is that the ship established itself. As you said, it did not require any permission slip to stand off-shore in international waters, and it provides the platforms for General Shinseki's and General Jones' helicopters. It proved its worth and continues to prove it every day in this situation.

With specific reference to the one carrier that was slipped, I calculate by almost 2 years in your budget, I will do my very best to convince this committee that we should restore the necessary funds to put that carrier back on schedule. Could you give us an overall view as to the number of ships? With regard to this one carrier that was slipped, could you speak on the desirability of restoring the budget dollars necessary to put it back on schedule?

Admiral CLARK. Let me first respond to the issue of the viability and the requirement for carriers. Every so often it is required to address the question, is this still an asset we need? One of the things we have learned about warfare, and which we relearn every time we get into any kind of action, is that air space dominance is required.

I am very pleased with the way we have teamed with the Air Force and the Marine Corps in Operation Enduring Freedom. Let me just say, so everybody knows, that the United States Marine Corps has been flying attack aircraft off of our carriers during this mission on a regular basis. Their squadrons are integrated into our force.

Secretary Rumsfeld said we were going to challenge all of our assumptions when he came into office. I said that when I got this job 19 months ago, so I had to applaud what he was saying. I believe that we have proven once again the requirement for aircraft carriers, and that roles change over time. For example, we never thought about an aircraft carrier routinely conducting operations 800 to 1,000 miles inland the way we are doing in this operation. This shows us how we need to continue to reach out for the technology that is available, and future aircraft operating off those decks will give us even more reach. First, we have to have that carrier. Second, in regards to the 375 number, you can't do "4-2-1" with a mythical presence. You do that with real combat capability. It is my belief that when you analyze the way we will need to do this in the future, it has to do with the mix of ships. It is not just numbers, Senator, as I said in my opening statement. It is about the right kinds of ships.

The family of ships that I believe are going to spin out of the DD(X) program will include some large ships and some smaller ships. Those smaller ships are going to be required to be greater in number, because of their innate capability and the requirement for them to be viewed like an aircraft squadron instead of a unit of one when they move into an area. The littoral combatant ship is going to deal specifically with threats of the future in the near land areas, and we need that ship as fast as we can get it.

We really ought to talk about the specifics of the threat in a closed session. I would be happy to do that, or provide information for the record if you would like us to do that.

Regarding my third point, there were two issues with the slipping of the carrier. There is no question about it: the first reason was affordability. My responsibility is to recommend a budget that has the best balancing capability that I believe our total Navy needs. We did not have the resources to do that without taking the action that we did. We split-funded it through 2 years, and it slipped a year.

So first, it is an affordability issue. Second, there is a lot of new technology in that platform. New technology involves risk, and so I do not want to say that we did it just for the technology. I believe that the risk will be mitigated with the program that we have, but I also believe it is a balance of all of the issues that we are competing in the 2006 to 2008 time frame. That is the reason I made the recommendations we did.

Senator WARNER. Thank you.

Chairman LEVIN. Thank you very much.

Senator Cleland.

Senator CLELAND. Thank you, one and all, for your service to our country. I think this has been a fascinating hearing so far. It certainly has been for me, maybe even a historic hearing in trying to connect the dots.

First of all, I am saddened by the fact that we have had loss of life. My State has 13 military bases, so this country cannot go to war without my State going to war. Of the eight service men and women killed in the last 72 hours, five were based in Georgia: four Army Rangers from the 75th Ranger Battalion flying out of Hunter Army Airfield in Savannah and one airman out of Moody Air Force Base in Valdosta.

In terms of the combat that these young men and women were under, I just would like to submit for the record a marvelous piece by Newhouse News Service, "Wounded GI's Recount 18-Hour Ordeal Under al Qaida Mortar Barrage." It is an incredible description of what that combat is all about. If there is no objection, Mr. Chairman, I would like to have that entered into the record.

Chairman LEVIN. It will be made a part of the record.

[The information referred to follows:]



After treatment for shrapnel wounds they suffered fighting al-Qaida forces as part of Operation Anaconda, Sgt. 1st Class Tom Abbott (l) waits to be driven to Bagram Air Base's "Tent City" by Sgt. Maj. Frank Grippe. (Photo by John Berry)

NATIONAL SECURITY

Wounded GIs Recount 18-Hour Ordeal Under al-Qaida Mortar Barrage

By DAVID WOOD

c.2002 Newhouse News Service

[CLICK HERE TO BUY THIS STORY](#)

BAGRAM AIR BASE, Afghanistan -- A black shape comes clattering out of the darkness a couple of times a night, a double-bladed CH-47 helicopter approaching fast and flaring to set down squarely atop the big white H newly painted on the cracked concrete apron of this former Soviet fighter base.

Men run toward it and duck under the whirling blades as the chopper's big rear gate yawns open to reveal another harvest of the war on terrorism: battle-wounded men on litters who are gently lifted and rushed toward the best emergency trauma care in Afghanistan, a U.S. Army forward surgical team from Fort Bragg, N.C.

One litter carried Tom Abbott, a platoon sergeant who for 18 hours was pinned down along with most of his unit -- Charlie Company of the 1st Battalion, 87th Infantry, a regiment of the 10th Mountain Division -- by vicious mortar fire from al-Qaida fighters intent on wiping them out.

Sgt. 1st Class Abbott, a polite and careful 32-year-old from Utica, N.Y., was treated at Bagram for a nasty shrapnel wound in his right arm before being flown out of Afghanistan for further treatment.

The good news, surgeons here said, is that most of the wounded from Operation Anaconda have suffered non-life-threatening injuries -- usually in the arms or legs from relatively low-velocity mortar or grenade shrapnel. Recently upgraded body armor protects soldiers' torsos from more serious wounds. One 10th Mountain trooper was shot twice in the chest; body armor saved his life.

The trauma care here is superb, but everyone knows that much depends on other factors.

"Do you believe in God? End of story," said Sgt. Maj. Frank Grippe, also from Utica, describing how a shot-up and exhausted Charlie Company held on against encircling al-Qaida fighters. Grippe was limping with a shrapnel wound in his thigh.

On Saturday, the opening day of the current U.S. and allied offensive dubbed Operation Anaconda, Abbott and 1st Platoon were hunkered down in a wadi, or narrow gully, with a ridgeline rising above them to the east. Al-Qaida fighters held the high ground, using their mortars with frightening accuracy.

The tube-launched bombs were fired with a hollow "THUNK" and then arced silently before exploding in a burst of razor-sharp steel fragments.

"They were 'walking' the mortars right to us -- one hit about 50 meters away, then 20, then 10 (about 30 feet) and then they were dropping right in on top of us," Abbott said, grimacing with pain after emergency treatment here.

"I said, 'OK, we are getting out of here,' and we started going down the wadi, and one round landed between me and the LT (lieutenant), it took everybody out. Everybody was yelling, 'I'm hit, I'm hit,' and guys were down all over and we were bandaging guys and some guys were freaking out, and I called in suppressive fire and yelled, 'Wake up and let's move or we're all gonna die here!'"

That's when Abbott got hit: a jagged steel fragment from a mortar round slashed into his upper right arm.

"All I felt was liquid running down my arm," he said. "My arm went totally numb."

Abbott's best friend, Staff Sgt. Robert Brault, watched him go down.

Now they were getting hit from three sides as al-Qaida fighters crept around to their north and began dropping rounds in from there. The air was heavy with explosions and smoke and soldiers yelling. It was morning still, and they knew no helicopter would fly into the firefight to get them out until after dark, at best.

"There was a time when everybody thought we were gonna die," said Brault, a 31-year-old from Jacksonville, Fla. "We knew we had to wait until dark. You'd see your buddies going down and you'd think, 'Who's gonna be left to put US on the choppers?'"

Most of them were trained Combat Life Savers, an Army innovation that gives every soldier some life-saving skills. Problem was, the soldiers said, they couldn't give first aid and fight at the same time.

"We had to choose between taking care of our guys and keeping up steady fire," Brault said. "If we didn't keep up fire, everyone else was gonna get capped, too."

Brault, Abbott, Grippe and dozens of others ended up in the makeshift medical triage center at Bagram that night after a helicopter finally brought everyone out alive. The center, in a Soviet-era building near the airstrip, boasts a 22-person staff, an operating room, intensive care units, a resuscitation room and advanced life support equipment.

The job of the medical staff here, from surgeons to scrub nurses and blood techs, is emergency trauma medicine: keep the patient breathing, stop the bleeding, and get them stabilized either for surgery or medical evacuation to a more sophisticated medical facility.

"Most of what we're seeing is low-velocity shrapnel wounds which cause less damage to tissue and are less susceptible to infection," said the general surgeon who is commander of the surgical team here.

Slightly more than half of the battle casualties taken so far by Task Force Rakkasan -- the hundreds of troopers from the 10th Mountain and 101st Airborne divisions fighting in Operation Anaconda -- have returned to service. Military censors prohibited the release of precise casualty figures.

Surgeons said some injured soldiers arrive relatively unfazed and ready for more even after taking incredible punishment, while others come in terrified and completely undone by the idea that they have been wounded.

Understandably, the men and women on the medical staff are passionate about what they do.

"This sounds hokey, but what drives us is knowing we are giving the best care possible to guys who are laying it on the line out there," said a 29-year-old nurse anesthetist.

"These guys are offering to make the ultimate sacrifice for their country," he said. "Our job is to prevent them from doing that."

Senator CLELAND. Additionally, in my own experience, having served with the First Air Cavalry Division in 1967 and 1968 in an operation where General Jumper was flying aircraft into Khe Sanh dodging mortars and General Jones was a young officer trying to get to Khe Sanh like we were, one of the things that has brought all that back is the marvelous movie, "We Were Soldiers." Anybody who wants to get a feel for what these young servicemen are going through in the mountains of Afghanistan ought to see that movie.

The point is, in this high tech world where we go to fight wars with high technology, ultimately we have to put people in there, and ultimately people are our greatest resources. General Jumper, thank you very much for coming to Georgia this week and speaking to our troops at Warner Robins Air Force Base. Your words were powerful and very reassuring to all of us.

I will say that it does seem to me, after the work that Senator Pat Roberts and I did a couple of years ago about the global reach of the United States being 129 countries, the combination of downsizing of the American military over the last 10 years by some 40 percent and the increased commitments of our forces by some 300 percent around the world, as General Shinseki has pointed out in other testimony, means we are stretched to the limit. We really do not have enough people to do all of what we are required to do.

Recent press reports indicate that instead of the budget we are talking about, the Army actually asked for 40,000 additional troops, the Air Force asked for 8,000 additional airmen, and the Navy and Marine Corps asked for 3,000 more each. Apparently, this budget only provides for an increase of approximately 2,300 to the Marine Corps only.

I would like to start off with General Shinseki. General, if you do not get the 40,000 extra troops, what will it do to your ability to meet the commitments not only to service men and women under fire, where we are putting more service members as we speak in that mountain area, but to your commitments around the world?

General SHINSEKI. Senator, thanks. Let me go back and recount 2½ years worth of work in this area. Two and a half years ago we could not recruit, and so in the last 2 years we have fixed our recruiting challenges. You cannot talk about an end strength until you get your recruiting programs straight, and we have done that.

I think the 40,000 number crept up in previous testimony when we were talking about a two major theater war plus lots of peacetime requirements. As the chairman has offered with the QDR and the new strategy that has been visited, there are details now that we have to go back through and run the numbers. There is a big number out there.

I do not know that the same number of 40,000 that was offered a year or so ago is still accurate, but what is clear, as I have said and the Secretary has said in previous testimony, is that we have an Army too small for the mission profile that we are performing. This was even before 11 September. Since that time, 13,000 soldiers have deployed to the Central Command (CENTCOM) area of responsibility (AOR), 24,000 Reserve component soldiers have been mobilized, and soldiers have deployed to the Philippines. The strain continues to be imposed on our people.

Whatever that big number ends up being when our analysis is done, I can tell you that there is a requirement for additional end strength. I have offered to the Office of the Secretary of Defense at least a discussion of growing our end strength above the 480,000 authorization this year by something on the order of 4,000 or 5,000, which is what we can recruit this year. That falls within the congressional guidance of a 2-percent accession to the 480,000. I think that is a relevant starting point to a discussion that may end up

in a much larger number. But for right now, we can achieve the increase of about 5,000 soldiers and it would relieve a good bit of the pressure that both Active and Reserve component soldiers are feeling right now.

Senator CLELAND. Admiral Clark, is the Navy too small for its mission?

Admiral CLARK. Senator, it is good to be with you and see you today. If you look at our track history over the last 2 years, you will see that I have been growing my Navy. I am looking at my number here, and 2 years ago it was projected at 368,600. I am right at 376,000 this year. I put 4,000 in last year. I needed it, because we had too many gaps at sea. Last year, we had deployed our carrier battle groups and amphibious ready groups at a higher readiness state in a manpower way than we have at any time in the last decade. Now, after September 11, the issue for me is how to deal with the security issues and anti-terrorism force protection (ATFP).

I can make it with the end strength that I have. With the allocation or the permission that was given by Congress, I can now exceed the end strength by 2 percent, instead of the previous ceiling that was at 1 percent. At the present time, I believe that I will be able to do this until we figure out exactly what the new force protection baseline is going to be. Within the 2 percent line is 7,400 people.

Here is the issue, though. That is an authority, but I do not have the resources to do that. I have to pay for it, and this gets into the second issue I want to address. I have capability within the Reserve structure, and I have a little over 10,000 people called up. These are people I need for force protection. That only exists in the Reserve structure, and in the new world that we are living in, we are analyzing if we are going to have to put in the Active Force. It is clear that we cannot support it long term in the Reserve structure.

Senator CLELAND. General Jones.

General JONES. Sir, in the 1997 QDR the Marine Corps took a cut of about 3,000 marines, and that cut was entirely in the muscle. We stood down some combat units and we significantly atrophied our reconnaissance capabilities, and since I have been in office it has been my goal to try to figure out a way to restore that capability. We have done a lot of that in internal reforms, and in the last 3 years we will have returned 4,500 marines to the operating forces by doing away with the some of the jobs, civilianizing if we need to keep them.

We have had some good internal success, and as you mentioned, we have requested 2,400 marines, which is in the budget. If that is authorized, we will significantly remedy that shortfall that I spoke of that occurred in 1997.

Senator CLELAND. General Jumper.

General JUMPER. Sir, thank you for inviting me on the trip to Georgia the other day. That was a very pleasant trip.

During the 1990s, we came down 40 percent in the strength of our Air Force. As part of the 2003 budget, we originally asked for an increase of 7,000. This is mainly due to the fact that we are not able to meet our commitments with our security forces. When you

declare an elevated threat condition overseas, our habit was to take our rotational forces and go fill that need. We never anticipated the need to do it overseas and in the United States at the same time.

The Secretary of Defense has rightly asked us to go back and look at efficiencies we might be able to find within our own force structure, moving missions to the Guard, Reserve, or to civilianize certain aspects of it. We are in the process of doing that, but we will not be able to continue to do our job with the numbers we have now, sir.

Senator CLELAND. Thank you all very much.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Cleland.

Senator McCain.

Senator MCCAIN. I would like to follow up on the comments that were just made by the witnesses, and also add a comment that they are aware of better than I am. The Guard and Reserves cannot remain on Active Duty for unlimited periods of time, otherwise we would not be able to recruit people to serve in either of the Guard or the Reserve. I think that is an obvious point that needs to be made here.

Senator Bayh and I have introduced legislation concerning national service. I am very pleased that the President is making a big issue of the opportunity to serve ones country, community, and Nation.

In our legislation, Senator Bayh and I propose service for men and women in the military on a short-term basis in both the Active Duty and Reserve status in return for some compensation. It seems to me that with all the homeland security requirements that are now being borne for the military, there is not a requirement for some of the training that is necessary in other functions and missions of the military.

Without getting into specifics, I would be very interested in your views about the concept of citizen soldiers being able to serve in both Active Duty and Guard for limited periods of time, and take up some of the responsibilities that clearly will be with us for a long period of time. We will begin with you, General.

General SHINSEKI. Senator, we have a fairly active program now, where we take soldiers out of the Active component, and as they complete their active service, roll them into Reserve component units.

It is good for those individuals. Many of our States offer college tuition as an incentive to join the National Guard, and it is also good for the Reserve component, because they get good experience out of 3 or 4 years of active time embedded into their formations, very quickly raising the skills and operational experience. I think there is tremendous good in having the youngsters from all of our formations being able to serve in a variety of other roles.

I think we send back to this country great leaders, whatever the rank and age, because of the way they are used operationally and the values that they acquire while they are with us. They are a tremendous resource to be used in other roles, whether it is for homeland security or other kinds of responsibilities.

I would like to still see a good many of them go into our Reserve component formations, because of the tremendous capabilities we have gotten out of that.

Senator MCCAIN. Well, I am sorry you could not answer my question.

Admiral Clark.

Admiral CLARK. Senator, I have this little rule that I apply to my life. I never, ever talk to a group without talking about service, and so I think the concept of national service is fantastic. I applaud your initiative. I do not know exactly the way we would apply it if it comes about, but I know we are finding that our people sign on to the whole concept of serving. That is something that we give our lives to that is bigger than ourselves, and that is what it is all about.

Senator MCCAIN. Thank you, Admiral.

General Jones.

General JONES. Senator, I am an active believer in service to the Nation. I think it can take all types of service, that I think our young people should be provided with encouragement to serve the Nation in any capacity they can, military being one of them. I am a supporter of national service.

Senator MCCAIN. General Jumper.

General JUMPER. Senator, I think it is an unprecedented time in history to be able to capitalize on the spirit that we have in this Nation that we have not seen since World War II. The notion of national service is a way to capitalize on it, and I fully support it.

Senator MCCAIN. Thank you. The administration is going to be coming over with a proposal. The President has made this, I think very appropriately, a high priority, and we look forward to working with him. I hope you will be thinking about how we can best implement a military component.

I think it will be difficult. I think we have this problem of two classes of the military. We have all kinds of issues that need to be addressed, but I think the realities are that it is going to be very difficult to increase your end strength because of the cost involved. We have so many security functions now, just in regard to homeland security, that I think we should actively pursue a way to handle those responsibilities. But most importantly, we should give young Americans a chance to serve, whether it be in the Peace Corps, Americorps, which has been an astonishing success, or help out with our national security needs. I think as you three have mentioned there is no better time in American history to pursue this. I thank the witnesses.

Finally, Admiral Clark, I am disappointed that we seem to have a \$48 billion increase in defense spending, and yet only three additional ships budgeted, less new ships than was envisioned before we had this spending increase. I do not quite understand that. That is very difficult for me to understand, particularly since we have found that the Navy played a vital role, as did the Marine Corps, Air Force, and the Army. You have young men and women on the U.S.S. *Theodore Roosevelt* proudly breaking the record for the longest period of time at sea by an aircraft carrier since World War II, is that correct?

Admiral CLARK. That is correct.

Senator MCCAIN. Then we had better look carefully at our match-up between assets and requirements. I think it is great to break the record once. I am not sure how many of them are eager to break it on subsequent occasions. If you believe that this conflict is going to be extended in nature, I am very worried about the strain on materiel, but mostly on the men and women in the Navy. I have never been more proud of them, but it is a terrific strain on them, and I am not sure we have the match-up right now. I really do not understand a decrease in ships, with a \$48-billion increase in spending.

I thank the chairman.

Chairman LEVIN. Thank you, Senator McCain.

Senator REED.

Senator REED. Thank you very much, Mr. Chairman, and I thank the witnesses for their testimony. Let me associate myself with the remarks of the chairman and the ranking member in saluting the services and the sacrifice of all of our men and women, particularly those in Afghanistan. I had the privilege of knowing General Hagenbeck for 30 years, who is commanding Operation Anaconda, and I know our forces are being well-led.

General Shinseki, I would note that the Army proposed to spend less in 2003 on research, development, test, and evaluation (RDT&E) than it did in 2002, \$6.9 billion versus \$7.1 billion. Yet, we all recognize the need to innovate, in fact, to pull forward some concepts and ideas that are scheduled far out in the future and move them forward. Can you comment upon this RDT&E funding situation?

General SHINSEKI. Senator, we have put as much into our RDT&E as we had flexibility to do. Ninety percent of that goes to our future science and technology investments for our Objective Force. In balance with all the other things, we are trying to ensure we have an appropriate priority for the \$10 billion increase that the Army experienced. About \$3.3 billion of that went directly in our defense health programs, much-needed adjustments over previous budgets.

About \$2 billion, \$1.9 billion to be more specific, went into compensation. These improvements in pay and allowances, which our people tell us was important, are very well spent.

About \$1 billion of that \$10 billion goes into pricing, fact-of-life adjustments, and costs that have to be addressed.

About \$3 billion of the \$10 billion went into programs, finding a balance between recapitalizing those legacy systems I talked about and making investments in trucks that the Army had a longstanding requirement to do.

About \$500 million went into chemical demilitarization, a requirement that we have for the Department of Defense. Approximately \$900 million went into programs, and we have put as much energy into research and development as we could, which covers about 90 percent of our future combat systems requirements.

Senator REED. Thank you, General Shinseki.

Admiral Clark, can you also comment on your RDT&E situation? But first, let me associate myself with Senator McCain's and the chairman's comments about the shortfall in shipbuilding. It is somewhat perplexing to us, and I want to go on the record with

that point. I also want to commend you for your emphasis on underwater unmanned vehicles (UUV), which is another aspect of modernization and using RDT&E. I notice that you have accelerated a multimission reconfigured UUV and upgraded some other systems which are important. Why don't you comment on RDT&E generally, and anything else in specifics?

Admiral CLARK. Thank you, Senator, and for your comments on UUVs. I believe that UUV and UAV development is going to transform our Navy in ways that many of us can only barely envision today. They are very important for our future. I do not have the exact numbers here on the R&D accounts, but let me speak to the issue of shipbuilding.

I hope I made it clear in my opening comment that I would like to have more shipbuilding. I have testified before this committee on two occasions about my belief in the requirement for us to develop the discipline to create systems where we can better partner with industry and level-fund these accounts. I believe we are buying all of the ships and airplanes that we are involved in at the wrong end of the economic order quantity chain. It applies to aircraft as well as to ships.

We do have the modernization of the two Trident submarines that we are paying for in this year, which fundamentally would not have been in the total ship number. I believe we need to recognize that as part of the Navy's commitment to taking care of what the taxpayer has already bought. This budget reaches out and rescues SSNs that were going to be lost to the Navy.

Having said all of that, there is no question about the fact that we need to be able to move toward a higher investment stream into the shipbuilding business and, of course, these R&D lines feed those accounts.

When we talk about where all the money went, General Jones and I received a \$9-billion increase. We buy much of our hardware out of the same accounts. One of the things I want to focus on, which I did not mention it in my opening statement, is that almost \$1 billion is for munitions. This is an investment that we had to make to ensure that we are going to be ready to take on future threats.

Senator REED. Thank you very much, Admiral Clark.

General Jones, in a similar vein of RDT&E, could you just bring us up to date on the status of the two principal developing platforms, the Osprey and the AAV?

General JONES. Yes, sir. The AAV has been found to be a mature technology by two major independent review panels. The problems associated with the Osprey mostly had to do with engineering fixes. We have spent the major part of this year addressing those issues with industry, and we have been pleased to be able to announce that we will return to a flight-testing program in April of this year. We hope that that will prove to be successful.

With regard to the AAV program, we voluntarily slipped it 1 year in order to take care of some design problems, mostly hydraulic types of issues. But the AAV program is an award-winning program, and clearly one of the most important transformational programs we have going. So, we are optimistic on both of those.

Senator REED. Thank you. General Jumper, my time has expired. Let me simply express my great respect and appreciation for your pilots and your people on the ground. They have done a great job. They flew us around into Bagram. Their ingenuity and their skill was very impressive, so please relay those comments.

General JUMPER. Thank you, Senator.

Admiral CLARK. Senator, may I add something?

Chairman LEVIN. Please.

Admiral CLARK. Senator, our 2002 R&D number was \$10.5 billion, and our 2003 number is \$12.5 billion.

Chairman LEVIN. Thank you, Admiral.

Senator Inhofe.

Senator WARNER. Thank you, Mr. Chairman. Let me echo what Senator Warner said in his extraordinary opening statement and the extraordinary statements made by all. I feel compelled right now to single out Admiral Clark and tell him that in addition to the opening statement he made today, he made a great statement to the entire world at the National Prayer Breakfast, when he left no doubt as to who is in charge in America. I personally appreciate it very much.

Knowing the high OPTEMPO and the problems that are out there, I have had occasion to spend some time recently in to Ramstein, Aviano, Vicenza, Bosnia, and Derby. I also spent some time at the hospital in Landstuhl where there are people from all services. I have to say this just so it gets on the record: I talked to the young troops who were injured and to a last one they said they wanted to get back to their unit and they wanted to make a career out of the military.

This is a change. This did not happen prior to September 11. Admiral Clark, I remember one young lady's name, because she had the same name as the ship she was on. It was a young lady named Stennis. She was on the U.S.S. *Stennis*, and during a refueling operation she got her leg caught and a cable pulled her overboard.

You look over the side of one of those carriers, which we have all done, and it is 77 feet down there. She fell down into the churning water, and it crushed both of her lungs. She was gasping, and between breaths she said she wanted to return to her unit, and wanted to make a career out of the United States Navy.

All four of you have done such a great job of instilling that sense of patriotism that, as someone else said, has not been present since World War II.

I was going to spend some time on this whole force structure issue, but it has been covered pretty well. I would only say that I think there are two deficiencies in the budget that came from the administration: force structure and military construction. Yet, I do not say that critically because we had so many needs, primarily modernization. I know you are living with the hand that was dealt you, but we are going to try to deal you a better hand from this point on.

As far as the discussion on service is concerned, I happen to have been a product of the draft. I may be the only member of the Senate Armed Services Committee that openly advocates returning to compulsory military service.

Let me get into a couple of other things, though. General Shinseki, you made several comments about the Crusader and I want to give you a chance to expand on them. General Jumper, you were very courageous 5 years ago when you admitted we were not giving our troops the very best of everything on the field. There are some strike vehicles that the Russians are making now that in some respects are better than our F-15 and our F-16.

Historically, we have always had the best. That is not true any more, and General Shinseki, I have spent sometime over looking at the various options on our artillery pieces. The German PZH 2000 is a better system than our Paladin now, but not as good as our Crusader will be when we get it in the field. I would like you to make any comments you want to make about the Crusader. I consider it to be the crown jewel of what we are going to have. Do you have any comments to make about that?

General SHINSEKI. Thank you, Senator. Discussions about the Crusader have gone on for the last couple of years, and I would tell you that in all the time of my service, one of the things we lived with throughout the Cold War was a lack of adequate artillery. We were both outgunned and outranged by the other side, unable to put precision fires where we needed them, and without the kind of rate of fires that would give us an edge.

When you are living in a Cold War environment, where the other guy is moving offensively to your formations, you get a little return for having lots of less adequate artillery, but able to provide, because he is moving into fires, adequate concentration.

Senator INHOFE. I appreciate that, and it is fully funded now.

Let me get to my last question on the U.S.S. *Wasp* before I run out of time. I spent some time with Admiral Dawson and Admiral Natter, the Commander of the marine expeditionary unit and the Commander of the U.S.S. *Wasp* respectively, and we talked about live-fire training on Vieques. All of them said they would like to have had that. They did have inert training at the beginning, but they did not have the final unified training that they all said that they would like to have had.

When asked, "If live-fire is a 10, what is your level of training?" They all said 5. I think that is very significant, because the President in his State of the Union speech talked about having the very best training. We are not giving them the best training, because there is a void there. They told me that they thought there was a presidential directive forbidding live-fire training, so we looked up that directive. It was dated January 31, 2000, when President Clinton said that we are going to hold off until a referendum.

I have had some legal interpretations that say that is no longer an active directive. It is gone. It is gone because there is no longer a referendum, and that is how we worded it in the National Defense Authorization Act for Fiscal Year 2002. I would like to get your comments.

Do you still stand by the letter that you sent out saying that you respectfully request support of a wartime modification of the current practice to sanction the use of live ordnance during combined armed training exercise prior to the deployment, signed by Admiral Clark and General Jones?

Admiral CLARK. Yes, sir, I do.

General JONES. I do as well, sir.

Senator INHOFE. It has been very confusing to all of us on this panel, because we get kind of passed back and forth. Here I was talking to those individuals who were responsible for training in the field. They all said they really needed to have it. There is no place else they can get the unified training. As far as your opinions are concerned, would you make Vieques available for live-fire training by making that option clear to the commanders within the Navy and your Marine counterparts at future deployments, if it is up to you?

Admiral CLARK. If I had the option of making it a live-fire exercise, then I would have to deal with all the other issues I have to deal with around this case, so let me just say it in a simple way. If it was a perfect world, and live-fire was available to me, we certainly would be exercising that.

Senator INHOFE. We are going to be striving for a more perfect world now that we are at war, so I think that might happen. General Jones.

General JONES. Yes, sir, I agree with the CNO.

Senator INHOFE. Thank you, Mr. Chairman.

Chairman LEVIN. General Shinseki, would you expand for the record your answer relative to Crusader? I was not sure that you had finished it. Please provide it for the record, because I do not want to take any more time.

Senator INHOFE. Mr. Chairman, I appreciate that. I did cut him short because I was afraid I would run out of time on my last question.

General SHINSEKI. The bottom line is, we need it.

Chairman LEVIN. That may be the bottom line, but if I got your tone correctly you were going to expand on what you were saying. I think it is important, because it is an issue which has been raised in a significant way in a number of places. I think it is important that we have your complete answer, and I know Senator Inhofe had to stop because of our 6-minute rule. It would be helpful if you provide an answer for the record.

[The information referred to follows:]

CRUSADER

General SHINSEKI. We recently designated the Crusader as a "Legacy to Objective" system that will be present throughout transformation. Crusader will significantly improve the capability of the counterattack corps with close supporting precision fires, state-of-the-art connectivity, autonomy, and improved deployability characteristics. These characteristics make Crusader a critical fire support augmentation option for the interim and light forces. In the future, Future Combat Systems (FCS) based units will have their own organic close support capability. But we will still need to rely on Crusader in an external support or reinforcing capacity, where it provides risk mitigation until we can achieve close support capability with an FCS-based platform. The bottom line is that for the next 30 years, Crusader will provide close support and external complementary fires to the entire force as it transforms.

Senator Ben Nelson.

Senator BEN NELSON. Thank you, Mr. Chairman. I would like to thank our witnesses for being here with us today. We are in the 157th day of Operation Enduring Freedom, saddened by the loss of life and the expectation that more service members will be placed in harm's way.

As a point of personal privilege, I would like to comment that Sergeant Philip J. Svitak, who was in the Second Battalion 160th Special Operations Aviation Regiment, was a native Nebraskan, born in Lincoln and raised in Fremont. Our personal condolences go to his family, friends, and comrades in arms. I say that having just returned from a visit to Afghanistan, Pakistan, and Uzbekistan, spending some time at K2, as well as Bagram and Kabul. I visited with the men and women in the military in those locations and the morale was high.

There was also strong concern about rotation. It is my understanding that the rotation for U.S. Central Command (CENTCOM) is 179 days. That is the marker for rotation at the present time. Does that coincide with your estimate, because there is a concern when you are on 12-7 and off 12-7 but have no place to go, that it is a very difficult assignment. They are not complaining about it, but there was the question raised about rotation.

Maybe the chiefs can comment in connection with rotation. We have heard about shortages of personnel, and there is no question it is a major challenge. If we wear thin and wear down there is a concern about the ability to continue to maintain the high quality of our men and women.

General Shinseki.

General SHINSEKI. Senator, I would say that we are not hearing the complaints at this point, but we do know that the mobilization numbers had to go to our Reserve component formations suggest that there is not enough capability in our Active component structure to handle all of the requirements.

An interesting thing happens when you deploy youngsters operationally. If they have a very clearly defined mission and a purpose, they can handle what they are being asked to do. It has a great return and satisfaction for what they are trained to do and what they are then doing in the field.

If it were less operational, I think we would be hearing at least questions about what is this mission about. We are not getting that from the places we have Active and Reserve component soldiers deployed today. I do not get that inquiry. I do not get it in Bosnia. We do not get it in Kosovo, the Sinai, Southwest Asia, or Afghanistan, and that mission I do think we need to pay attention to this, especially where it affects the Reserve components, because you can rotate them on an operation one time, and then it is a long time before you can go back to the same Reserve component soldier.

Senator BEN NELSON. I would not say that they were in the nature of complaints, but it was a matter of concern. Of course, concerns untended very often become complaints, or get worse than that as time goes by.

General SHINSEKI. We watch this closely.

Admiral CLARK. This is an issue on the Active side and the Reserve side for me. We are a rotational force, and we routinely plan for 6-month deployments. We have had a lot of history to analyze, and when the deployments get longer than this it creates an extra hardship for our people.

My responsibility is to try to figure out how to meet the taskings that we have been given. My policy, which I inherited this from my

predecessor and he from his, was that we go to the Active side stay at 6-month deployments, and I have said that we will do that if we possibly can. But, if winning this war means I have to extend somebody I will not blink twice. We are going to do that.

Along with my other commanders, I have to keep this balance piece. We have to understand the dynamics of it, because my forces are going to deploy, come home, go in a shipyard, train up, and deploy again. It is an issue for us and we have to watch it very carefully. So far, only a couple of the units we have had to do that with.

On the Reserve side, here is what I am getting in the field. I was in the Indian Ocean a few weeks ago, and they just want to know what the plan is.

Senator BEN NELSON. Mostly that is what I found out too, what the service members wanted to know was the plan.

Admiral CLARK. Yes, they say "how long am I going to be here? Let me know." We are being as honest with them as we know how to be, and telling them we are doing a zero-based review. Right now we are going through a zero-based review of every individual that has been called up and will communicate with them where we stand.

My particular challenge is the segment of the Reserve structure that I do not have in the Active Force, and so I have to manage it carefully.

Senator BEN NELSON. Thank you. General.

General JONES. Sir, my comments are very much like Admiral Clark's. We are a rotational force. We are also a young force. The average age of a United States marine is around 24 years old. They join the Marine Corps to do the kinds of things that we are providing for them at present. Our highest reenlistment rates are in our deployed units. We are keyed, though, to the 6-month deployment. We will make exceptions to that as needed in order to help prosecute the war and the campaign, and everybody understands that. But 6 months is culturally very acceptable to the recruiting and retention goals that we set for ourselves.

Senator BEN NELSON. General Jumper.

General JUMPER. Sir, in the Air Force we have a bit different problem. When our units return, especially the aviation units we have deployed, they are still on tap for a 72-hour response for the major war plans we have to respond to, so we cannot let their skills, the overall spectrum of their skills, deteriorate. We try to rotate our aviation units out on a 90-day period. This is something we have worked with CENTCOM. We are not able to do that for all of our systems, and there will be some of the systems we have to keep over there for 180 days, because of the demands on those assets.

In addition, we have to pay close attention to our Guard and Reserves. They cannot go over for 180 days at a time. We are usually rotating them out in cycles, sometimes as often as 2-week cycles as they come in and out to be able to return to their jobs. We have to respect the employers that give these people up, and not take for granted the service that our Guard and Reserve provides us. Those are the complicators, but we work these out with CENTCOM, and it is well-understood.

Senator BEN NELSON. I appreciate your responses. It is obvious that communication is the most important part of dealing with that concern. I commend you for your efforts and suggest that we all continue to communicate as closely as possible, particularly those that have any questions about it at all. I thank you very much for what you are doing.

Chairman LEVIN. Thank you, Senator Ben Nelson.

Senator SESSIONS.

Senator SESSIONS. Thank you, Mr. Chairman. Our military has on occasion been accused of being hidebound and conservative and slow to change. I think that has been the history of our militaries around the world. We tend to stick with what has done well before, but I have to say that I do not believe history will record any military that has transformed itself better in the last 20 years than ours. You have made tremendous progress, and some of the things you have described in your opening statements represent tactics hardly even dreamed of 25 years ago. I believe you are continuing to move in that direction. We would like to see it accelerated and be able to help you create even a greater lead than we have today.

All of you talked about the morale of the soldiers and retention. It looks good. As the ranking member on the Subcommittee on Seapower, I visited the Fifth Fleet in the Gulf, and the Seventh Fleet in Japan. I was just recently in the Mediterranean. I agree that morale is very good and retention is up. Would you tell me how good retention helps you, what benefits that gives to any service, particularly the Navy, and can it save us some money that we could use for other things, like ships?

Admiral CLARK. It absolutely will save us money, and here is how good it is. I just approved a reduction in this year's recruiting goal by 4,000. I am not sure I am finished. The reason is, my stretch goal for this year is to retain 57 percent of those first-term sailors that are eligible for reenlistment. That is my goal. I am at 64.8 as we speak, and the month of January there were 70 percent of them reenlisting.

I must tell you, Senator, I have been doing this since 1968, and going to the Indian Ocean to see 20,000 sailors in 3 days. I have never, ever been prouder to be in the Navy.

How does it save us money? Every one of those recruits costs me \$10,000 to \$15,000. The Navy is becoming more high tech, and that means we need to keep the people we have trained and their skills. I believe we are going to have to do some more innovation and figure out how to incentivize the process to pay for the skills that come to us that are required for us to maintain this more sophisticated, driven-by-technology kind of military that we want. Of course, we do not want a fair fight. We want to out-gun everybody and out-tech everybody.

Senator SESSIONS. Thank you. I assume that is a similar story with all of you; good retention and savings in a lot of different ways. You have more people on the job and not in the process of being trained, too, and that strengthens your capabilities, does it not?

Admiral CLARK. That is true, which goes back to my response to an earlier question regarding end strength. I remember being before Congress and talking about this issue and somebody saying to

me, "Admiral, you could not get them in the Navy anyway if we gave you more." That is not the challenge I have. Without the 2 percent flexibility given us I would have had to close the doors completely last year. In July, I had to lock the door on Navy veterans who wanted to come back in.

So it saves us money and gives us a skill-based force that is able to handle the technology of today and of the future.

Senator SESSIONS. That is good news indeed. One of the things I know you have been dealing with, Admiral Clark, is some unfunded requirements of previous years. You are trying to work those off, as I understand the numbers. Correct me if I am wrong, but I believe you had \$600 million for the 2002 budget, \$500 million for the 2003 budget, and you are setting aside some additional money for 2003 so that you will not have that kind of unfunded requirement that carry over and diminishes the next year's budget. That is effectively what has happened. Things did not get fully paid for in 1 year, so now you are having to take money out of this year's budget to pay back old debts.

Admiral CLARK. I presume we are talking about readiness requirements, maintenance, parts, and so forth, is that correct?

Senator SESSIONS. That is what I understand. You had mentioned earlier that there were carryover requirements that are eating into your funds, and the numbers I had seen were about \$1½ billion.

Admiral CLARK. There are several carryovers. We could be talking about prior years shipbuilding bills, or we could be talking about the approach to readiness in the past. When I first appeared before you I talked about a \$600 million shortfall in the flying hour account. I want to be on record that the 2002 budget was the best readiness budget I had seen in at least a decade, and I just stopped counting there, Senator. It would go back aways.

The 2003 budget builds on that. We have this year fully funded 100 percent of the aviation flying hour account, and 2002 was the first time we had ever done that since I have been in the Navy.

Senator SESSIONS. So a pilot has to have so many hours in flight, and if he does not get it in this fiscal year you have to give him extra hours the next year to get him caught up?

Admiral CLARK. It is a complex matrix, but if you fall behind then it actually costs you more money to catch up.

Senator SESSIONS. Hopefully we will get that worked off, and that could free up substantial money. If you could stay current, then we will not have that burden, and hopefully that can be used for ships, too. I wish we could talk more about ships, but my time is up, Mr. Chairman.

Senator WARNER. Mr. Chairman, could I ask a prerogative of the ranking member and to take a minute of my time now?

Chairman LEVIN. It depends upon the other members here.

Senator WARNER. You are eating up my time here. [Laughter.]

The statistics are the best news I have heard in a long time. I think your colleagues should be given the opportunity right now in the record to say what your goal for retention was for the Army, Marine Corps, and Air Force.

Senator ROBERTS. I have that for the Marine Corps, John if you would let me say it.

Senator WARNER. Well, Commandant, you have been preempted. Could the Chief of Staff of the Army give the goal in retention?

General SHINSEKI. Absolutely. Two and a half years ago, Senator, when I appeared here, we were struggling with recruiting. While recruiting was tough, retention was not a problem for the Army. We are retaining at 109 percent of our goal. We have been anywhere between 104 and 107 percent every year since. Now we have fixed the recruiting challenge, and we continue to retain at very high rates.

Senator WARNER. The Department of the Air Force.

General JUMPER. Sir, we are at 107 percent of our recruiting goals so far this year. We met our goal easily last year. On the retention side, for our first term enlistments we are meeting our goals, and we have seen 1,100 prior service people come back into the service this year, so the news is good all the way around.

Senator WARNER. Senator Roberts, you go ahead on the Marine Corps.

Chairman LEVIN. You want to step out there, Senator Roberts? [Laughter.]

Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman. Gentlemen, welcome, and thank you for your great service to our country. I particularly want to express my admiration for the young men and women in uniform who you all represent. Like many of my colleagues, I have had the opportunity to visit our troops in Afghanistan and throughout Central Asia. Their morale was extraordinarily high. I believe that to be the case because they know that America is completely united behind them, and I think that makes all the difference.

Admiral Clark, you will probably not be surprised to learn I am going to use my time to talk to you about shipbuilding. We have a \$48 billion increase in the defense budget this year, yet the budget provides for the procurement of fewer ships than last year. I am very disappointed in that. The numbers tell the story. For fiscal year 2001, \$11.9 billion was allocated for shipbuilding; for fiscal year 2002 it was \$9.5 billion; and for fiscal year 2003 we are looking at only \$8.2 billion.

Your written statement very candidly describes the problem. You said, "Current aircraft and ship procurement rates will, if continued, result in a Navy numerically smaller than today's, and I think this is the important part, significantly smaller than would be needed to sustain the war. Such a fleet would be an invitation to greater operational risk and international instability."

The Congressional Research Service warns us that if we continue down this path we will have a deficit of 47 ships. We are well below what the levels are called for in the QDR. We know that we need an average of 8.9 new Navy ships per year in order to maintain a 310-ship fleet. If we are not reversing the decline in shipbuilding in a year when we are having a \$48 billion increase in defense spending, then when are we going to do it?

I am just very concerned that we have uneconomic procurement rates that are increasing the cost per ship to the Navy and are jeopardizing our shipbuilding industrial base. In my judgment, we cannot continue to defer investment year after year, so I want to

help you solve this problem. I want to ask you some questions on how we can start remedying the situation now, because we are just getting deeper and deeper in the hole.

Let us start with your priorities for this fiscal year. There is some money in the budget, \$74 million, for an additional down payment on a third DDG for fiscal year 2003, and last year we provided an advance procurement of \$125 million for a third DDG. How high is having a third DDG-51 on your priority list?

Admiral CLARK. Senator, I cannot tell you how important it is to me and how important it is to increase not only the numbers but the investment stream. I talked earlier about my requirement to put forward a balanced recommendation to build the Navy, and you know how I stacked my priorities.

From the time I came up here for my confirmation hearing, I told you my first priority was going to be the battle for people; my second was going to be current readiness; and my third priority was going to be the future. We are doing splendidly in numbers 1 and 2. There is no question we have to do better in number 3, future readiness. In my opening statement I tried to emphasize that.

I also testified here a year ago that I needed to have an investment stream, and my total acquisition investment needs to be—the CBO first put this number out—somewhere around \$33 to \$34 billion. For the last dozen years it has been about \$23 billion, and so I would like to represent myself on this because I am doing what I said I was going to do.

I do not like the way it has turned out in the shipbuilding line, but I have paid the bills to make sure that we have people to man the Navy and that the current Navy will be ready. I have to figure out how to create internal savings and efficiencies in the Navy so that I can do something about the \$10 billion shortfall.

I cannot testify where the \$48 billion went. I can only tell you where the \$9 billion went that came to the Navy. Seven and a half billion dollars went to current readiness, including personnel. I do not think it is fair for me to sit here with my hand out begging for more money without doing what I can do inside the institution to make it more productive and more efficient. But where I am this year, I was unable to find the resources to add to the shipbuilding account.

Now, if I had another \$1, where would we put the first one? The first one would be in the DDG line. The second one would be for LPD and so forth. We need to understand, and I need to go on record, about the fact that we need \$12 billion of new construction funds committed to the SCN line every year. We are trying to partner with industry. We have done war games with industry to figure out how to get at the right end of the economic order quantity line, and that is the way to do it.

Senator COLLINS. Mr. Chairman, I think that the committee will need to address this problem. This is a serious shortfall in shipbuilding. If we do not start addressing it in a year when we have a \$48 billion increase in defense spending, I do not know when we are going to address it. I think one of the recommendations that I would make to the chairman and ranking member is that perhaps we should take a look at the \$10 billion reserve fund. Perhaps

some of that needs to be rededicated to make up for this egregious and continuing shortfall in shipbuilding.

Thank you.

Senator WARNER. Mr. Chairman, I wish to commend our colleague for her comments. You have been a steadfast supporter of this for all the years you have served on this committee. I think the \$10 billion is a focal point. Remember, the President proposes, Congress disposes, and we have solid testimony here, in this hearing and in other hearings, to support augmentation of the shipbuilding part of the President's budget. I thank the Senator.

Chairman LEVIN. Thank you.

Senator Roberts.

Senator ROBERTS. Thank you, Mr. Chairman. This has been a rather remarkable morning of testimony, an unbelievable change from about 4 or 5 years ago. As I recall, your predecessors appeared before us at about the same time of the year and said basically, "steady as she goes with the defense budget." They said "we can do this," and then in the fall we had an emergency meeting, and they indicated that they could not do this.

I would remind everybody that at that particular time, with the exception of one service, we were having real problems with recruiting and retention, PERSTEMPO, OPTEMPO, mission quality, quality of life, distrust between our service members and command, and according to several studies, a disconnect between the civilian population and the military.

My, how times have changed, certainly very positively in that regard. I want to credit you and our men and women in uniform for the much more positive attitude that we have. I think we are a much more united country and much more aware of the sacrifice that all of you are making.

According to my distinguished ranking member, I am supposed to give some testimony on behalf of the Marine Corps. General Jones has indicated that the Marine Corps is a young force. The average age of our marines is 24, roughly 6 to 8 years younger than the average age of the members of the other services. This is due in part to the culture of Marine Corps, unique with 68 percent of our marines being on their first enlistment at any one time.

The nature of the marine force structure requires us to annually recruit 41,000 men and women into our enlisted ranks. To fill this tremendous demand, our recruiters work tirelessly and have consistently met our goals in quality and quantity for over 6½ years. The performance of our recruiters has been superb.

This, Mr. Chairman, with the same damn ad on television for the last 10 years. [Laughter.]

Senator WARNER. It is working.

Senator ROBERTS. Right along there with "Gunsmoke," it keeps rerunning. Now we have a little bit of a new one, but it is the same thing, the marine takes his marine sword out and slays the dragon. The reason I want to bring that up is I remember the battle with the appropriators, where every other service had an increase in their recruiting and the marines had a flat line or a decline.

All of you gave very glowing reports on retention and recruiting. Are you indicating that your retention budgets are about right? Do you need more or less?

General Shinseki.

General SHINSEKI. Senator, we are about right, but I will tell you that we also look very hard, when we are making numbers, at how we can get some efficiency back. As you well know, the workforce in our recruiting effort are soldiers out of the line, and part of our end strength balance is affected by getting them back. So we are looking at it.

Our number is 180,000. We will do that this year for the third year in a row. That is a big number, but we have recruiting about right. We have gone to school on the Marine Corps, picked up some pointers from them, and we are very proud of our recruiting program. But 180,000 is a full year's worth of recruiting for us.

Senator ROBERTS. Admiral Clark.

Admiral CLARK. As I said a few minutes ago, Senator, I just recently reduced my number to 50,000 for this year.

Senator ROBERTS. I was a little stunned by that. That is amazing.

Admiral CLARK. Our target has been in the neighborhood of 56,000 to 58,000 in recent years. We increased our recruiter force 2½ to 3 years ago to 5,000. There are things that we could do to make them more effective and to give them better tools, and we are looking at that now. Nobody has talked about it yet, but General Jones and I put together a joint advertising campaign, I believe for the first time in our history, and it played for the first time 3 weeks ago. When he said earlier in the hearing that this is a real team, he is correct, and this is the power of teamwork.

Senator ROBERTS. General Jones.

General JONES. Sir, if I could add to your compelling testimony— [Laughter.]

One point I would make about recruiting is that it is not just the numbers, but the incredibly high quality of recruit that we are able to attract, virtually all high school graduates, and very bright. We are seeing the level of education in our services rise. I do not want to speak for all of my colleagues, but I think I am probably correct in saying that the most consistent demand that we hear from the ranks is, "okay, I am here now, how am I going to continue my education."

So they come to us highly educated, and they leave even better-educated. We celebrate this, because we believe that we are providing to our society at the end of an enlistment, for those who do not stay with us, an incredible citizen for the future. It is someone who appreciates the quality of their service and who knows their service has been appreciated by a grateful Nation. All of the things you have done in this committee to support that has been dramatically effective within the ranks.

A second point I would make is that you can recruit just about anyone if you are a good salesman, but the strength of your culture is determined by your retention statistics. In almost 3 years in office, I found that we had been leaning too much on the recruiting banner, and we had not really paid enough attention to reenlistment, career planning, and what to do once we have people in the service.

A couple of years ago we frankly had a problem with first-term attrition and so we focused on that. We found that we were not

working hard enough to keep the marines that would have wanted to stay with us if we had just worked a little bit harder and listened a little bit better. We fixed that in an amazingly short period of time.

We then found that the second-term attrition numbers were not really as good as we thought they should have been, because institutionally we had a sense that, "well, we have you now, and you are in for 20 years." That is not necessarily so, and so we fixed that simultaneously. That has allowed us to do what Vern Clark said, and now we have a tremendous program for our career force and are doing well. But again, it is a complex and sophisticated program, and it is not just about numbers.

Thank you, sir.

Senator ROBERTS. General Jumper.

General JUMPER. Senator, we recruit the fewest number of all the other services, at about 35,000 a year. Because of the technical skills required, such as those Vernon Clark talked about, we rely on our retention statistics. We have to work that hard, but we are well ahead this year at 107 percent. Up until about 3 years ago, the Air Force was never much in the recruiting business. We had to learn it from scratch. We never had a problem making recruiting, but the robust economy and the airline hirings had put us in the recruiting business. We are up on the step now. We are making our goals, and we are proud of these airmen who are coming in and doing the Nation's business.

Senator ROBERTS. I read a recent article which suggested that the science and technology funding goal is hindered by service resistance. There also was an order from the Department of Defense for you all to reach the 3-percent goal of total defense budget. Senator Reed went into that to some degree. You answered the question, and the reason I am bringing that up is that Senator Levin and Senator Warner will instruct Senator Landrieu and myself on the Subcommittee on Emerging Threats and Capabilities to say, "don't forget the seed corn in regard to technology."

What will it take for the services to commit to and adequately fund the science and technology program? You have pretty much answered that, but I wanted to second what Senator Reed indicated. If we are going to maintain our lead in terms of technology, I think that is essential.

The last thing that I would like to say is on behalf of Senator Collins. I serve on the Intelligence Committee, and the "silent service" plays an important part in regard to intelligence-gathering. They are a very proud service without any question, and the silent service is usually silent. Admiral Kunetzny was not so silent, and made some good points to prevent these "oh-my-God" hearings in the Intelligence Committee once something happens that turns into a real tragedy. It seems to me that we must have adequate intelligence-gathering, and our "submarine service" is quite unique in that regard. Could you address that on top of Senator Collins' remarks, because I am very worried about that. I think we have huge gaps in our intelligence-gathering capability because we do not have the submarines.

Admiral CLARK. We currently are right at the target line for the number of submarines we ought to have in our Navy, and that is

55 SSNs and the Trident force. It is the "silent service," and we do not broadcast where they are out and about and what they are doing, but they are an extraordinarily valuable asset. This budget has one new *Virginia*-class in each year. What it has added is the advance procurement, so that we can get to two, and we must do so. We cannot sustain the force at one a year. It is not possible, so the advance procurement has to lead the commitment to the end year for the acquiring of and contracting of these submarines. That is toward the end of the FYDP, sir.

Senator ROBERTS. You will be happy to notice you can have lunch. My time has expired.

Chairman LEVIN. Senator Carnahan.

Senator CARNAHAN. Thank you, Mr. Chairman. I want to offer my condolences to the families and the loved ones of those who were lost in combat this week. Among those we mourn is Sergeant Philip Svitak from Missouri, and our prayers certainly go out to his wife, children, parents, and family. Sergeant Svitak, along with his comrades, died in service to their country, defending us from future terrorist attacks. A grateful Nation honors their service and their sacrifice.

General Jumper, your written testimony referred to the Air Force's innovative new medical concept, the expeditionary medical system (EMEDS). It rushes medics to where they are needed rapidly. It can care for patients affected by chemical, biological, and radiological weapons. Those capabilities might be very useful in responding to terrorist attacks and natural disasters within the United States. What benefits might the EMEDS program bring to our domestic first responders in case of future attacks?

General JUMPER. Senator, the EMEDS is a 20-bed portable hospital. We have several of them deployed around the world right now, and they do magnificent work with a complete surgical suite and the ability to care for a variety of combat and noncombat-related trauma. It has served us very well.

With regard to how this might serve us at home, I think the potential is certainly there. In consultation with the Homeland Defense Organization, Governor Ridge, and the lash-ups between the Homeland Defense Agency and the military organizations, this will be something that I think we should explore. I know the capability of those systems, and I know that they have been very beneficial and productive for all of us in uniform.

Senator CARNAHAN. Thank you.

Admiral Clark, the F/A-18 has proven invaluable in our current war on terrorism in Afghanistan. The 2003 budget cuts the number of F/A-18s to be delivered next year. We need more, but we are getting less. The Navy's unfunded requirements list puts 10 more F/A-18, E/Fs, as its third priority. Why is this such a high priority for the Navy?

Admiral CLARK. Thank you, Senator, for asking this question. We have talked a lot about shipbuilding here this morning, and my opening testimony was about shipbuilding and aircraft.

My air force today, which is also General Jones' air force because they are flying F/A-18s with us over there, is older than it has ever been in our history. The cost of operating these old airplanes is

high, and we have data generated this year that shows the demand on spare parts is climbing at 9 percent a year.

We do not have a model that we are sure can accurately produce the right numbers, because we have never been here in our history. The F-14 is my second highest airplane in terms of cost per hour of operation. The F/A-18 E/F will replace that and reduce the cost of operation by at least 50 percent. It will bring great capability to our air force, which we need. Since the average age of our aircraft is 18 years, the only way to get better is to buy new ones.

The program that we have sent forward seeks to accelerate the retirement of the F-14 and the S-3, and the desire is to bring the F/A-18 E/F online as soon as possible. We clearly need to be buying at as high as we can in the multiyear contract. That was all that we had the resources for, Senator.

Senator CARNAHAN. What are you doing to minimize the risk of flying the older aircraft?

Admiral CLARK. We are spending more money on readiness, and so when I came and said, "my priority is to keep the Navy that I have today to make sure that it is ready," that is the tasking I have been given from our Commander in Chief. All of us sat across the front when the President spoke to the Nation and Congress on September 20, and he looked down at us and made clear what our task was: be ready. The way we are being ready is that we are having to spend the readiness resources to keep it that way.

Senator CARNAHAN. Thank you.

General Shinseki, I understand that it often takes years before the most advanced technology gets from research and development laboratories to the users at places like Fort Leonard Wood, for instance. I am concerned that in the area of chemical and biological defense we cannot afford to wait that long. The threat of such attacks has never been more real. Would you describe how the Army will ensure that our soldiers have the most advanced technology to protect them against chemical and biological attacks?

General SHINSEKI. Thank you, Senator. This is one of the areas in which we have expended a good bit of effort, and not only in terms of defense for individual soldiers. Investments have also gone into detection capabilities, both in operational combat theaters and in the homeland, where the ability to detect those dangers are often subtle and the risks expose large populations.

We have invested considerable effort in regards to both our offensive and defensive capabilities in this arena to better equip our soldiers who deploy and increase our ability to protect our populations here at home. In fact, we have a good bit of sensing capability in operation around this town at this moment as a result of September 11.

We continue to put tremendous effort here, but there is more to be done.

Senator CARNAHAN. Thank you. I would like to insert the balance of my remarks in the record. My time has expired, Mr. Chairman.

[The prepared statement of Senator Carnahan follows:]

PREPARED STATEMENT BY SENATOR JEAN CARNAHAN

Thank you Mr. Chairman.

I want to express my condolences to all the men and women in our Armed Forces for the loss of their colleagues.

I want to offer my condolences to the families and loved ones of those who were lost in combat this week.

The Nation mourns with you.

The death of these soldiers during combat this week is a sober reminder to all Americans that we are at war, and that war is a deadly and serious business.

Among those we mourn is Sergeant Philip James Svitak from Neosho, Missouri.

Our prayers go out to his wife, children, parents, and family.

Sergeant Svitak and his comrades died in service to their country defending us from future attacks of terrorism.

A grateful Nation honors their service and their sacrifice.

We are here to discuss defense authorization requests for the coming fiscal year.

We will also examine the budget's ability to fulfill our future needs.

Our military was already in a state of rapid change prior to September 11.

Events of that day, and our current war against terrorism, only added greater urgency to the need for military transformation.

Transformation means shifting to a lighter, leaner, and more lethal military. In other words, a military with a smaller footprint but bigger capability.

This committee will work closely with the leaders of our Armed Forces to fulfill transformation's intent.

I am particularly interested in five ongoing initiatives:

1. Expanding the capabilities of our strategic airlift so we can place weapons, equipment, and our forces on the ground anywhere at anytime;

2. Continuing to foster Unmanned Combat Aerial Vehicle (UCAVs) technologies. UCAVs bring overwhelming lethality to the enemy while removing our pilots from risk;

3. Investing in technologies that detect and deter the use of weapons of mass destruction against our fielded troops and our citizens at home;

4. Creating robust homeland defense programs, which prevent attacks upon our soil, and which provide lightening-speed medical response to attacks on our Nation; and

5. Ensuring we have the aircraft needed to perform short- and long-range bombing missions. Such missions have proven extremely valuable during the war on terrorism.

A casual observer of these proceedings might think this is about spending money on "things"—tanks, bombs, aircraft, and ships. But I read your written testimony and I know you think otherwise. You think—and you are right—this hearing is about people.

This hearing is about that 19-year-old soldier who is thousands of miles away from his family and is—as we speak—engaged in combat in the mountains of Afghanistan.

He does not want to be there, but he believes in his country.

He will do anything we ask of him to defend it.

We are telling him to fight.

We may be asking him to die.

We must make sure everything we provide him works to ensure he complete his mission, quickly, effectively, and God willing, safely.

Chairman LEVIN. Thank you, Senator Carnahan.

I would like to ask each of you about your unfunded priority lists. Did any of you receive any instructions, guidance, or any limitations placed on the content of your list by civilian officials in the Department of Defense?

General SHINSEKI. No, sir, I did not.

Admiral CLARK. No, I did not.

General JONES. I did not, sir.

General JUMPER. I did not, sir.

Chairman LEVIN. General Jumper, Air Force witnesses have previously testified the F-22 program is going to be event-driven rather than calendar-driven. In other words, the F-22 would have to meet certain criteria and pass certain tests and gates before the next step would be taken in the process.

Can you give us assurances that the Air Force is not going to cut corners in the development or the operational testing stages, and that the F-22 will start operational testing only when there is high

confidence that the F-22 will be able to successfully complete operational testing?

General JUMPER. Senator, I give you my personal assurances and hold myself personally responsible as the action officer on that very issue. I am reviewing this twice a week, including the burn-down rate on the tests, and I can tell you we will not put an airplane in the air that is not safe and ready.

Chairman LEVIN. I am going to ask each of you a question on funding for missile defense programs. Were you asked to express your views on the funding for missile defense programs relative to other priorities in the defense budget for 2003? General Shinseki.

General SHINSEKI. Mr. Chairman, I am not aware that I provided that kind of input, but there are pieces of missile programs such as PAC-3 that we participate in because it has primary interest to the ground force. As to an overall program, I do not believe I provided that kind of input.

Chairman LEVIN. Admiral Clark.

Admiral CLARK. I do not recall a discussion that I have been involved in where we sat down and discussed missile defense trade-offs.

Chairman LEVIN. General Jones.

General JONES. I am not on the budget lines. No, sir.

Chairman LEVIN. General Jumper.

General JUMPER. No, sir.

Chairman LEVIN. General Shinseki, relative to the Crusader artillery system, please give us the detail for the record that you were beginning earlier. In general, could you very quickly give us an idea how this system fits in with your plans for a more mobile, lighter, and lethal Army? That question is being raised, it seems to me, by a significant number of people, so try to encapsulate that issue for us.

General SHINSEKI. I will, Senator. I think those that question the Crusader's utility tied to it sort of a Cold War construct, and primarily focus on its weight. I would offer that its weight is problematic for me as well, since I have spent the last 2½ years trying to get away from that Cold War weight that we carried into this century as an Army.

But here is what is not Cold War about the Crusader. Throughout the Cold War and for most of my professional career, as I started to say earlier, we have been outgunned by all of our adversaries in terms of range, the ability to put precision fire on target, and the ability to move those artillery systems so they were not subject and vulnerable to counterfire, which is very much a part of what ground artillery combat is all about.

In Desert Storm, we also found out the artillery pieces we had could not keep up with our tanks and our Bradleys, so the pace at which we attacked often slowed to allow the artillery to catch up. We needed to fix that.

Following Desert Storm, we took 25 percent of our artillery pieces and retired them. They did not serve our purposes, and that was the amount of risk we could afford to take. Twenty five percent of our inadequate artillery we took out of the force 5 to 7 years ago, and then put those savings towards future capabilities that Crusader now offers: the ability to out-range our adversary; the ability

to have precision fires on which we can fire at more times the rate of fire of our opponents, with greater precision; and the ability to once firing, move out from the return fires and keep up with our tanks.

We have also taken 25 percent of our tanks out of our formations, betting on the outcome that improved artillery will shore up this risk. We accept it. We retired 25 percent of our infantry-carrying vehicles for the same reason, so there is a certain amount of risk we have already invested into our formations that we expect Crusader will provide us the return on.

Of the Cold War descriptions, perhaps weight is the one thing people focus on, but the Crusader is intended to go into combat with our counterattack corps, which comes by surface anyway, and that is how they would arrive in-theater.

When I became Service Chief of the Army, the Crusader was rated at something like 55 or 60 tons. We put it on a slim-fast diet. It is now coming in at about 40 tons. We hope to get it even below that. It will still float into operation with a counterattack corps that comes by sea, but at this weight it can fly in C-5s and C-17s. Four of them would have covered every inch of Kosovo. A firing platoon will outfire one of today's batteries, so in terms of savings it will provide us greater capabilities at reduced cost.

Chairman LEVIN. Thank you.

Senator Warner.

Senator WARNER. I think that is a very important response to an issue that is before this committee, and that testimony is helpful.

I can remember my father in World War I talking about the French 75s, and how it outgunned what we had. The Germans had a wonderful weapon that they used and kept in service for a long time.

I commend you for trying to tackle this tough issue and bring it into the confines of a rapidly-moving, transformed Army. It is not easy, General, but I think it is essential that this future Army have an artillery element, because it has always been there, and it always will be needed. We do not know today what faces us in the future.

Earlier, Senator McCain asked a very important question about national service on a broad range of issues, and I quickly looked over some memoranda I had here on the subject. I have to do a lot of study myself on this issue before I am prepared to make decisions. Having had an opportunity to hear your other three colleagues, do you wish to augment your answer a little bit?

General SHINSEKI. I may not have put as fine a point on Senator McCain's question. I applaud the effort to offer American youth national service.

I am also challenged with recruiting for the Army, and that is a responsibility I have that seems to be going well right now. But I think this is a very special time in our history, and the response of American youth has been unbelievably superb, given this Chief's ability in the month of January to assure the force that we will make our recruiting numbers of 180,000 in September of this year. Normally, we recruit up till August and September, and it is the last weeks before we know for sure. We have already met that recruiting target, and we can declare recruiting a success this year.

Senator WARNER. While I have you, General, earlier this week we received the testimony of General Schwartz, our CINC in the Korean area of responsibility (AOR). I talked to him extensively privately, and then again in open session. We basically had the same discussion, in private and in open testimony, that there is a problem with regard to either the perception or the reality about Army personnel being assigned to that AOR. There are astonishing numbers of individuals who are faced with the decision, a family decision, between their career in the Army and a tour there. They have to forfeit their Army career and go to the civilian life versus taking a career there. You are familiar with that.

General SHINSEKI. I am.

Senator WARNER. I asked General Schwartz if he would prepare for me, which of course I will share with the committee, a proposal to remedy this, and to do it in consultation with you. It would be my hope and my expectation that the two of you would have a joint approach to that solution, because that problem has to be solved.

The Korean peninsula is an area where we have the largest number of American troops in place overseas where we frankly have less direct or indirect support from allies, as opposed to the brilliant operations now going on in Afghanistan, where we have a number of allies involved. In the Korean AOR, it is pretty much the South Koreans and ourselves there. I would like to have those recommendations addressed by this committee in this authorization cycle to see whether or not we can step up and help you with a solution.

General SHINSEKI. Thank you, Senator.

Senator WARNER. We need not expand on it now, but I would hope that you and General Schwartz could work on that together.

General Jones, I was struck by your comment on education. I have said so many times I would not be here had it not been for the GI bill. The continued education opportunities in the services are just remarkable. As a matter of fact, last night I happened to be seated next to General Kernan, the Commander in Chief, Joint Forces Command, and he explained to me that his education was basically that he came in through the enlisted program and got his commission without any college education. He quickly studied nights and weekends to get his college degree while on Active Duty.

Our colleague from Georgia spearheaded, and I think everybody on the committee joined him, a remarkable enhancement of the GI bill in our last authorization bill. It is a transferability provision to family members if the service person is not able to utilize their benefits.

Anything further in the GI bill this year that would help you? Obviously, your recruiting is going very well, and that was one of the inducements, but any changes that any of you feel is necessary?

General SHINSEKI. I am not aware of any, and I agree with Senator Cleland and respect his interest in the transferability. We have had discussions on that.

Senator WARNER. Any of the other Chiefs?

Admiral CLARK. I am a great believer that in order to sustain our victories in the battle for people we have to have a set of incen-

tives, and I believe transferability is one such incentive that can be of great value to us. I do believe it needs to be structured in a way that helps us with our career force, as opposed to a broad application.

In other words, I need all the tools I can get to fill all of the hard jobs that I have, and anything that can be done to make that a reality will be a plus as we shape our force for the future.

Senator WARNER. Mr. Chairman, I see my time is up. I have two other questions, but I will await my next turn. I want to talk about medical care for our active and retired individuals.

Chairman LEVIN. Given your recruitment success, why is advertising at great expense necessary these days, on the TV particularly? General Shinseki.

General SHINSEKI. We need it to go to the television advertising that we currently have, and really that ad is about one-third on television, Senator. It ends with a logo that appears and a stamp that says "goarmy.com," and it really encourages our youngsters to get on the Internet.

Chairman LEVIN. In general, though, why do we have to have an advertising budget of the size we have now if our recruitment is ahead of our goals?

General SHINSEKI. As I said, we constantly review how much we spend in this arena, and it is cause and effect. We purchase these advertisements some time ago. They are beginning to show, and we are getting the response. We will go back and take a look.

Chairman LEVIN. Would you do that? Admiral Clark.

Admiral CLARK. I don't know exactly what my number is. I believe is \$76 million, but I do not have it with me to verify. Of the thousands of line items, I do not have it right here. I will get it for you. We are advertising less on television. Our strategy has been to push this, and we are using very short spots. It is all appealing to the issue of lifestyle of service, and then we are taking them to the web.

The web this year has enjoyed under this new approach over 120 percent increase, but again I will get that number for you.

Chairman LEVIN. If you could take a look at you advertising budget as well, and tell us whether or not you think it is still justified, given the recruitment successes, I would appreciate it.

[The information referred to follows:]

Admiral CLARK. As we enter May 2002, Navy recruiting is experiencing a level of mission accomplishment not seen since the early 1990s, with 9 consecutive months of achieving both the monthly accession goal and the Delayed Entry Program goal. While the efforts of our recruiters in the field cannot be overstated, our advertising strategy is key to this success. We are extremely pleased with the performance of our advertising agency, Campbell-Ewald, based in Detroit, Michigan.

Campbell-Ewald has been under contract with the Navy since September 2000. Their innovative approach and commitment to the Navy's core values and service have led to a tremendous partnership that continues to grow. As you may know, Campbell-Ewald rolled out the "Navy Accelerate Your Life" advertising campaign in March 2001, designed to attract young men and women of all races and across the spectrum of diversity. Results have been exceptional.

In its partnership with Campbell-Ewald, Navy has prioritized its advertising effort in the Internet and radio markets because these are key media avenues for reaching our target audience. Television advertising is viewed as a support medium. In fact, you may not see many Navy commercials on television because of this targeted approach (unless you are a frequent viewer of MTV). The common theme in our advertising is a call to action, intended to pique young people's interest and

guide them to Navy recruiting's web site, www.navy.com. This has proven to be a highly successful strategy, as evidenced by the level of activity we are seeing on navy.com (a 159 percent increase in the number of unique visitors per day, over the previous site).

I know that one of your interest areas is why we need to retain the size of our advertising budget when we are meeting our recruiting and retention goals. While we talk about having an all-volunteer force, we still must "recruit" a large majority of the people we access. Our research shows that young men and women are less likely to consider military service if they have not had the exposure that comes from advertising. The advertising investment we make ensures continued exposure to the Navy "brand" and pays off in recruit quality (high school graduates and the number of prospective recruits who score in the upper half of the Armed Forces Qualification Test) at a time when the youth propensity to enlist in the armed services remains below 20 percent.

While we are committed to maintaining an advertising budget that grows with the national media inflation rates, this year we have leveraged our advertising effectiveness and reduced our recruiting force by 10 percent—500 recruiters. In effect, we are balancing our commitment to growth in advertising with a reduction in recruiting force. Harvesting this benefit we have sent those recruiters back to sea to other high priority jobs. As we proved so far this year, being able to achieve goal for 9 consecutive months, with a reduced recruiting force, reaffirms that advertising is a key to maintaining the awareness of target groups and to be able to recruit the highest quality sailors.

General Jones.

General JONES. Sir, we are also doing less on television. We passed up the Superbowl, for example, which is not something we usually do, but we have taken our funds and allocated them in different ways to take advantage of the means of communication that are available that were not there 5 or 6 years ago.

We find, for example, that the Marine Corps presence at NASCAR events is extraordinarily fruitful in terms of interest of people who come by our booths. I do not think our budget is growing, but I also think that we have spent a lot of time building in our culture a recognition that the recruiting is a valuable asset. In other words, the skill set is recognized and is conducive for promotion and recognition.

I think that our recruiters are first and foremost wonderful role models for our young people, and fundamentally what we want them to experience when they talk to a recruiter is a sense of admiration and a sense of an identity that at some point they would like to be like those marines. In the case of the Marine Corps, in order to provide an incentive to the top quality of our force to do that, you have to build a culture within the Marine Corps that says recruiting is important, and if you succeed in recruiting, your career will be enhanced, and we have done that.

This is certainly a bow wave we are riding right now, but at the back of every wave there is always that trough, and we just want to be ready when the trough comes.

General JUMPER. Mr. Chairman, again, we are pretty new in this business, but we found great success in a series of very short, hard-hitting spots. The same TV generation gets attracted by that, but as General Jones says, the real proof is when they come in and go face-to-face with a recruiter. That is what we are really trying to get them to do, so we will, believe me, look at this TV budget. I agree with you, the prices are high on this, and we will adjust accordingly to our success.

Admiral CLARK. Sir, may I follow up? We have received unprecedented free advertising this year.

Chairman LEVIN. That is not the part I am referring to. [Laughter.]

We are grateful to whoever provided that, but there is also a real cost here. I would like all of you to take a look at your budget requests, given your recruitment successes and your unfunded priority lists. The Army has as large an unfunded priority this year as last year. The Marine Corps is higher. The other two services are lower, but in light of the unfunded priorities, a number of which have been mentioned here this morning, take a look at those budgets.

General Jumper, let me ask you about Operation Noble Eagle. The budget request, \$1.2 billion to continue combat air patrols (CAPs) over the United States into 2003. Can you tell us whether or not, in your judgment, the current threat warrants maintaining these combat air patrols at the current level, and also, are there other ways that we can protect against the threat that had such a devastating effect on September 11? Finally, as part of the same subject, what impact is maintaining these air patrols having on your ability to train and deploy your tactical air forces for other missions?

General JUMPER. Thank you, Mr. Chairman.

Senator WARNER. Mr. Chairman, could they also be allowed to respond to that question in classified form? I think there are two parts to that very important question.

[The information referred to follows:]

[Deleted.]

General JUMPER. Mr. Chairman, thank you for that question. We estimate right now we are spending about \$50 million a week in the total effort. This is just within the Air Force. This does not include significant ground forces that are at work as well to fly the CAPs over the United States, including 5,000 tanker sorties; our air surveillance aircraft; the people that are on alert backing them up; and all the effort that goes into that. It is about 11,000 people and 250 airplanes tied up each and every day in this effort.

The Secretary of Defense has asked us to take a look at how we might fulfill this with a combination of alert aircraft, and that is under study right now. General Eberhardt, the Commander at NORAD, has brought forth a proposal that is currently being studied at OSD. To directly answer your question, yes, I think there is a way we can do this job more safely.

I think this whole problem is better addressed at the other end of the problem, the actions we have taken in the airports to ensure security on the airplanes. We want to take care of this problem long before you would have to deal with it in the air by assuring that terrorists cannot get access to the cockpits and the marshalls that are on the airplanes. I think on the first two questions we can do something that is more efficient.

On the impact on our rotational forces, it is significant. The people that are up there flying these CAPs today are the ones we are supposed to be training and getting up to take the next rotation, so it does have an impact. It creates a training void that we have to scramble to make up within our rotational force, and this change in venue will help correct that.

Chairman LEVIN. Thank you. Keep us informed and as you do that study include us in that effort because we obviously want that safety. Again, we want safety and protection against that threat, but there are ways of doing it at a lower cost and with less impact on our other commitments. We surely want to be able to consider that as well.

General JUMPER. Yes, Mr. Chairman.

Chairman LEVIN. Senator Warner.

Senator WARNER. Mr. Chairman, I thank you for asking that important question, which is asked of all of us as we travel in our respective States. But, of course, our primary reason is to protect Americans in every way against the unknown and uncertain terrorist threats which are manifold.

I think our President, his Cabinet, and others have been very careful in warning us against threats from time to time, but never in our history have we ever experienced this type of threat to the American public here at home. Therefore, I realize it is costly, and it has made for a stressful situation on your rotation base, but I think it has been vital in helping restore public confidence in civil aviation. Civil aviation is in many respects the spoke around which our economy revolves, and we have to help it.

General JUMPER. If I might comment, Senator, every day we intercept the odd Piper Cub or twin-engine airplane that strays off-course and set them right again. I agree with you, sir.

Senator WARNER. In my State, National Airport has suffered probably more than any other airport in the Nation. I think the administration has done its very best to bring the level of flights back up. We are back to over half of what we were before September 11, but the repercussions on the economy have been devastating in our State.

But even with the reinstatement of the flights, they are not as filled as they once were, because a number of Americans for personal considerations are saying, "well, it is not that far to drive our car, so let us just take the car, rather than the air transport," and that exacerbates the overcrowding we have on our highways today. Therefore, I am glad that the administration is looking at it, and I commend you and the other military people who participated in this very important homeland defense initiative.

Chairman LEVIN. Just on that subject, before you leave it, I think you mentioned, General, that there may be an alternative, which may give us some real protection but without some of the costs and impacts. One possibility you mentioned was having a more alert status. Could you expand on that possibility, which would give us the protection we need?

General JUMPER. The details of the proposal, as I said, Mr. Chairman, are under study, but essentially it puts us on an alert posture in about 20 locations around the United States. It enables us to respond within certain timed criteria to any event that we would be cued to by the FAA.

It also includes, and we have already done this, by the way, netting the radars of the FAA so that the North American Air Defense Command, General Eberhardt, and his command can see the internal pieces of the air space in the United States that before September 11 we were not looking at. We were looking outward, in a long

tradition of strategic air defense. That part has already been done, and will continue to be improved so that we can respond more quickly to these unknown events when cued by the FAA.

The third part, Mr. Chairman, is the part that we will continue to have trouble with: the small, light aircraft flying at low altitude below the FAA radars and not squawking with the Identification Friend or Foe (IFF) system. That will continue to be one we will have to worry about.

Senator WARNER. I am always concerned about the medical field. My father was a doctor. As a matter of fact, General Shinseki, he served in World War I in the trenches as a young doctor. The medical treatment we offer our active and retired military personnel is of great importance. Could each of you give your own professional and personal views as to where we are? Hopefully, we are steadily improving.

The TRICARE for Life program has been an enormous benefit. The mechanics and the gears of the program are not meshing completely as they should, but it will take time to work out some of that down to the level where care is delivered. But I think it is a step forward. This committee, working with the House Armed Services Committee, spearheaded the effort to provide TRICARE for Life.

It was not the Department of Defense, I have to say, it was the committees of Congress. We keep a watchful eye on it. If you would, please give us a short summary of where you see that important service to both active and retired today. Are there any shortfalls we should take into consideration?

General SHINSEKI. Thank you, Senator. Compared to where we were 2 years ago, when we first met to discuss health care, I do not hear the same complaints. I think our people understand we have made a major step forward here in providing for their health care both while they serve, and even more importantly, after they have retired.

A lot of the mechanics need to be worked out, and we continue to work that. From time to time we hear suggestions as to how to make that better, and we act on that, but I do not get the concerns expressed as I go around that we were getting even a year ago.

Admiral CLARK. Just a few weeks ago, there was a large TRICARE convention sponsored by OSD, and I was given the opportunity to speak. In preparation, I went to the Master Chief Petty Officer of the Navy and said, "give me an update of what are you hearing in the field." He said that the problems have largely disappeared off the scope, and great progress has been made.

Out of the \$9 billion commitment to medical care we received this year, \$2.8 billion was in this category, so there is a significant commitment of funding to this area and the results are visible.

General JONES. Sir, I agree with the CNO. The Navy doctors and corpsmen are all on Admiral Clark's side of the house, but we are the beneficiaries of that. I concur we have seen a dramatic turn around, not only for the care of our marines, but for their families and our retirees as well, and we thank you.

General JUMPER. Mr. Chairman, I think that the number of complaints we hear has certainly gone down. I continue to worry that \$2.8 billion has to be put into a program that was that far out of

its budget. I watch large amounts of money being dedicated to TRICARE, and we pay a lot of attention getting our commanders involved in making sure that these gears mesh together properly down at the local level, and that the specific kinds of specialists at some of our remote bases, especially our northern tier bases, are made available.

These are minor problems as far as the whole program, but they have a profound impact on the attitude of our people when we cannot provide the services that the system promises. We continue to work this problem down at the commander level, and continue to make improvements, but I agree with my colleagues that the system is improving. It is getting better, but it still remains an item of very serious concern to me.

Senator WARNER. Another personnel issue which has been longstanding, like TRICARE for Life, is the issue of concurrent receipt. In the final moments of Senate floor debate on the conference report, Chairman Levin and I, together with Senator Reed and Senator Hutchinson, spoke of that issue. We are now beginning to look at it again and see what we can do. We may not be able to do it all at once, but we have to determine what we can do on that issue now and in the foreseeable future to resolve it.

I will not call for comments now, but I invite you to put anything in the record that you feel is pertinent to this issue.

[The information referred to follows:]

General JUMPER. The Air Force supports the Department's position.

Senator WARNER. I want those who are following this hearing and who are interested in that subject to know that we feel it is an inequity that has to be addressed. The dollars involved are very significant, and we are not going to give up. I just mentioned the four, but there are others on the committee working this issue.

I have one last question, and then I will defer to our chairman. My last question concerns the old adage that the military is always preparing to fight the last war. Well, transformation has changed that. I think it would be interesting if each of you gave two examples of what your departments have learned from the current operation, which I think is going very well. We have achieved a very large measure of success in the Afghan AOR.

We have not apprehended bin Laden, but we will get him. We have not captured Omar, but we will get him. In the meantime, we are fighting, dying, and bleeding, but we are carrying out the orders of the Commander in Chief.

What have we learned from this conflict that you have immediately incorporated into your current doctrine in your respective departments?

General SHINSEKI. Sir, I think much of it has already been discussed, and that is the capabilities resident in all four services here that come together quite well when you have great, creative, and tough people on the ground with a sense of innovation who can ride in on horseback and direct the fires of a B-2.

The other piece is a reinforcement of the fact that, as good as our technology is, we ultimately have to deal with the ground environment where you force the other guy to mass. Then all the great technology we have invested in is brought to bear, but it is a com-

plement of all our capabilities that must work together. As Jim Jones and I agreed 2½ years ago, none of us have ever been in an overly crowded battlefield.

General CLARK. It is really hard to just do two, but I talked earlier, as did General Jumper, about the incredible coordination and integration with the Air Force and the air commander and how that is working. Let me blow right by that and mention jointness. I was running short of a particular type of munition. I picked up the phone and called John and said, "John, I need help." He said, "how many do you need?" I told him, and he told me I would have them in the morning. That's how well the joint machine is working.

But the most important lesson is that many times we use measures of effectiveness that I think miss the mark. This operation really drove the point home to me. My new favorite word is persistence. It appeared a couple of times in my opening statement. If we just talk about how many bombs we dropped, we miss the point. The level of activity for pilots operating off of our carriers today is close to what it was when we started the offensive operation, and the reason for that does not have anything to do with how many bombs we are dropping. It has to do with persistent combat power being available, and when you have 4,000 or 5,000 Americans on the ground, that is the order of the day.

What we have found, working hand-in-hand with the Marine Corps and the strike fighters in the Air Force, is that we have been working and coordinating our resources to make sure we have somebody on the scene. One of those young folks on the ground can say, "I need help right away." It is about persistence, and it has been going on at ranges that we never thought possible before. This whole conflict was about target opportunity and time-critical targeting, as opposed to a big, long, strategic target list that you planned out for months in advance. The ability of our people to execute a mission like that has been the biggest learning experience for me.

General JONES. It is difficult to count just two, but I would say the first is a relearned experience, and that is the value of the men on the ground. You contrast the air campaign in Kosovo against the air campaign in Afghanistan, and the force multiplier certainly included the technology. But the real force multiplier was the soldier, sailor, airman, and marine on the ground. That is the harness. That is the multiplier that says we can, in a much shorter period of time, take all of this technology and apply it with great precision and bring about the end results that the Nation wants effectively and safely.

We should be careful in the future, because we should never get to the point where Americans in uniform on the ground are going to be a disposable asset that will not be needed in the future war fight. I do not believe that.

We can celebrate that we do not see the horrific casualties that Senator Warner mentioned in World War II. In the 20th century, the coin of the realm was that God was on the side of the big battalions. If you came to the fight with more people, technology, firepower, boats, and ships and had competent leaders and brave soldiers, sailors, airmen, and marines, you could win the fight.

We are still going to need that in the 21st century, but the good news is that because of our incredible asymmetric advantage, which we should keep as a Nation against any future adversary, we will be able to do things with much smaller units. The battalions of the 21st century will do things that the regiments of the 20th century did, and we are seeing that in Afghanistan.

The other point I would make is that the four of us represent an incredible range of assets resident within our services. This Nation has global responsibilities. It is responsible for leadership and for celebrating the inexorable rise toward true freedom for all people. At various points in our use of the military we are going to call on different assets. There will be times when sea bases will be prime and land bases will not. We have to be very careful as we go along in how we invest to make sure that our interests are well-understood, and that we understand the power that all of these capabilities together bring.

This is not to say that the Army, Navy, Air Force, or Marine Corps should ever be as one. The cultural diversity that we bring to the battlefield is in itself a force multiplier. In a sense, we have many things that we are doing now that we are just slack-jawed over: the distances, ranges, precision, responses, and lethality. But the real good news is that we have young Americans motivated in the 21st century to do things for the same reasons, Senator, that your father, you, and others like you did in the 20th century. That is incredibly good news for the country.

Thank you.

General JUMPER. Sir, my number one lesson is that we were wrong about this generation of Americans, who we have been taught are not as respectful, committed, loyal, or dedicated as previous generations. I was down at Lackland Air Force Base for graduation ceremonies the week before last. These kids come out of the field, having spent many days learning the rigors of living in tent cities as a lot of us do, and for the first time, as they graduate, they are called airmen instead of trainee by their training instructor. For many of them it is the first time they have really had a chance to achieve.

You go around and shake their hands and ask them if they are proud of themselves. Five or six said, "not only am I proud, sir, but this saved my life. I have been given the opportunity to achieve something I would not have had before." I am proud of the opportunity to take a generation of youngsters who have not had the opportunity to be proud of themselves and give them that chance.

On the technical side, we could go on forever. One point I would like to expand on made by Vernon Clark is that we learn something out of every war. My word of the week is "balance." You see nothing in the paper over arguments between the Air Force and the Navy about who flew the most sorties or dropped the most bombs. In fact, if you go over there you find that some of the forward air controllers are flying Predators and remotely controlling close air support. It is seamless. You do not know where it is coming from, and we have learned to do it all the same.

I will tell you, we have learned a lot of this on the fly, since this operation began. If I could speak for Vernon Clark, the Navy is not used to taking off and flying 8 or 9 hour sorties with multiple air

refueling. It is not the way they train, and it is different. It is different for us, too, because the first sorties out of Whiteman Air Force Base were 44 hours long. We have a cadre of people that know how to do that now. That is different.

Where this will be going in the future, and what we will be coming to this committee and asking for help on, is figuring out how you fly these complex scenarios where you are putting all of the services together. It is going to have to be something we do sometimes in the synthetic world, where you are using the satellites in space and the manned and the unmanned aircraft with precision munitions to get the seams closed and weapons on the target. That team includes General Shinseki's special operators on the ground, as well as the marines. So you have seen this coming together, and it is exemplified better in this war than we have in the rest of the decade.

We all have our part to play. We all bring something to the fight, and there is plenty of war for everybody.

Senator WARNER. Those are very responsive answers. I think it is one of the best hearings you and I have had, and you and I have been here a long time. We do not mention how long we have been here.

Chairman LEVIN. If you will not, I will not. [Laughter.]

Senator WARNER. I want to pick up on something General Jones said. He drew a very interesting comparison to Kosovo. I remember so well the last 2 or 3 days of that conflict. Just by coincidence, I was on one of my visits, and I was with General Clark. He was our NATO Commander and the Commander in Chief, European Command at the time. We were in a helicopter, and we were going along the border of Kosovo looking at avenues of approaches to get ground troops in. He had been operating under constraints, some political, some diplomatic, and he was prepared to take on that issue publicly, but he wanted to make sure that there were avenues of approaches to get the forces in and the requisite heavy equipment that must accompany the ground forces.

I remember so well, we looked at bridges, which were 100 years old, to determine whether or not the engineers could come in and in a very short period of time and strengthen those bridges. We were looking at the means by which to disembark sea forces from ships onto land using barges to take them in. This commander was determined that he had to confront this issue and take that on.

Fortunately, that war ended. I remember so well receiving the message that hostilities were going to cease. I think your peer groups in years prior have recognized that the ground element is something that just cannot be discounted in this type of operation, and to his credit he was beginning to realize that and to take it on.

Chairman LEVIN. I have just one last request. General Shinseki, you have requested that the Joint Staff conduct a study of the implications of the proposed changes to the unified command plan, particularly in relation to the creation of a new CINC for homeland defense, including the implications of that proposed change on your responsibility to train and equip our forces. Please let us know for the record the status of that study, and please describe some of the concerns you might have and when you expect that that study to

be completed. It is late now, so I will not ask you to comment on that at this time.

[The information referred to follows:]

CINC NORTH

General SHINSEKI. Although Army has not commissioned a formal study on the formulation of a new commander in chief (CINC), we have participated in a series of discussions along with the other services and the Joint Staff about the topic. We generally agree on the need for this new headquarters. In establishing the new command, it is important to get the incoming commander's perspective on the mission and organization of the command. We want to ensure the CINC has the opportunity to conduct his analysis and then organize the command based on his mission analysis.

We think the CINC's analysis is critical for the successful execution of this most important military mission. Preliminarily Army analysis indicates this CINC will have very few forces assigned to the theater, but would instead receive Army forces through the force provision process from Joint Forces Command. The CINC should have forces apportioned for deliberate planning however. We anticipate the majority of these forces multi-apportioned to other theaters as well.

We do not anticipate our requirement to train and equip our forces to change significantly based on the new CINC. The Army mission is to fight and win the Nation's wars. From that warfighting ethos, comes our ability to support another lead Federal agency in the homeland. At this point, we intend on maintaining the Army's warfighting, expeditionary focus, even for forces that might be apportioned or assigned to CINCNORTH. That will ensure the Army's ability to meet its non-negotiable contract with America to fight and win our Nation's wars.

Senator WARNER. Could I just say, it is so important that you bring that up. I have said repeatedly, and I think you have joined me in saying, that we have to move swiftly on establishing the CINCNORTH, the homeland defense CINC. Let us hope and pray we never have another strike against this country, but if that were to happen, I think the American public would ask what have we done in the interim. That is a plan that I hope is going to be put in place as quickly as possible, and to reconcile some legitimate differences between several CINCs as to how to do it.

Recently, I have talked with several of them on this subject, as you have. Let us get moving on this. I am confident that Congress will back you and the Secretary of Defense in his decision.

Chairman LEVIN. Senator Warner made reference to the issue of concurrent receipt, which we tried to address last year without success. We did act in the Senate, but we were unable to get it through conference. To confirm what Senator Warner has said, in a letter to the Budget Committee I asked that they address this issue in the budget, and that they find a way, if possible, to do it this year.

There is a big expense to it, but there is also a big equity issue here as well. I know that Senator Warner has joined in that, and Senator Reid has been carrying the brunt of the leadership on this

issue. It is just something that I wanted to make clear for the record, that the letter to the Budget Committee also makes reference to that issue.

Senator WARNER. Could I mention, in my letter to the Budget Committee, Senator Hutchinson also takes that issue on. As I said, it has to be a top priority, because I am concerned about your program elements, due to the enormity of these sums.

Chairman LEVIN. Senator Warner and I were with our troops over Thanksgiving in Uzbekistan, Pakistan, and a number of other places, and I can tell you how proud we were to serve them dinner. We are all proud of you, and your leadership is a big part of our success. We thank you individually and collectively for that. It has been a tremendous force for strength and cohesion that you have all mentioned, which is really striking. We heard many examples of the way the forces are now working together, and it was so different many years ago when I first got here. Goldwater-Nichols was a big contributor to that effort, but you gentlemen have been committed to that, and it has made a real difference. We heard directly from the troops during Thanksgiving the various examples of how they work together as a team.

We are grateful to you for your testimony today. It has been an excellent hearing. We will stand adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR MAX CLELAND

WARNER ROBINS

1. Senator CLELAND. General Jumper, could you outline some of the good things that you saw at Warner Robins on Monday, March 4, 2002? I would also hope that you could outline steps which Warner Robins, along with all of our Airlift Control Centers, could and should undertake to become more efficient and effective; it is my hope that the Senate Armed Services Committee can assist you by using this information to strengthen the Airlift Control Centers' mission.

General JUMPER. Senator Cleland, the Air Force is working to create "world class" maintenance and repair operations at the depots. Getting aircraft, engines, and parts repaired and returned to our operational units faster would be a big help in improving the readiness of our forces. It would provide the airlift system more available airlift assets to better manage the critical flow of airlift cargo moving around the world in support of contingency operations. It was very encouraging to see the spirit of innovation and the progress being made by the depot team at Warner Robins as they re-engineer and transform their shop floor practices. The improvements they are making are significant in terms of improving output and reducing cost. The most impressive thing is the spirit of the people on the floor contributing to these improvements. Also impressive were the signs of the emerging partnerships that Warner Robins is forming with its commercial partners. In the long run these partnerships will pay big dividends in helping us to ensure the viability of the depots. All of these efforts are part of a much bigger transformation effort that we have underway at our depots. These transformation efforts coupled with the renewed commitment we are making to increase investment in our depots through our emerging depot strategy will truly make our depots world class maintenance, repair, and overhaul facilities. We appreciate your strong support in helping us to improve our depots so that they in turn can improve their support to our operational forces.

GI BILL

2. Senator CLELAND. General Shinseki, Admiral Clark, General Jones, and General Jumper, last year we succeeded in enacting a provision that authorizes service secretaries to permit service members with critical skills to transfer up to half of their benefit to family members in return for a service commitment. This proposal gives the DOD and the services significant flexibility in how it is implemented. Would you outline what plans you have for using this new retention tool?

General SHINSEKI. We are exploring several options regarding transferring Montgomery GI Bill benefits to family members as a retention incentive for certain critical specialties. The first priority for the use of these educational benefits will always be for the soldier. The soldier earns these benefits for his or her uniformed service to the United States. However, the Army will work to find an acceptable solution to the transferability of GI Bill benefits to family members as a retention incentive for certain critical specialties.

Admiral CLARK. Many Navy men and women are concerned about their ability to pay for their children's college education, while at the same time, they may never have opportunity to use their own Montgomery GI Bill (MGIB) benefits. Congressional leadership in this area has allowed us to look at new ways of providing career incentives in a force where over 60 percent of our people have dependents.

Navy is embarking on a small-scale program that will measure the retention impact of allowing certain members to transfer MGIB. We have selected an initial population (in the range of approximately 700–1,000 sailors that will continue to be re-fined) that meets the following criteria:

- Rating/skill is either critical or undermanned;
- Length of Service is 10–14 years (Zone C);
- End of Obligated Service is between June 1, 2002 and December 31, 2002;
- Is currently enrolled in MGIB program; and
- Is a member with qualifying dependents.

We have constrained the initial population group due to founding considerations and to ensure that we can make a meaningful input to the report due to Congress in January 2003. A control group will be established comprised of sailors who meet the same criteria as the initial population, with the exception that they would not be currently enrolled in MGIB.

Once the Department of Veterans Affairs is ready to begin program implementation, personnel in the initial population group will be individually notified that they have been selected for participation. They will be given the option to elect MGIB transferability in exchange for an agreement to remain on Active Duty for 4 more years. This initial small-scale roll-out of the program will run from June to December 2002.

General JONES. The Marine Corps appreciates the efforts of Congress to provide the services with additional tools that may assist them in retaining the best and brightest enlisted personnel to meet the career level skill demands to sustain the services. Unfortunately, due to the war on terrorism, the Marine Corps does not currently have the funding available to offer this benefit to our servicemembers with critical skills. However, I have directed the Deputy Commandant for Manpower and Reserve Affairs to conduct a survey to determine the potential effect of Montgomery GI Bill transferability on recruiting and retention within the Marine Corps. I would like to reinforce the testimony of both the Sergeant Major of the Marine Corps and Deputy Commandant of the Marine Corps for Manpower and Reserve Affairs, that this benefit should be available to all marines who choose to remain in our corps.

General JUMPER. We have developed an implementation plan to test this new retention incentive. The test program will be conducted from October 1, 2002 through September 30, 2002, and will focus on critical enlisted and officer Air Force Specialty Codes (AFSCs). On the enlisted side, these will include our young men and women who are linguists, fire fighters, and computer system programs. For the officers, we will focus on our engineering and science critical skills and will include those in the scientist and developmental and civil engineering communities. Since transferability is an unfunded mandate that must be borne by the services, implementation is contingent upon adequate funding in fiscal year 2003.

TRANSFORMATION

3. Senator CLELAND. General Shinseki, Admiral Clark, General Jones, and General Jumper, how have your transformation plans been affected by what we have learned and continue to learn about the war on terror? Are those realities adequately addressed in the fiscal year 2003 defense budget?

General SHINSEKI. The attacks of September 11 were more than just the first salvo in a new war; they validated the direction of our vision and the need to accelerate Army transformation. We have funded the Army's top priorities, but have taken some risk in certain areas to create a balanced program. The Army is in a continuous process of learning and assessing from our experiences with the global war on terrorism and is eager to work with Congress to align the fiscal year 2003 budget with new realities as they emerge. Likewise, we appreciate added funding

for those areas where we did take risk. Overall, we believe our efforts to accelerate transformation are on track with the emerging strategic environment.

Admiral CLARK. The global war on terrorism is but the first war of the 21st century. Violent horizons lie before us, harboring profound challenges including the threat of cyberwar, weapons of mass destruction (WMD), continued international terrorism, and the havoc accompanying failed states. Importantly, such threats do not replace the specter of state-on-state conflict. They add to the danger and uncertainty, providing new sparks to already combustible situations.

To ensure future warfighting effectiveness in this uncertain strategic environment, sovereign naval forces are being transformed to better prevent crises and—should deterrence fail—project offensive and defensive power ashore to defeat all adversaries. We are transforming to become a 21st century Navy of awesome capabilities: strategically and operationally agile; technologically and organizationally innovative; networked at every level; highly joint; and effectively integrated with allies. The lessons we are learning from the war on terror have reaffirmed the importance of this transformation.

The President's budget adequately addresses transformation. Some examples of exciting new technologies funded in the President's budget that will accelerate our transformation toward a fully networked Navy include the DD(X) destroyer, SSGN submarine, Joint Strike Fighter, Unmanned Aerial and Underwater Vehicles, Tactical Tomahawk Theater Ballistic Missile system, Cooperative Engagement Capability, and Navy-Marine Corps Intranet, among others.

General JONES. Marine participation in Operation Enduring Freedom confirmed our vision of likely future contingencies and strengthened our resolve to transform our warfighting capabilities as quickly as possible. The Marine Corps' capstone concept of Expeditionary Maneuver Warfare (EMW) envisioned from its inception an asymmetric battlefield on which the enemy would attempt to counter our technological advantage with unconventional weapons, decentralized operations, and anti-access strategies. EMW addresses the chaos and ambiguity of the environment encountered during Operation Enduring Freedom, the rise of non-state actors, and the potential for weapons of mass destruction. Our transformation strategy remains intended to exercise our current capabilities in new and innovative ways while we develop new warfighting capabilities to meet exactly these requirements.

Expeditionary Warfare Capability: Operation Enduring Freedom has again demonstrated the need for joint forces to project power far from our shores, deep inland, and with minimal dependence on landbases. In Afghanistan, Marine forces confirmed their ability to immediately meet the enemy, operate from his terrain, and defeat him while relying on our expeditionary ethos, maneuver warfare philosophy, and naval heritage. Our transformation process will only enhance the ability of the Marine Corps to get to the point of conflict with the right mix of personnel and equipment to accomplish the mission. Development and fielding of the MV-22, the Advanced Amphibious Assault Vehicle, and Maritime Prepositioning Force (Future) [MPF(F)] shipping will increase our ability to project power from the sovereign seas further ashore and more rapidly than we demonstrated during OEF.

Capabilities for Joint Force Commanders: The global war on terrorism has clearly shown the synergy possible when Joint Force Commanders have a full toolbox of service-unique capabilities to employ and combine for the task at hand. Our forward-deployed Navy/Marine Corps team is designed for immediate employment by joint commanders, supporting other elements of the joint force and enabling follow-on forces. Transformation will add to the capabilities provided by our Amphibious Ready Groups (ARGs) and embarked Marine Expeditionary Units (MEUs) by strengthening our ability to provide warfighting Commanders in Chief (CINCs) with rapidly deployed Marine Expeditionary Brigades (MEBs). Additionally, the war on terror has identified the need for rapidly deployable and dedicated anti-terrorism forces. Our organizational agility, essential to transformation, has responded with the establishment of the Fourth Marine Expeditionary Brigade (Anti-Terrorism) [4th MEB (AT)], a powerful combined-arms team prepared for worldwide anti-terrorism operations. Our Nation's experience in the war on terror to date indicates to us that our transformational strategy, guided by EMW, is appropriately focused and well targeted to meet the needs of tomorrow.

Seabasing: The war on terror continues to demonstrate the need for U.S. forces to be capable of defeating anti-access strategies. We must be capable of projecting power despite political constraints or long-range weapons and with minimal dependence on fixed and vulnerable landbases. In Afghanistan, the Navy/Marine Corps team was able to insert and sustain a capable force into theater from the sea, supported by, and in turn supporting, other elements of the joint force. As we move forward with delivery of the LPD-17-class amphibious ships, plans for a replacement to the current LHA fleet, and development of our Marine Prepositioning Force (Fu-

ture), our transformation will capitalize on these capabilities. Seabasing will provide the Navy/Marine Corps team with greater strategic agility, operational reach, and tactical flexibility than we are capable of today, enabling power projection independent of host nation support against objectives across the breadth and depth of a theater. This enhanced capability will allow joint force commanders to introduce marine units deep into a challenging environment, sustain those forces indefinitely, and then rapidly reconstitute the force for future operations from platforms with inherent seabased force protection. The ability to initiate and sustain operations without the requirement for port facilities and airfields, historical planning inhibitors, will greatly expand the operational and tactical reach of the commander, increase tempo, and enhance the overall flexibility of the entire joint force.

General JUMPER. Our war on terror is allowing us to witness the potential of transformation, a mindset that creates asymmetric military advantage by leveraging advanced technologies, focusing on capabilities-based concepts of operation, and harnessing innovative organizational changes.

Transformation expands the way we, as airmen, think. It transcends just designing new systems. We are witnessing transformation when we see our troops riding horseback with a GPS and laser range finder as the tools of the trade on the saddle horn. Combine this with a secure satellite and radio links, and we are passing target coordinates to a B-52, and precisely placing a JDAM in the midst of enemy forces within 600–800 meters of friendly positions, with complete confidence. No single piece of this equation is transformational; rather, it is the integration of all our capabilities—both old and new—that elevates our operational effectiveness to new heights. This vividly displays in living color how real transformation gets down to the operator, and that's the focus of our transformation plans. Our 2003 defense budget makes important steps in sustaining that momentum.

Another critical transformation issue is organizational change. The transformation of Headquarters Air Force is underway. Recently, we directed the stand-up of a new organization, AF/XI. AF/XI's mission will be to orchestrate the integration of our warfighting systems—they will ensure we capitalize on the changes needed to achieve true integration. Their charter will be to focus on new cutting edge ideas, thus avoiding the constraints of old think. It's this type of new thinking that has positioned us to use 21st century technology to win the 21st century wars.

UNFUNDED REQUIREMENTS

4. Senator CLELAND. General Shinseki, you testified last week before the House Armed Services Committee that the Army's unfunded requirements totaled around \$9.5 billion. Which, if any, of those programs not adequately addressed in the budget request are tied to your transformation efforts?

General SHINSEKI. Approximately \$4.4 billion of the Army's fiscal year 2003 critical shortfalls are tied to our transformation efforts, including over \$2 billion for modernization of the Legacy Forces.

HOMELAND SECURITY

5. Senator CLELAND. General Shinseki, on Tuesday, Admiral Blair, General Schwartz, and Major General Speer testified before this committee and each commented on the additional requirements the war on terrorism and Operation Enduring Freedom have placed on their commands. Given the lengthy deployment that the war on terrorism is going to require, I remain concerned about over-tasking units. To my knowledge, only the Marine Corps officially requested an increase in end-strength in the fiscal year 2003 budget to meet increased needs. We have fought hard for retention and recruitment to ease the overburdening of the current force structure. What we fail to do regarding end strength will negatively impact retention and recruitment if we don't indicate the reality that more is needed. We are at war and must realize the human consequences that result from our policy deliberations. Service men and women will risk more than their reputations in carrying out the policies we approve. What role is the Reserve component going to play regarding homeland security and how will that affect their ability to support and reinforce active duty units and requirements?

General SHINSEKI. The Reserve components are part of the Army's overall coordinated homeland security capability—either in a homeland defense role or in support to local, state, and federal authorities. The Reserve components will continue to play a critical role in supporting and reinforcing Active-Duty Forces as the Army meets its strategic requirements.

The Army's non-negotiable contract with the American people is to fight and win our Nation's wars. The Army prepares for these warfighting missions by maintaining a combat focus with trained and ready units. Maintaining a warfighting focus gives the Army the capability to support civil authorities in a wide range of domestic contingencies and the Guard and Reserve are no exceptions.

In addition to warfighting, one of the Army's core competencies is supporting civil authorities. Most of what the Army has done in securing the homeland over the past 6 months has involved supporting civil authorities whose own capabilities have been exhausted or overwhelmed. The bulk of homeland security responsibilities reside with various civil authorities—local, state, and Federal. Because of its wide range of capabilities and geographic dispersion across the country, the Army is uniquely capable of supporting civil authorities across a spectrum of domestic contingencies. The Army's Active and Reserve components execute these missions throughout any given year in responding to hurricanes, forest fires, and other crises.

When directed, the Army uses the best available capability, whether it is Active Army, Army Reserve, or Army National Guard, to meet mission requirements. In responding to the mission, we take into account several considerations such as geographic location of the capability relative to the mission, accessibility to Reserve component units, capability of the unit, availability of the unit, and impact on other Army missions.

National Guard units play a prominent role in homeland security because of their ability to be employed in a Federal or a non-Federal status and they are often employed under state control to meet the needs of local and state authorities. In this capacity, the National Guard can support homeland security requirements prior to a Federal response being requested or approved.

6. Senator CLELAND. General Shinseki, in their role involving homeland security, will any of our Armed Forces' proposed roles be limited by the Posse Comitatus Act?

General SHINSEKI. The answer would depend upon the status of the military personnel when performing a mission related to homeland security. The Posse Comitatus Act (PCA) applies to soldiers in a Title 10 status and, therefore, imposes limits on the participation by the military in civilian law enforcement activities. The PCA does not apply to National Guard soldiers in a Title 32 or state Active Duty status. If soldiers perform homeland security missions that amount to direct military involvement with civilian law enforcement activities, while in a Title 10 status, then the PCA could limit these soldiers' role.

The Federal courts have enunciated three tests to determine whether the use of military personnel violates the PCA. If any one of these three tests is met, the assistance may be considered a violation of the PCA. The first test is whether the actions of military personnel were "active" or "passive." Only the direct, active use of military personnel to enforce the laws is a violation of the PCA. The second test is whether the use of military personnel pervaded the activities of civilian law enforcement officials. To be a violation of the PCA under this test, military personnel must fully subsume the role of civilian law enforcement officials. The third test is whether the military personnel subjected citizens to the exercise of military power that was regulatory, proscriptive, or compulsory in nature. A power "regulatory in nature" is one that controls or directs. A power "proscriptive in nature" is one that prohibits or condemns. A power "compulsory in nature" is one that exerts some coercive force. Anytime servicemembers are used to stop, search, and potentially apprehend citizens during a homeland defense mission, the PCA could be implicated.

There are several general and specific statutory exceptions to the PCA. The "Military Purpose Doctrine" permits direct assistance if the primary purpose furthers a military or foreign affairs function of the United States. In certain emergency or civil disturbance situations, the President may also approve of direct military assistance to civilian law enforcement. Some of the specific exceptions include the protection of national parks, crimes against foreign officials, members of Congress, or the President, Vice President, and other designated dignitaries, and crimes involving nuclear materials.

7. Senator CLELAND. General Shinseki, does the Posse Comitatus Act need to be reviewed to ensure we don't limit what benefits the military can provide to homeland security? If so, how?

General SHINSEKI. No. I believe that the balance created over the last century and a quarter is about right and strongly suggest that a wholesale revision of the PCA is not necessary. Because members of the Armed Forces are not trained to undertake civilian police work, the Department does not want to become engaged in law enforcement missions except under the most exigent of circumstances. The President has adequate authority under the Constitution and existing statute, to employ

the Armed Forces domestically to deal with terrorist threats associated with the September 11 attacks, if he chooses to do so.

OPERATION ANACONDA

8. Senator CLELAND. General Shinseki, the actions this past week in Operation Anaconda have reinforced how brutal and difficult ground combat is and the value we place on leaving no servicemember behind. I would like to hear your thoughts on the ground campaign and the performance of our soldiers in theater.

General SHINSEKI. I am pleased with the results of the current operations in Afghanistan. All reports from commanders in the field indicate that, despite operating in high altitude and harsh weather conditions, our soldiers are doing the job that we have equipped and trained them to do. They are demonstrating their profound and abiding devotion to this Nation, willingly and without hesitation. They go into harm's way on our behalf and are prepared to give their lives to preserve freedom and our way of life. We have lost eight American servicemembers in this current operation thus far, and many hundreds at this moment are putting their lives at risk to deal with this brutal and determined adversary. The days ahead will continue to be dangerous days for our forces, but the alternative to taking such risk is not acceptable. We must defend against terrorists by going after them. It is also important to remember that as our soldiers continue to make incredible contributions and even more incredible sacrifices, they look to us to demonstrate both the Nation's appreciation and its commitment to them and their families. It is a commitment that you have honored well, and for that, we are all very grateful.

HEALTH CARE

9. Senator CLELAND. General Shinseki, in your prepared statement you state that you are working with the office of the Secretary of Defense to improve TRICARE in order to provide better medical care for soldiers, families, and retirees. We are fully committed to making TRICARE the very best health care available, so I am extremely interested in what you have in mind. What kinds of changes are you proposing?

General SHINSEKI. With the wonderful enhancements to the health care benefit that Congress has recently provided, our focus is on improving the delivery of health care to all of our beneficiaries. There are several components to this effort.

First, we must recapitalize our military treatment facilities (MTF) and invest in the Direct Care System. For years, we have under-funded the real property maintenance and military construction replacement of these facilities. We need to fully fund the maintenance account to keep our assets in prime condition and replace those facilities that no longer meet the mission of modern healthcare or research. The vast majority of our Active Duty population and their families, and many retirees, obtain health care from the Direct Care System, and they should receive care in facilities that are equal to the newer civilian offices and hospitals. Furthermore, we must continue to provide investment venture capital funding for improvements in the business process of our MTFs so that we optimize the performance of our system. The Army Medical Department has developed a rigorous business case analysis process to validate targeted improvements in parts of the system that will not only improve the delivery of health care, but will provide a positive return on investment over a period of years. But until recently, we have not had a mechanism to make the kind of upfront investment in our system which is common in the private sector because we have locked ourselves to single year budgeting. Last year, Congress allocated \$30 million in multiyear funds that are being invested in improvements that will optimize the system. This year we are targeting ways to improve women's health services in our MTFs and will focus on optimizing and improving that aspect of health care delivery.

Second, we must reduce "the hassle factor" when beneficiaries access care in the private sector. We must insure that the barriers to care are reduced or eliminated. For instance, many private sector physicians are refusing to accept new TRICARE patients because of low reimbursement rates. We are asking the TRICARE Management Activity (TMA) to fully implement the authority given by Congress in the National Defense Authorization Act for Fiscal Year 2000 and the National Defense Authorization Act for Fiscal Year 2001 for locality-based reimbursement, especially in areas which are chronically short of providers. We are working with TMA to develop the next generation of TRICARE managed care support contracts so we eliminate the problems that beneficiaries have when trying to access care or purchase pharmaceuticals when they are outside of the TRICARE region they were enrolled in.

We want these new contracts to do a better job of tracking referrals when patients are sent from MTFs to civilian providers and providing consults back to the military primary care managers.

Finally, we see significant opportunity to better synchronize our efforts with the Veteran's Administration (VA) and the Medicare system. The VA and DOD both operate robust health delivery systems and their beneficiary populations are overlapping. There are economies of scale and partnering opportunities that we can utilize to both provide a more convenient or responsive system for the patient, and save the Federal government money at the same time. With respect to Medicare, we have 1.5 million dual-eligible retirees who now have a TRICARE for Life benefit that combines with Medicare Part B to pay virtually all of their health care costs. We have a financial incentive to find the most cost effective way to manage their care. We still believe that a direct discounted payment from Medicare to DOD represents a powerful way to leverage the strengths of the DOD Direct Care System to reduce total Medicare outlays.

ARMY UNIVERSITY ONLINE

10. Senator CLELAND. General Shinseki, I maintain that the services can become America's greatest university. The Army has an innovative online education program that, by all reports, is a great reenlistment incentive. Is this the online electronic Army University program that you mention in your prepared statement? Would you describe this program for us?

General SHINSEKI. On July 10, 2000, the Army announced a major new educational initiative, Army University Access Online, now known as eArmyU. On December 14, 2000, the Army awarded a 5-year, performance-based contract to PricewaterhouseCoopers to serve as the prime contractor and education management system integrator responsible for eArmyU. PricewaterhouseCoopers leveraged an unprecedented partnership of "best of breed" providers to harness industry-leading technology and to create the eArmyU virtual university.

eArmyU offers soldiers access to a wide variety of online post-secondary programs and related educational services via a comprehensive portal. Complementing the existing educational programs and services available to soldiers, eArmyU helps to ensure that all enlisted soldiers have the opportunity to fulfill their professional and personal educational goals while simultaneously building the technology, critical thinking, and decision-making skills required to fully transform the Army and succeed on the digitized battlefield.

eArmyU continues the Army's commitment to invest in its people by providing soldiers 100 percent tuition funding for anytime, anyplace distance learning opportunities. Using a technology package (laptop computer, printer, and Internet service provider account) provided by eArmyU, soldiers access a university system that provides virtual classrooms, materials, discussion groups, virtual libraries, encyclopedias, assessment tools, tutoring, academic advisement, and administrative and technical support. Soldiers are required to have 3 years retainability within the Army and must successfully complete 12 semester hours in the first 2 years of enrollment. With eArmyU, soldiers no longer have to choose between their career and their personal development.

To maximize program success, the contract integrator is required to bring together and manage a consortium of colleges and universities. Participating institutions must agree to provide maximum credit for military experience, training, and standardized tests using the American Council on Education recommendations; degree plans that outline degree requirements and illustrate ways soldiers can meet each requirement; and student support services (e.g., basic computer skills training, online tutoring and mentoring, and access to electronic library resources). Furthermore, eArmyU institutions are accredited by agencies recognized by the U.S. Department of Education. All eArmyU institutions who provide undergraduate credit-bearing programs are members of the Servicemembers Opportunity College Army Degree System. Graduate and non-credit programs within eArmyU comply with Servicemembers Opportunity College institutional principles and criteria.

While much of a soldier's interaction is virtual through the web portal, students also have ample opportunities for face-to-face and telephone interactions with academic advisors and course mentors. This full range of program services is provided free to soldiers.

eArmyU is currently offered to enlisted soldiers at Fort Benning, Georgia; Fort Campbell, Kentucky; Fort Hood, Texas; Fort Lewis, Washington; and Fort Carson, Colorado. Based on available funding, over 12,000 soldiers were allowed to enroll during the first contract year. Participation requests continue to far exceed available

funding. More than 32,000 soldiers at these installations have expressed interest in the program.

The program has met with overwhelming success. Soldiers view eArmyU as a clear demonstration of the Army's investment in them, significantly increasing morale. The program has made education viable for soldiers; 50 percent of participants have never enrolled in post secondary education. As of March 1, 2002, nearly 16 percent of those soldiers who signed participation agreements reenlisted or extended to take advantage of eArmyU. There is considerable potential for return on investment.

More than a web site, the eArmyU portal (www.eArmyU.com) is the gateway to a totally integrated education management system offering a full slate of diverse courses and student services. After the first year, over 1,400 courses in 90 programs are available through 23 accredited colleges and universities.

The Army is expanding program participation to three more installations in May 2002: Fort Wainwright, Alaska; Schofield Barracks, Hawaii; and Heidelberg Military Community, Germany. The final three sites scheduled for fielding in fiscal year 2002 are Fort Drum, New York; Fort Bragg, North Carolina; and Camp Casey, Korea. Based on availability of funding, the Army is using a phased, incremental approach for Army-wide implementation estimated at 80,000 students by fiscal year 2007.

11. Senator CLELAND. General Shinseki, is the Army funding the continued planned expansion of this program?

General SHINSEKI. Funding the continued planned expansion of Army University Access Online to Active component enlisted soldiers Army-wide presents significant challenges. There are currently unfinanced requirements associated with the planned expansion. The Army is working to address those challenges.

MANNED MULTI-MISSION, MULTI-SENSOR AIRCRAFT

12. Senator CLELAND. General Jumper, in the fiscal year 2003 budget the Department of the Air Force has requested research and development and procurement funding for both multi-mission command and control constellation and multi-mission command and control aircraft (MC²A). I understand that the funds for MC²A include the purchase of a 767 multi-mission, multi-sensor test bed. Recent articles indicate that the Air Force's single solution for a manned multi-mission, multi-sensor aircraft is the 767. On the other hand, other multi-mission, multi-sensor programs such as the Army's aerial common sensor program, the Navy's multi-mission maritime aircraft program, Israel's SEMA program, and the Japanese Coast Guard's program are moving toward smaller, less costly aircraft to procure and operate. It appears that with the high demand/low density problem; potential quality of life issues; the advancement of reachback that can minimize the footprint forward; potential crew manning and training issues; and potential non-wartime missions—not to mention affordability—that these all argue for a mix of manned multi-mission, multi-sensor aircraft vice a single point 767 solution. What in your CONOPS-based acquisition process drives you to the 767 as the sole solution of a manned multi-mission, multi-sensor platform? Please provide the cost and operational flexibility tradeoffs studies that have lead to that conclusion by May 1, 2002.

General JUMPER. The Air Force vision is that these 767-400 aircraft with MP-RTIP (Multi-Platform Radar Technology Insertion Program) radar would be the forerunners of a larger fleet of multi-sensor/mission aircraft. These aircraft, to be seen in future budget submissions, will be known as MC²A and would serve as hubs for a family of networked ISR and strike systems known as a Multi-sensor Command and Control Constellation (MC²C).

The 767-400 was selected by the MP-RTIP Analysis of Alternatives (AOA) as the best-manned platform to carry a large variant of the MP-RTIP sensor—an active, electronically scanned array radar. The MP-RTIP sensor satisfies a validated requirement for a Ground Moving Target Indicator (GMTI) capability, as well as a focused Air Moving Target Indicator (AMTI) capability for Cruise Missile Defense. This selection also supports the Concept of Operations conducting multiple missions with multiple sensors in support of ISR collection and battle management, including an Air Operations Center (AOC) execution cell.

The MP-RTIP AOA examined many alternatives including 707s and 767s as well as larger and smaller aircraft. In this AOA, the 707 was the least expensive aircraft to meet single mission requirements similar to the current E-8 JSTARS whereas the 767-400 was the least expensive alternative for meeting multi-mission requirements. The 767-400 aircraft with the MP-RTIP sensor will comprise Spiral One of the MC²A. No other spirals are currently funded. Subsequent spirals will be refined

and funded, pending completion of appropriate analyses and reviews. The four operational 767-400s with MP-RTIP will provide very critical capabilities for the Air Force and DOD. The one 767-400 RDT&E aircraft being procured in fiscal year 2003 will be a critical hardware testbed both for MP-RTIP and the MC²A concept.

The 767 has been selected as the current Air Force solution for a manned multi-mission, multi-sensor platform within the Air Force vision of a MC²C. The MC²C will be a horizontally integrated architecture of C²ISR capabilities in the air, in space, and on the ground. This future constellation will include MC²A aircraft as well as E-8 JSTARS, E-3 AWACS, Global Hawk UAVs, and other manned and unmanned aircraft as well as space and ground sensors, including systems operated by other services and agencies. The objective composition of the MC²C consisting of a combination of sensors and platforms will be determined after operational and technical systems architectures have been completed.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. AKAKA

UNFUNDED AIRFRAMES

13. Senator AKAKA. General Jumper, the Air Force's unfunded priority list includes \$163 million for maintenance for three different airframes. Apparently, if these funds are not provided, numerous aircraft may be grounded. As the Chairman of the Readiness and Management Support Subcommittee, I am obviously quite concerned about this issue. Can you explain why the Air Force did not include funds for these critical repairs in its budget request?

General JUMPER. The depot maintenance environment is dynamic, and these additional requirements surfaced after the fiscal year 2003 President's budget was submitted. The crash damage aircraft and increased engine maintenance are driven by Operation Noble Eagle and Operation Enduring Freedom. The requirements to repair the B-1B wing pivot shear repair, B-2 hot trailing edge repair, and F-15 horizontal stabilizer upgrades were revealed after the budget was submitted. Additionally, these requirements are either safety of flight issues or are critical repairs that may be necessary in the future ground aircraft. The B-1B fleet reductions and the increased direct material requirements were not known until after the fiscal year 2003 President's budget was submitted.

14. Senator AKAKA. General Jumper, if Congress is unable to provide additional funding for this maintenance, what is the Air Force's plan to ensure that we are not forced to ground bomber and fighter aircraft?

General JUMPER. If the required maintenance is not funded we will be forced to resort to extraordinary measures to be borne by the maintainers in order to keep the system in operation. Cannibalization rates will increase. Delayed entrance into Program Depot Maintenance (PDM) has the added negative effect of driving significant inspections and maintenance in the field. The special inspections designed to keep aircraft airworthy beyond their scheduled PDM input dates, serve only to provide temporary relief from a grounding condition. These inspections increase in complexity and become significantly more labor-intensive, ultimately resulting in the weapon system being grounded. When the aircraft do come into PDM the cost will be higher and the flow time longer. Operating systems beyond their planned service interval has the added risk and potential to increase the failure rates which may result in Emergency Action Time Compliance Technical Order Inspections/repairs. Ultimately, we will keep the equipment operating but it will come at the expense of the men and women who must accomplish this additional work with fewer resources. This, in turn, will also have a negative impact on our ability to retain skilled technicians. The right answer must be to fund the needed maintenance.

INTERIM BRIGADES OVERSEAS

15. Senator AKAKA. General Shinseki, I understand that, based upon the recommendations of the Quadrennial Defense Review, the Army is considering stationing an Interim Brigade Combat Team (IBCT) in Europe. In testimony before this committee earlier this week, General Schwartz stated that a key element of modernization on the Korean peninsula would be to replace one existing brigade with an IBCT. What is the Army's position on the need for additional IBCTs beyond the six currently planned to be based in the United States?

General SHINSEKI. In the process of studying and planning the stationing of an IBCT in Europe, the Army has validated a requirement for six IBCTs. While a case can be made for an additional seventh IBCT that is additive to the force structure,

it was determined in consultation with the Office of the Secretary of Defense, that it was not an affordable option at this time. The Army's assessment is that operational risk can be mitigated by the on-time arrival of the Army Objective Force, and the funding of the critical components of the Army recapitalization and modernization plan.

16. Senator AKAKA. General Shinseki, will one of the existing six be reallocated to Europe or to Korea, or is the Army pursuing additional brigades?

General SHINSEKI. In July 2001, the Army announced the location of the six IBCTs. This was based upon operational and strategic considerations. DOD tasked the Army to study a plan to station an IBCT in Europe by the end of 2007. The Army briefed the Deputy Secretary of Defense on February 20, 2002, on the findings of that analysis. The Army prefers to maintain the status quo until the arrival of the first Objective Force units in 2010, but is prepared to rotate an IBCT to Germany and return of a mechanized brigade to the continental United States in 2007.

17. Senator AKAKA. General Shinseki, if more interim brigades are needed, how will they be funded?

General SHINSEKI. At this time, the Army does not have plans for additional interim brigades. If at a future date, more brigades are necessary, the Army will attempt to make more difficult decisions to reallocate funding internally, and possibly seek additional funding if necessary.

VIEQUES

18. Senator AKAKA. Admiral Clark, Secretary England plans to find a replacement for Vieques by May 2003, a little over a year from now. Any funds needed to prepare an alternative location by that date would have to be expended in fiscal years 2002 and 2003. It is my understanding that no funds are included in the fiscal year 2003 budget to set up an alternative site or sites for east coast training, but that the Navy has since prepared a cost estimate at the direction of the Office of the Secretary of Defense. Can you provide the committee with this estimate, along with possible sources of these funds, if they are required?

Admiral CLARK. The DOD fiscal year 2002 Supplemental Request includes \$16 million to support initial environmental documentation and infrastructure improvements for several of our east and gulf coast training range/OPAREA complexes. These improvements are needed and valuable regardless of any decision regarding our training at Vieques. Requirements beyond fiscal year 2002 have not been finalized. After the Center for Naval Analyses' study on future training alternatives is received and evaluated, these requirements will be reviewed in the fiscal year 2003 Apportionment Review, and funding decisions made in light of competing priorities and available resources.

19. Senator AKAKA. Admiral Clark, what is your plan for creating a replacement site or sites by 2003?

Admiral CLARK. We expect the Center for Naval Analyses' study on the future of Navy training to provide insight into the best alternatives for quality Navy training as a whole. After we have an opportunity to receive and evaluate the study, we will be shaping the way ahead for the 21st century. In the interim, we are addressing the shortfall in training capability, capacity, and flexibility within the Atlantic Fleet area by improving our training infrastructure at multiple sites.

20. Senator AKAKA. Admiral Clark, the Navy and the Clinton administration made an agreement with the government of Puerto Rico regarding Vieques. Part of that agreement was to provide \$40 million in economic assistance upfront, regardless of the ultimate outcome on continued training on Vieques. Congress provided those funds in July 2000. To date, only \$12.8 million of those funds have actually been used. It is my understanding that funds have not been provided for one of the major economic development projects that both the Clinton administration and the Bush administration told Congress they support the construction of a ferry terminal. Does the Navy intend to provide the full \$40 million in economic assistance that was agreed to?

Admiral CLARK. The Navy carefully considers each proposed economic assistance project to ensure it is executable, and that it positively and directly provides lasting impacts to the Vieques inhabitants. We will continue to be good stewards of the taxpayers' dollars.

21. Senator AKAKA. Admiral Clark and General Jones, when Secretary England testified before this committee a few weeks ago, he did not clearly state whether he will make the decision to allow live-fire training to resume on Vieques, whether the decision is above his pay grade, or whether he had delegated that decision to you or other military leaders in the Department of the Navy. Do you have a request pending to resume live-fire training on Vieques, and if so, who will make the decision?

Admiral CLARK. There is no pending request to use explosive ordnance on the Vieques training range.

General JONES. The October 31, 2001, letter from myself and Admiral Clark to the Secretary of the Navy requesting use of live ordnance during combined arms training on Vieques was written in order to receive a wartime modification of the current restrictions on live-fire training. This request was for limited scope, graduate level training to finalize coordination procedures and certify end-to-end handling and delivery of live munitions. The realism afforded by live-fire training is essential preparation for success on the battlefield and due to the ongoing requirements of the global war on terrorism, necessitate this shift to wartime operations. The request indicated that both the JFK Battle Group and WASP Amphibious Ready Group were next to deploy to the Central Command Area of Responsibility in support of Operation Enduring Freedom, but it was not intended to apply solely to those units and their assigned sailors and marines. The October 31, 2001, request for live-fire training on Vieques remains in effect.

USE OF NATIONAL GUARD FOR AIRPORT AND BORDER PATROL

22. Senator AKAKA. General Shinseki, given the high operating tempo of our forces today and the demand for the Guard to support military missions, do you feel the Guard should be used to provide security at airports or on the border on a long-term basis, or should the Guard concentrate on fulfilling missions where their unique military training is required?

General SHINSEKI. The National Guard plays an important role in homeland security. It also plays a critical role in supporting the full range of strategic requirements. The National Guard can be employed under different authorities to best meet requirements. Soldiers from the National Guard are supporting the airport security mission under Title 32 authority—state control with Federal money. The border security mission is being performed under Title 10 authority—on a straight Federal basis.

The Army's non-negotiable contract with the American people is to fight and win our Nation's wars. The Army prepares for this mission by maintaining a combat focus with trained and ready units. Maintaining a warfighting focus also gives the Army the capability to support civil authorities in a wide range of domestic contingencies. The bulk of homeland security responsibilities reside with various civil authorities—local, State, and Federal. When Active Army, Army Reserve, or Army National Guard forces are used to support domestic civil authorities, our contributions should be temporary. The Army is typically tasked to support civil authorities whose own capabilities have been exhausted or overwhelmed. Support is normally for a specified, relatively short duration to allow those responsible to reach self sufficiency.

HIGH DEMAND/LOW DENSITY

23. Senator AKAKA. General Shinseki, Admiral Clark, General Jones, and General Jumper, Secretary Rumsfeld was quoted recently as saying that we made the mistake of not buying enough of certain high demand/low density forces in the past and that the administration would not be making the same mistake in the future. General Jumper, your prepared statement notes that we have deployed almost our entire inventory of Airborne Warning and Control Systems and Special Operations aircraft to support the war on terrorism. Could each of you highlight what steps your budget request takes to address shortfalls of high demand/low density forces?

General SHINSEKI. We have incorporated our Total Army Analysis results, where we invested Active component spaces in high demand/low density units and in units needed for the war on terrorism. We are building four multi-component Biological Integrated Detection System companies, which is a 200 percent increase over the current two companies in the force. In addition, we increased the manning levels of all Active Component Patriot battalions to 100 percent and restructured the Army's Technical Escort Unit, almost doubling its size and capabilities.

With respect to the global war on terrorism, we invested 986 spaces in Army Special Forces capabilities to include buying two additional psychological operations companies and two additional civil affairs units in the Active component. We are also pursuing resourcing an additional MH-47 battalion in the 160th Special Operation Aviation Regiment. However, the \$100 million plus cost per airframe is proving beyond the Army's capabilities of resourcing. We also invested almost 500 spaces into resourcing the CINCs theater level military intelligence brigades and groups that dramatically increase the day-to-day capabilities. Finally, we increased the manpower in Third U.S. Army by 157 spaces, significantly improving the resourcing of Central Command's Army Service Component Command. In addition, the President's budget provides the Army with targeted recruiting and retention incentives through several programs to retain shortage specialties.

Admiral CLARK. The Navy fiscal year 2003 budget request contains RDT&E funds to commence System Development and Demonstration for a replacement to the EA-6B as well as funds for the sustainability of the EA-6B, until the replacement aircraft Initial Operational Capability (IOC) in fiscal year 2009.

Two additional Patrol Squadron Special Projects (VPU) aircraft are being procured with fiscal year 1999 and fiscal year 2000 funds. The aircraft will be produced by modifying P-3C airframes that were in desert storage to the VPU configuration. These modifications are in progress and deliveries of the aircraft are scheduled for the second and third quarters of fiscal year 2003, respectively. These two additional aircraft will ensure the ability of force providers to provide the required four VPU aircraft to warfighting commanders.

In a separate program, the mission systems of two existing VPU aircraft are being transferred to two more modern and sustainable airframes. These conversions will be completed in the first and third quarters of fiscal year 2003, respectively.

General JONES. The Marine Corps' only high demand/low density asset is the EA-6B Prowler aircraft. The DON has completed the congressionally-funded (\$10 million of \$16 million study) Airborne Electronic Attack Analysis of Alternatives (AEA AOA) and intends to fund the RDT&E efforts in the POM 2004 FYDP for a follow-on platform to replace the EA-6B. The services are currently analyzing the numerous platforms presented by the AOA and will make a decision by June 2. The DON recognizes an increase in inventory from 122 to 184 EA-6Bs is required to remove the EA-6B from high demand/low density status.

General JUMPER. The Air Force has requested almost \$1 billion in the fiscal year 2003 President's budget for investment funding in support of high demand/low density assets (HD/LD). The fiscal year 2003 President's budget provides funding to support research, development, test, and evaluation, aircraft modifications and other procurement initiatives in support of HD/LD assets. Current Air Force HD/LD assets include funding for combat search and rescue (HC-130 and HH-60), special operations (AFSOC C-130), and intelligence, surveillance, and reconnaissance (E-3/AWACS, E-8/JSTARS, U-2, RC-135/Rivet Joint, and Modular Control System) platforms.

24. Senator AKAKA. General Shinseki, Admiral Clark, General Jones, and General Jumper, does your budget support upgrades of those current high demand low density forces that have been having problems, such as the EA-6B?

General SHINSEKI. Unlike our request for fiscal year 2002, the Army's fiscal year 2003 budget requests the full authorization of 480,000 man-years. In addition, we have requested enabling incentives to recruit and retain specialty skills found in the high demand/low density units.

Admiral CLARK. Yes. The Navy fiscal year 2003 budget procures EA-6B ICAP III systems that will reach IOC in fiscal year 2005. Although there may be some configuration differences, ICAP III forms the capability baseline for the EA-6B follow-on platform. To ensure a smooth, rapid, successful transition to the EA-6B follow-on aircraft, we must procure a limited number of EA-6B ICAP III systems to allow fleet introduction and tactics development while the follow-on platform is in development.

In recognition of the fact that VPU aircraft are operated at a high rate of fatigue life accumulation, a program of Special Structural Inspections (SSIs) is funded in the fiscal year 2003 President's budget. This program will fund inspections of key areas of aircraft structure and will also provide needed repairs to allow the aircraft to operate for up to 5 years (or 600 flight hours) beyond the point at which they reach 100 percent fatigue life expended. This combination of four newer airframes in the VPU force along with the program of SSIs will provide the bridge in capabilities needed until the P-3 aircraft replacement, the Multi-mission Maritime Aircraft (MMA), reaches full operational capability.

General JONES. The current budget presented to Congress fully funds 122 EA-6B ICAP-III upgrades. ICAP-III is the baseline warfighting capability upgrade that will be used in the AEA AOA and is required to effectively counter the most recently fielded Surface to Air Missile threats. The Marine Corps fully supports the DOD requirement to upgrade the entire EA-6B fleet to ICAP-III. The CMC and CNO have included three additional jammer upgrade and service life extension items not contained in the fiscal year 2003 President's budget on their unfunded program lists. These items were not included in the fiscal year 2003 President's budget due to competing priorities and limited resources:

- EA-6B Wing Center Sections (8), \$40 million;
- EA-6B Band 9/10 buyout, \$37 million; and
- EA-6B USQ-113 Communications Jammer, additional 57 units, \$35 million.

General JUMPER. The Air Force has requested \$975 million in the fiscal year 2003 President's budget to develop, procure, and install upgrades on Air Force HD/LD platforms. Current Air Force HD/LD assets include funding for combat search and rescue (HC-130 and HH-60 modifications), special operations (AFSOC C-130 development and modifications), and intelligence, surveillance, and reconnaissance (E-3/AWACS, E-8/JSTARS, U-2, RC-135/Rivet Joint, and Modular Control System development and modification initiatives) platforms.

QUESTIONS SUBMITTED BY SENATOR MARY L. LANDRIEU

SHIPBUILDING

25. Senator LANDRIEU. Admiral Clark, one of your predecessors stated in testimony before this committee that "while numbers matter, the number is less important than the capability inherent in those numbers." Obviously, this is a source of much debate. While I agree with the long-standing American tradition of quality over quantity, it is true only to a point. Having dropped \$6 billion in shipbuilding from fiscal year 2001 to fiscal year 2003, we simply will not be able to meet all peacetime presence commitments. Further, I have emphasized again and again that current shipbuilding plans in the FYDP are putting our Navy into an ever-tightening death spiral which will ultimately stabilize at a Navy which is completely incapable of meeting peace or wartime requirements. I'm a very outspoken supporter of our shipbuilding programs and believe we need to be buying more than what the FYDP calls for, not less as we have done in the recent past. Do you agree that current shipbuilding levels will take us into the dangerously mediocre arena of a 300-ship Navy? Applying that standard today, could we sustain our current operations?

Admiral CLARK. The 2001 Quadrennial Defense Review (QDR) provides the baseline for Navy's force structure requirements. Current shipbuilding levels will permit us to sustain that QDR battle force of 310 ships over the short term, but not for the long term. Capabilities of this size force are judged to provide a moderate operational risk for several combinations of scenarios. Our experience of the last 10 years has demonstrated that such a force is severely stressed, placing an undue burden upon our sailors and marines. In consonance with the new defense strategy, the 2001 QDR calls for a new force-sizing construct. Although we have not determined the exact number of ships required, this transformed force will be sized and outfitted to meet warfighting missions, homeland defense, and smaller-scale contingencies. Today's manpower and current readiness requirements have prevented the Navy from fully investing in future procurement accounts, including shipbuilding. The Navy will require an additional \$10 billion annually to build for the future and recapitalize the entire fleet—ships, aircraft, and submarines, at a rate that will maintain the Navy that the Nation needs.

LPD-17

26. Senator LANDRIEU. Admiral Clark, I was happy to see in your statement you referenced the LPD-17 with regards to "investing in impressive programs that will comprise the core capability of our force in the coming decades." You also wrote that "we need to accelerate development as rapidly as design and production facilities will allow." It is my understanding that in order to provide flexible response and assured access, our plans require the capability to rapidly deploy the equivalent of three Marine Expeditionary Brigades. It is also my understanding that we are currently well below this requirement, and yet the LPD-17 was not given additional funding. What is the current lift capability and what are the implications of this shortfall?

Admiral CLARK. Current inventory of 38 Active and 1 Naval Reserve Force amphibious ships (5 LHAs, 7 LHDs, 11 LPD-4s, 8 LSD-41s, 4 LSD-49s, and 3 LSD-36s) provides 2.1 Marine Expeditionary Brigade-Assault Echelon (MEB AE) equivalent, as limited by vehicle lift. The current inventory meets the other four fingerprints of the fiscally constrained (2.5 MEB AE) amphibious lift goal, specifically cargo cube, troop berthing, rotary wing spots and landing craft spots.)

To counter this lift shortfall, the Navy established the Amphibious Lift Enhancement Program (ALEP), which has five LKAs and four LSTs in a deep reduced operating status. These ships would take a minimum of 6 months to reactivate, but would allow Navy to meet the 2.5 MEB AE fiscally constrained goal. As the Senator notes, the Marine Corps requirement calls for 3.0 MEB AE amphibious lift to fight a Major Theatre War.

27. Senator LANDRIEU. Admiral Clark, to what extent does the procurement of 12 LPD-17-class of ships address this shortfall?

Admiral CLARK. Once the final LPD-17 is delivered, around 2014/2015, amphibious lift capacity will meet the fiscally constrained 2.5 MEB AE goal achieving 83 percent of the lift required for one Major Theater War.

28. Senator LANDRIEU. Admiral Clark, what are the implications of delaying acquisition of the LPD-17-class of ships?

Admiral CLARK. The Navy will not reach the fiscally constrained goal of 2.5 MEB AE lift within the Active fleet until 2015. The last LPD-17-class ship was originally planned to deliver in 2009. By 2006, all LPD-4-class ships will have reached or exceeded their 35-year expected service lives. As a result of the delays to the LPD-17 program the Navy has coordinated adjustments as needed to the decommissioning schedule to maintain lift capability and the operating tempo for ships in commission. Six LPD-4-class ships are now scheduled to receive extended sustainment maintenance (\$70 million per ship) to adequately account for the unexpected extension of service life. Due to delays in the LPD-17 program, the LPD-4 ships will retire with an average age exceeding 41 years. Additionally, the fleet commanders are delayed in receiving the manpower reductions, survivability improvements, and warfighting capability increases associated with the LPD-17-class ships.

MC²A FUNDING

29. Senator LANDRIEU. General Jumper, since the Gulf War we have seen a technological revolution in Air Force intelligence, surveillance, and reconnaissance. From airborne warning and control systems, to unmanned aerial vehicles, to JSTARS, the United States Air Force's intelligence, surveillance, and reconnaissance (ISR) capabilities are a true benefit for our warfighting efforts. Please know I share your commitment to expanding this ISR dominance. Accordingly, I am pleased by the fiscal year 2003 budget commitment to the procurement and long-lead funding of JSTARS 17 and 18. Additionally, the development of the Multi-Platform Radar Technology Insertion Program (RTIP) is integral to expanding the Air Force's ISR dominance. Nevertheless, I have concerns that the Air Force has not made a budgetary commitment for the Multi-Sensor Command and Control Aircraft (MC²A) in the fiscal year 2003 budget. Nor do I see this program listed in the Air Force's unfunded requirement list. You and I discussed this matter thoroughly last year, and it was my impression that the Air Force's commitment to the MC²A was a long-term commitment that would be part of the fiscal year 2003 request and the FYDP. Could you comment on why the MC²A cannot be found in the fiscal year 2003 budget, or in the Air Force's unfunded requirements list?

General JUMPER. First, to clarify a point made earlier, the Air Force has provided for long lead and procurement funding for JSTARS P-17 in its fiscal year 2003 budget request. There is not funding identified for a P-18 in the request, although the Air Force has not reached a final decision on when the JSTARS production should end as we transition to the MC²A.

In fiscal year 2003, the Air Force has requested \$679 million toward the Multi-Sensor Command and Control Aircraft effort. One hundred ninety one million dollars of these funds are in the fiscal year 2003 budget request (RDT&E Line 148, PE 0207449F, and Multi-sensor Command and Control Constellation). This \$191 million includes \$149 million for continued design and development of the MP-RTIP sensor and \$42 million for beginning development of the 767 RDT&E test bed aircraft. The additional \$488 million is requested in the fiscal year 2003 President's Budget Defense Emergency Response Fund. These funds will procure the 767 testbed; plan the spiral implementation of the MC²A sensor capabilities on that platform; design and develop common modifications for other 767-based aircraft (e.g.

tanker and Rivet Joint) and the command and control networking architectures essential for realizing a horizontally integrated network of manned and unmanned air, space, and ground systems.

30. Senator LANDRIEU. General Jumper, why have none of the 767s leased for modernization of the tanker fleet been allocated for MC²A use?

General JUMPER. See answer to question 29.

31. Senator LANDRIEU. General Jumper, what affects will the change of thinking on MC²A have on the future of JSTARS procurement and RTIP development?

General JUMPER. The Air Force hasn't changed its mind on the Multi-Sensor Command and Control Aircraft (MC²A). The Air Force is fully committed to achieving MC²A Spiral 1 Ground Moving Target Indicator (GMTI) and Cruise Missile Defense (CMD) capability by the 2012 date required by OSD. The fiscal year 2003 President's budget requested a \$2.1 billion increase over the fiscal year 2002 President's budget (including the \$488 million in fiscal year 2003 DERF). Between the fiscal year 2002 President's budget and the fiscal year 2003 President's budget we've established a new program element that holds funding for both the Multi-Platform Radar Technology Insertion Program (MP-RTIP) and the MC²A. That new program element is PE 0207449F, Multi-Sensor Command and Control Constellation (MC²C) and is found at line R-148 in the fiscal year 2003 President's budget documentation.

ARMORED SECURITY VEHICLE

32. Senator LANDRIEU. General Shinseki, the Army's fiscal year 2004 budget plans call for the termination the Armored Security Vehicle (ASV). Frankly, I am troubled by that decision, which is not consistent with my recollection of representations made to me last year about continuing the program. First, there is nothing wrong with the vehicle, and it meets its mission very well. Its need has only increased after September 11. It is strongly supported by the military police (MP) in Bosnia and Kosovo. I am confident it will perform well if sent to Afghanistan.

Second, we hear a great deal about the Army's investments to achieve strategic mobility. MPs are critical to strategic mobility. There is no other armored, wheeled vehicle that has the same mobility as the combat force. Add-on armor to other wheeled vehicles reduces mobility for HMMWVs, and add-on armor does not provide the safety to the men and women in the vehicle like that of the ASV.

Third, the Army cites cost as a prohibition for the ASV in fiscal year 2004. Yet, very attractive industry proposals have been given to the Army to continue production in fiscal year 2004 and beyond at or near the current prices. The Army knows these proposals are very attractive, if not below cost.

Fourth, roughly 500 more ASVs need to be purchased to meet the recently revised acquisition objective. These vehicles are needed to equip the counter attack corps and other essential units necessary to the Army's transformation.

As Chairman of the Emerging Threats and Capabilities Subcommittee, I see this vehicle as absolutely necessary and of no less priority than other vehicles you are purchasing and propose to purchase. Is it the Army's intention to fully obligate the extra \$3.5 million provided last year for additional ASVs?

General SHINSEKI. The Army will fully obligate the additional \$3.5 million in April 2002 for ASVs.

33. Senator LANDRIEU. General Shinseki, will you fully obligate the fiscal year 2003 funds for vehicles as requested in the budget?

General SHINSEKI. At this time, the Army plans to fully obligate the fiscal year 2003 ASV funds.

ARMORED SECURITY VEHICLE

34. Senator LANDRIEU. General Shinseki, are we putting lives at risk in up-armored HMMWVs to save money?

General SHINSEKI. No, the Army is not putting soldiers' lives at risk in up-armored HMMWVs to save money. The very nature of soldiers' missions puts their lives at risk; however, we do everything possible to operationally mitigate those risks. Soldier protection is a top priority, and we strive to provide soldiers with the protection needed to accomplish their missions.

QUESTIONS SUBMITTED BY SENATOR JEAN CARNAHAN

EXPEDITIONARY MEDICAL SYSTEM

35. Senator CARNAHAN. General Jumper, your written testimony referred to the Air Force's innovative new medical concept, the Expeditionary Medical Systems (EMEDS). It rushes medics to where they are needed, rapidly. It can care for patients affected by chemical, biological, and radiological weapons. These capabilities might be very useful in responding to terrorist attacks and natural disasters within the United States. What benefits might this EMEDS program bring to our domestic first responders in the case of future attacks?

General JUMPER. The EMEDS concept provides a highly mobile, flexible medical response that can be tailored to any situation. The greatest benefit of EMEDS is that it allows for rapid response—the quick mobility of medical assets to a disaster site. This rapid response is defined in terms of hours, not days, which will make the difference in saving lives. EMEDS is also very flexible in that it allows tailoring the response to the particular threat and situation at hand. Not every situation will require a full 25-bed hospital capability. In addition, various specific response packages may be added, such as preventive medicine, pharmaceutical, agent detection, patient decontamination, and others, as required. Tailoring the response to the threat is an efficient use of resources while meeting the requirement. In addition to being highly mobile and flexible, EMEDS can be collectively protected against biological/chemical contamination, thus providing a safe medical environment. The concept of an EMEDS-like capability can be adapted by any state/agency/organization to operationalize their disaster response plans.

UNMANNED COMBAT AERIAL VEHICLE

36. Senator CARNAHAN. General Jumper, the Unmanned Combat Aerial Vehicle (UCAV) is fascinating technology and will play a variety of combat roles. In Afghanistan, UCAVs have already demonstrated their value in reconnaissance and are beginning to excel as weapons platforms. Can you describe the contribution the UCAV will provide to other missions such as destroying enemy air defenses?

General JUMPER. UCAVs will provide a tremendous contribution to SEAD/Strike in the early stages of a high threat conflict. Early warfighter emphasis remains on addressing the 2010-plus anti-access problems in the high-risk “double-digit” SAM environment, using UCAV's precision and increased stealth to target advanced SAMs, and paving the way for our legacy platforms. In addition, the Air Force is exploring the potential for limited near-term electronic attack and tactical reconnaissance role and studying the long-term potential for directed energy and precision all weather attack capability.

STRATEGIC AIRLIFT

37. Senator CARNAHAN. General Jumper, our war on terrorism has caused an important shift in our strategic outlook. We have moved from a doctrine of containment, to the concept of preemption: attacking, or helping to attack, potential enemies before they strike us. What new demands will this place on the Air Force's strategic airlift?

General JUMPER. The Air Force is still assessing potential changes in airlift requirements resulting from the ongoing war on terrorism. However, Mobility Requirements Study fiscal year 2005 (MRS-05) identified a requirement of 54.5 million ton miles per day—to execute a two near simultaneous war scenario. Currently, we are experiencing a shortfall in meeting that requirement. The proposed follow-on C-17 multiyear procurement will bring the fleet total to 180 aircraft. This continued C-17 procurement combined with C-5 modernization will allow the Air Force to meet MRS-05 airlift requirements and provide options to continue growth if additional demands are identified as a result of the global war on terrorism.

38. Senator CARNAHAN. General Jumper, does the fiscal year 2003 budget begin to address these new issues?

General JUMPER. This budget underpins our vision of providing the Nation a total air and space force with global reconnaissance and strike, including supporting troops and deploying them, across the full spectrum of operations. Our investments in a wide variety of strike systems (both new or improved), sensors, and communication links bring us closer to our vision of having an all weather, 24 hour a day, 7 days a week ability to provide near instantaneous ground attack from the air with a wide variety of platforms.

C-17 STRATEGIC ROLES

39. Senator CARNAHAN. General Jumper, what roles will the C-17 play in this new strategic framework?

General JUMPER. The C-17, along with the C-5, will play a significant role in our strategic airlift force's ability to react to the rapidly changing international security environment. The C-17s capability to operate from short, semi-prepared airfields, and airdrop, make it uniquely capable of operations into austere locations as illustrated during the current campaign in Afghanistan. With its high mission capable rates and unmatched flexibility, the C-17 will remain the backbone of our strategic airlift forces for the foreseeable future.

F/A-18

40. Senator CARNAHAN. Admiral Clark, the F/A-18 has proven invaluable in our current war on terrorism in Afghanistan. The fiscal year 2003 budget cuts the number of F/A-18s to be delivered next year. We need more. We are getting less. The Navy's unfunded requirements list puts 10 more F/A-18 E/Fs as its third priority. Why is this a high priority for the Navy?

Admiral CLARK. The unfunded requirement for 10 additional F/A-18 E/Fs is a high priority because it allows the Navy to replace an aging inventory of F-14s more rapidly and increases the combat capability of our air wings. While the F-14 has served the Navy well, it costs twice as much as the F/A-18 E/F to operate, and imposes a high workload on our sailors to maintain the aircraft.

41. Senator CARNAHAN. Admiral Clark, your written testimony says our current F/A-18 forces have "flown well in excess of planned utilization dates." You said, "more than 300 F/A-18s will require service life extensions earlier than planned." We are flying these and other aircraft beyond their expected life span and beyond their programmed limits. Can you comment on this situation and your describe your efforts to minimize the risks of flying aging aircraft?

Admiral CLARK. The Navy's estimate of service life extension requirements for the F/A-18 (over 300 aircraft) is based on the procurement plan of replacement platforms (F/A-18 E/F and Joint Strike Fighter) and the structural limits of the aircraft. F/A-18 structural limits are based primarily on the number of carrier catapults and arrested landings (2000) and wing root fatigue life expended on each aircraft. The Navy closely monitors aircraft service life remaining through the Structural Appraisal of Fatigue Effects (SAFE) program, and conducts rigorous inspections to track the structural integrity of each aircraft. The SAFE program provides monthly tracking of each aircraft's service life remaining and allows the Navy to accurately project service life extension requirements. In addition, an Operational Safety Improvement Program (OSIP 11-84) has been established to correct airframe structural deficiencies when they are discovered during the inspection process.

As aircraft utilization rates increase, catapult and arrested landings and wing root fatigue increase, thereby decreasing the service life remaining on the aircraft. These factors collectively accelerate the requirement to conduct service life extensions on the aircraft.

SCIENCE AND TECHNOLOGY

42. Senator CARNAHAN. General Shinseki, I understand that it often takes years before the most advanced technology gets from the research and development laboratories to the users at places like Fort Leonard Wood. I am concerned that in the area of chemical and biological defense we cannot afford to wait that long. The threat of such attacks has never been more real. How will the Army ensure our soldiers have the most advanced technologies to protect them against chemical and biological attacks?

General SHINSEKI. Protection against chemical and biological attack is critical for all of our warfighters. By law, chemical and biological defense is consolidated under Office of the Secretary of Defense management, specifically the Assistant to the Secretary of Defense for Nuclear, Chemical, and Biological Defense. The executive agent for the Chemical and Biological Defense Program is the Army.

The Chemical and Biological Defense Program has implemented a technology maturity metric (technology readiness levels (TRLs)) and assessment process to ensure technologies are not transitioned prematurely into systems development and demonstration (SDD). In that regard, we believe the key to speeding products to the warfighter is in the science and technology (S&T) community maturing their emerg-

ing technologies sufficiently prior to transition so any potential cost and schedule growths are minimized during SDD. Past program experience has shown that it is less expensive to fix technical problems in S&T than it is in SDD.

QUESTIONS SUBMITTED BY SENATOR JOHN WARNER

ARMY COUNTERMINE CAPABILITIES

43. Senator WARNER. General Shinseki, the January 21, 2002, edition of *Inside the Army* quoted an internal Army review that stated "the service faces countermining capability 'shortfalls' in four key areas: see and detect from standoff ranges; mine neutralization; force protection; and demining and clearing." What capabilities do our soldiers have currently for standoff mine detection from a vehicle or aircraft?

General SHINSEKI. U.S. soldiers do not presently have a standoff detection capability from a vehicle or aircraft. The Army is assessing a standoff detection technology from a rotary wing UAV known as a Camcopter. This is expected to be a limited capability for detection of changes in routes that would indicate the presence of mining activity. Development of a minefield stand off detection capability from a UAV is slated to be initiated in fiscal year 2003. Standoff detection from a vehicle in a pure sense is not achievable today. What is planned in the near term is the use of an unmanned ground search platform to remove the soldier from the vehicle during search operations. This is the Ground Standoff Mine Detection System program under development today.

44. Senator WARNER. What is the fielding status of the Army's current next-generation mine detection systems, the Ground Standoff Mine Detection System (GSTAMIDS) and the Handheld Standoff Mine Detection System (HSTAMIDS)?

General SHINSEKI. The GSTAMIDS is currently in development with a planned transition to production for the Block 0 version to occur in February 2003. The HSTAMIDS is currently in development with a planned transition to production at the end of fiscal year 2003. As a result of Operation Enduring Freedom, the Army initiated an acceleration of the program to provide 200 production units of an interim variant to be delivered by the end of calendar year 2002.

45. Senator WARNER. General Shinseki, what measures has the Army taken to mitigate risk until these systems are fielded?

General SHINSEKI. The Army has committed \$29 million for urgent operational requirements in support of Operation Enduring Freedom to mitigate risk until these systems are fielded. The forces have deployed mine sniffing dog teams on the ground in Afghanistan. D7 bulldozers have been equipped with armor protection for use in clearance of some areas with mines. Tele-operated mini-flails have been deployed to clear areas of antipersonnel mines. We have procured state-of-the-art metal detectors from Australia that are more effective in highly mineralized soil conditions found in some parts of Afghanistan. This is an interim measure until the Handheld Standoff Mine Detection System mine detectors are available.

46. Senator WARNER. General Shinseki, what are the countermining capabilities for the Interim Brigade Combat Team?

General SHINSEKI. In addition to the HSTAMIDS and GSTAMIDS systems, countermining capabilities for the Interim Brigade Combat Team consist of a suite of equipment to be deployed with the Engineer Squad Vehicle Variant of the Interim Armored Vehicle. Each vehicle will be equipped with light weight rollers or light weight full-width blades. As part of the ensemble, each vehicle will also be equipped with a magnetic signature duplicator to deal with magnetic influence fuzed mines. Six of the vehicles in the nine vehicle engineer company will also tow a Mine Clearing Line Charge (MICLIC). The MICLICs will be replaced starting in the fiscal year 2005 time frame with the Explosive Standoff Mine Clearance system, also known as Mongoose. Mongoose will provide a more robust capability across the full spectrum of the threat.

QUESTIONS SUBMITTED BY SENATOR STROM THURMOND

END STRENGTH

47. Senator THURMOND. General Shinseki, Admiral, Clark, and General Jumper, in previous testimony before the committee, we were told that more than 60,000 National Guard and Reserve personnel have been called to active duty. Although a

large number of these personnel are on duty to provide airport security, the majority supports the war against terrorism. In fact, it is acknowledged that the Active-Duty Forces could not prosecute the war without the support of the Reserve components. Since the Reserve components cannot be kept on active duty indefinitely, what will be the impact on the operation if the Reserve call-up is terminated?

General SHINSEKI. Active component forces are so fully integrated with the Reserve components that we cannot conduct sustained operations without direct inclusion of the Reserve components. The impact of termination of the Reserve call-up would be severe and would dramatically affect our ability to sustain our current operations. Were the Reserve call-up terminated, we would be hard pressed to support the warfighting commanders in chief and have difficulty meeting homeland security needs and maintaining readiness of our Active component forces. The Army has called on nearly 28,000 Army National Guard, Army Reserve, Individual Mobilization Augmentee, and Individual Ready Reserve soldiers in support of Operations Noble Eagle and Enduring Freedom. Approximately 57 percent are supporting homeland defense efforts, while 43 percent are engaged in the war on terrorism.

Admiral CLARK. The termination of the Reserve Mobilization will most significantly impact our ability to sustain force protection, plan and implement the war on global terrorism, conduct harbor defense, and affect the quality and quantity of information gathered and analyzed by our intelligence components. To date, the top four mission areas supported by Navy mobilized Reservists are:

	<i>Percent</i>
Force Protection	54
Unified Command/Service Staffs	12
Intelligence	10
Harbor Defense	7

Without augmentation by the Reserve component, either Active Duty PERSTEMPO will increase or responsiveness to current and anticipated tasking will be protracted.

General JUMPER. The Active-Duty Forces cannot prosecute this war in its entirety without the support of the Reserve components (RC). This is especially true due to the complexity and robust response of the United States to the war on terror. In fact, the level of RC support, the combination of mobilized and volunteer forces, has remained relatively constant for some time. The Air Force policy from the inception of hostilities has been that our gaining commands must certify that requirements cannot reasonably be sourced from the Active Duty or Reserve component volunteer forces. We therefore have been prudent from the start with our use of mobilized RC forces and will continue to be. We have also worked closely with the theater commanders and instituted a policy that, as much as possible, we will rotate our outside CONUS-deployed forces on our 90-day AEF construct. Unfortunately, not all of our career fields have the depth of personnel to do this, but the majority will be able to comply. The effect of this policy is that we can reduce the duration of support from the RC forces alleviating the impact on the individuals and their civilian employers.

48. Senator THURMOND. General Shinseki, Admiral Clark, and General Jumper, if you were to increase the end strength (E/S) of your service, what would be the optimum increase?

General SHINSEKI. The current operational environment places additional demands on the Army that were previously unrealized. Post-September 11 events have only increased demands placed on the force, and the Army will likely require an end strength increase to fully meet these demands.

The Total Army Analysis (TAA) process will determine the size and composition of the Army within a constrained budget. The current effort, TAA 09, is not complete but will account for the additional emerging requirements in the area of homeland security and the global war on terrorism.

To address the immediate need, the Fiscal Year 2002 Defense Authorization Act permits the Department of Defense to allow the services to exceed their end strength by 2 percent in any fiscal year in which there is a war or national emergency. Taking full allowance of this provision would allow the Army to increase its Active component end strength to 489,600.

The Army can realistically increase recruiting by an additional 4,000 soldiers per year in fiscal year 2003 and 2004 to address the most immediate needs of the war on terrorism and homeland security, provide relief for Reserve component soldiers, and allow more time to analyze enduring requirements.

Admiral CLARK. Based on current force structure and mission requirements, the Navy needs to be at 376,000 plus 4,383 additional end strength needed to support increased anti-terrorism force protection in fiscal year 2003. The increased security

end strength will permit the fleet's to meet force protection conditions necessary for a long-term security posture. Total Navy end strength requirements are 380,383.

General JUMPER. Initial projections show a 30,000 increase in total military (Active/Guard/Reserve) end strength requirement, but our production base could only execute 7,000 in fiscal year 2003. SECDEF challenged us to pursue more innovative solutions to offset the need for additional E/S. We are currently meeting E/S requirements through partial mobilization of the ARC and stop loss actions, but we can't use these tools indefinitely. In anticipation of demobilization and an end to stop loss, we are starting the lengthy process of determining the best and most efficient way to meet our increased requirements.

TRANSFORMATION

49. Senator WARNER. General Shinseki, based on the experience of the current operations in the Balkans and Afghanistan and the prospect that future conflicts will be unlike those we fought in the past, have you considered advancing the schedule for the Army's Transformation?

General SHINSEKI. Yes, from our current operations in the Balkans and the global war on terrorism, the Army is in a continuous process of learning from and assessing these experiences. The attacks of September 11 were more than just the first salvo in a new war; they validated the direction of our vision and the need to accelerate transformation. We believe our efforts to accelerate transformation are on track with the emerging strategic environment.

50. Senator WARNER. General Shinseki, what is the pacing issue in the Army's Transformation?

General SHINSEKI. The Objective Force is the pacing issue of the Army's transformation. The Objective Force is the integration of people, systems, and emerging technologies. The success of Army transformation and the realization of the Objective Force will ultimately depend on our people. Soldiers remain the centerpiece of our formations, and it will take trained, educated, disciplined, tough, and dedicated soldiers at every level to implement this change. The Objective Force soldier must be multi-faceted, adaptive, self aware, innovative, creative, and a risk-taker. The only way to ensure this is through realistic training at home station, emergency deployment readiness exercises, and the combat training centers allowing soldiers to train as we want them to fight.

When we equip these soldiers with systems like the Future Combat Systems, Warfighter Information Network-Tactical, Comanche, Objective Force Warrior, and other emerging technologies, they will be the most skilled, knowledge-based force in the world. We will continue to exploit the revolutionary potential of information superiority and networked sensors, shooters, supporters, and decision-makers, to allow the force to see first, understand first, act first, and finish decisively in full spectrum military operations. It will change the way we deploy, fight, sustain, and use information.

CONDITIONS IN KOREA

51. Senator THURMOND. General Schwartz has made a strong case for improving the quality of life for our military personnel assigned to Korea. Since the Army has the largest contingent of forces in Korea, what is the Army doing to improve the quality-of-life for the soldiers assigned to Korea?

General SHINSEKI. General Schwartz has indeed made a compelling case to improve the well-being for all military personnel serving in Korea and their family members. His goal to make Korea an assignment of choice is a worthy endeavor that I fully support. The generous financial assistance that Congress has provided Korea in the last few years is gratifying, and the result is that significant inroads have been made into many of the most pressing near-term quality of life challenges. Still, more needs to be done to fix the long-term problems.

52. Senator THURMOND. General Shinseki, in your judgment, why are Army officers turning down command in Korea?

General SHINSEKI. We reviewed the reasons several officers gave in fiscal year 2002 for declining command in Korea, but found no single quantifiable reason. The majority cited general "family reasons." Overall command declination rates have remained relatively stable. As we look at command declinations Army-wide, we find no trend why officers decline command, nor can we find a pattern indicating officers are more likely to decline command of one type of unit over another.

Many officers who decline command in Korea and elsewhere have served our Nation proudly for 18 to 22 years. Some have deployed to Panama, Southwest Asia, the Balkans, and other remote locations leaving behind their families for extended periods. This takes an undeniable toll on family relationships, and many choose family stability over command.

Several changes beginning in fiscal year 2003 should help alleviate the number of declinations. Officers may now decline command as soon as they are notified of their board selection while maintaining their eligibility for command in future years. This allows officers to reconsider their selection should their circumstances change. Additionally, officers who are contacted for activation for command may state their non-availability for command at that time due to personal or professional reasons. This ensures they will not be forced into accepting or declining command for the wrong reason while they maintain their alternate status for future commands during that fiscal year.

53. Senator THURMOND. General Shinseki, if given the authority what immediate changes would you make to enhance the assignment to Korea?

General SHINSEKI. The well-being of our soldiers, civilians, and their families stationed overseas continues to be a priority. There are several initiatives that are contributing to the improvement of the well-being for Army personnel in Korea, such as new barracks and family housing construction and renovation. This will allow more service members to serve tours in Korea with their families. There are two major programs that are part of our Army facility strategy: one-plus-one barracks standard by 2009 and improvements in family housing through renovation and construction by 2007. This is a long-term goal, but we continue to improve existing housing through a phased renovation and conversion of family housing units. Our Korea housing and barracks plan will move us closer to our objective of providing a standard of housing commensurate with our civilian counterparts.

The Army is also addressing the concerns of a force that is more computer and Internet savvy by working to improve the connectivity of Internet portals for better e-mail communication. With increased emphasis on technology and communications, Eighth Army morale, welfare, and recreation (MWR) has stepped up to provide low-cost Internet access to our customers. Whether it's surfing the Internet or writing to loved ones back home, our community activity centers provide cyber cafes with DSL connections. Additionally, all MWR libraries are equipped with Internet-accessible computers.

Eighth Army MWR has offered cable television to members of the military community living in on-post quarters for over 5 years. Every barracks room and private living quarters receive free basic cable, which includes Armed Forces Network channels, local Korean channels, and free radio. Customers may also subscribe to the cable premium package, which offers additional programming, including CNN International, Discovery Channel, and many others. Costs for the premium package cover only the cost of channel licensing fees.

If given the authority to make immediate changes for improvement in the overall well-being of personnel in Korea, I would speed-up the timeline on the issues mentioned above. The single greatest effort would be in increasing barracks, family housing, workplace environment, and other facilities renovations and construction.

CIVIL AFFAIRS UNITS

54. Senator THURMOND. General Shinseki, the current operations have demonstrated the need for increased unconventional operating forces including the need for civil affairs units. I understand that the Army relies almost exclusively on the Army Reserve to support the civil affairs function and that these assets are being stretched to the breaking point. What, if any, are your plans to address the operations tempo of the Reserve civil affairs units?

General SHINSEKI. You are correct that civil affairs is primarily a U.S. Army Reserve (USAR) mission. Ninety-seven percent of Army civil affairs forces are in the USAR, because only in the USAR can we maintain the unique skill sets that civil affairs specialties require. USAR civil affairs soldiers bring special skills and experience from their civilian jobs that we cannot maintain in the active Army. For example, there is no Army specialty that duplicates the knowledge and skills needed to assist in reestablishing the economic and banking systems in a post-conflict environment. Reserve component civil affairs units have that capability, because they can recruit soldiers whose daily job is running a large bank, or a similar important position in the U.S. economic sector.

USAR civil affairs units have been involved in every operation and contingency for the last 20 years, from Grenada through the Gulf War and the Balkans, to the current operations against terrorism. Consequently, many Reserve civil affairs units have been deployed frequently and repeatedly, but the force is not yet at the breaking point. Currently, only 1 percent of the civil affairs force is mobilized supporting Operations Joint Guard and Joint Forge, and 5 percent of the civil affairs force is mobilized supporting Operations Noble Eagle and Enduring Freedom. On average during the past 5 years, only 12 percent of the force has been mobilized at any one time. That said, the civil affairs force does have some challenges. Due to the high operations tempo over the last several years, we have a challenge in the retention of qualified civil affairs soldiers. Also, 45 percent of the Reserve component civil affairs force has already been mobilized and performed duty in the Balkans. Current DOD policy only allows for one rotation per mobilization, which raises concerns about the ability of the civil affairs force to sustain both the Balkans mission and the global war on terrorism.

More than 2 years ago we initiated a force structure increase for both Active and Reserve component civil affairs to better support the regional combatant commanders. This force structure increase will also serve to partially alleviate the increasing operations tempo. Between now and fiscal year 2005, the Army will create four new Reserve component civil affairs battalions, totaling over 1,100 spaces. In fiscal years 2004 and 2005, the Active component civil affairs battalion will add one new company per year, for a total of 118 spaces. Additionally, this year the U.S. Army John F. Kennedy Special Warfare Center and School has doubled the number of officer and enlisted civil affairs courses to increase the available pool of qualified civil affairs soldiers.

These force structure changes will not happen overnight. Recruiting, training, and retaining for the new units will be a challenge. It will take approximately 2 years for each new Reserve component civil affairs unit to be fully trained and validated to deploy to execute missions. In the meantime, we are looking at other means to effectively manage the operations tempo for our Reserve units. These include potentially increasing the length of operational deployments, which will, over time, reduce the number of units and personnel mobilized, and closely evaluating and prioritizing other commitments for our Reserve civil affairs, such as exercise participation, to ensure that the essential requirements of the regional combatant commanders are being met while not overtaxing our Reserve Forces during the war against terrorism.

U.S.S. *JOHN F. KENNEDY*

55. Senator THURMOND. Admiral Clark, during the past several months, the materiel readiness of the U.S.S. *John F. Kennedy* has received a great deal of media coverage. According to several of the U.S.S. *John F. Kennedy's* chiefs interviewed by *The Navy Times*, the problems with the ship stem from the high OPTEMPO during 2001 and the lack of money for repairs. Do you agree with the chiefs' assessments that the high OPTEMPO and lack of funds were the cause of the U.S.S. *John F. Kennedy's* problems?

Admiral CLARK. U.S.S. *John F. Kennedy's* recent materiel readiness problem had a number of causes. Of particular note was the conversion of the fiscal year 1993 Service Life Extension Program (SLEP) availability to a Complex Overhaul, reducing the planned \$650 million work package to \$331 million. Cancellation of distributive system work from the SLEP program has caused systemic problems in steam, fuel oil, containment holding and transfer, and other piping systems. Other contributing factors include a 5-year period of time in the Reserve fleet with lower levels of maintenance funding as well as near-term poor oversight and enforcement of standards by shipboard leadership. More readiness money is flowing to the Fleet. The fiscal year 2002 budget has increased funding for Navy readiness accounts over fiscal year 2001 levels. Our priority is to take care of the Navy our Nation's taxpayers have already purchased.

56. Senator THURMOND. Admiral Clark, what assurance do you have that there are no other "U.S.S. *John F. Kennedys*" out in the fleet?

Admiral CLARK. The Navy has an active inspection program that periodically inspects each ship's operational readiness and material condition. The Navy's Board of Inspection and Survey discovered the U.S.S. *John F. Kennedy's* recent material readiness problems during a routine inspection.

Fleet readiness is a top Navy priority. The fiscal year 2002 budget has increased funding for Navy readiness accounts over fiscal year 2001 levels. This has signifi-

cantly reduced the level of deferred fiscal year 2002 ship maintenance from the levels of previous fiscal years.

FORWARD DEPLOYED STAGING BASE

57. Senator THURMOND. Admiral Clark, I understand that based on the successful deployment of special forces from the U.S.S. *Kitty Hawk* during the operation in Afghanistan, the Navy is looking at the notion of an afloat forward staging base designed to meet the special forces requirement without straining the carrier fleet. What can you tell us about this concept?

Admiral CLARK. I have directed a study on the feasibility of acquiring a platform that will provide, among other things, an operational capability similar to that seen in U.S.S. *Kitty Hawk* (CV 63) last year. Teams from Naval Sea Systems Command (NAVSEA) and Military Sealift Command (MSC) have explored more than 40 sea-borne platforms to assess their ability to meet this requirement. NAVSEA's and MSC's combined analysis and their recommendations will provide a basis for future decisions on afloat forward staging bases.

SUBMARINE FLEET

58. Senator THURMOND. Admiral Clark, in testimony before this committee during deliberation on the fiscal year 2001 budget, your predecessor, Admiral Johnson, stated: "The submarine force is no longer able to meet all the regional CINC's requirements due to the draw-down in force level." What is your assessment of the size of the submarine fleet compared to the real world operational requirements?

Admiral CLARK. Our 54 attack submarines (SSNs) in the inventory are insufficient to meet the theater demand today. Following September 11, combined requirements from the Combatant Commanders for SSNs available in theater surged to 12.9. Our 54 SSNs are only able to provide a theater presence of 10 to 10.5. To compensate for this shortfall, we are stretching the budget and innovating where possible. Three specific items in the fiscal year 2003 budget address this shortfall.

First, the fiscal year 2003 budget includes advance procurement to get to a three per year build rate for Virginia class SSN starting in fiscal year 2008. A build rate of at least two Virginia's per year is needed as soon as possible in order to maintain long-term attack submarine force structure above 55.

Second, the fiscal year 2003 budget includes refueling 8 of 10 available Los Angeles class SSNs throughout the FYDP to make more SSNs available before they reach their end of life around 2016.

Lastly, commencing late in fiscal year 2002, and complete by 2003, three refueled SSNs will be forward-based in Guam. Since these SSNs are closer to their theater of operation, they will spend the bulk of their time in theater and will be able to provide more operational days at-sea as compared to CONUS-based SSNs. This opportunity was enabled by a new operating cycle concept and by leveraging off existing Guam infrastructure that only required modest upgrades for the three SSNs.

59. Senator THURMOND. General Jumper, although the Air Force exceeded its retention for first term enlistments, it fell short of the goals for second term reenlistments, and career reenlistments. In your judgment, what is the greatest hindrance to achieving the reenlistment goals for the career force?

General JUMPER. In our most recent exit survey, second term and career airmen ranked "availability of civilian jobs" and "pay and allowances" as their number 1 and 2 reason for leaving the Air Force. The perception among those leaving was jobs were plentiful. In fact, about two-thirds of those leaving already had a job lined up. Since we can't change the economy, our efforts are focused on improving "pay and allowances"—to ensure our competitiveness in the marketplace. Compensation is an issue that continues to be of significant importance to military members and was cited by over half the enlisted members as a "strong" or "very strong" influence to leave. Despite the targeted pay raises, only 40 percent of separating members said their military income covered their basic expenses with money left over.

With your help, we are working hard to address these concerns. The improvements in basic pay, and other quality of life programs that Congress provided in the recent NDAA were a boost to our airmen and should go a long way in helping retain our career enlisted force. We will, however, continue to closely monitor reenlistments to ensure we retain our most valuable assets—our trained and experienced airmen.

MISSION CAPABLE RATES

60. Senator THURMOND. General Jumper, in reviewing the briefing information on the Air Force budget, I noted that the Air Force projected an aircraft mission capable rate projection for fiscal year 2003 of 78 percent. This represents an increase of 5 percent over fiscal year 2000, but is still short of the rates in the early 1990s. How will the operations in Afghanistan impact your mission capable rates?

General JUMPER. There were three effects from Operation Enduring Freedom (OEF) on Air Force mission capable rates:

- An initial effect accelerated an existing 15-month improvement in MC rates as the AF mobilized to a warfooting (depots surging, deployed aircraft receiving high-priority supply codes, and Reserve Forces activations) resulting in the aggregate MC rate spiking to 77.1 percent in December.
- Since September Air Force Reserve and Air National Guard rates increased dramatically in fiscal year 2002 following troop activations; this positively influenced overall AF aggregate rates with the Reserve components MC jumping from 67.9 percent in fiscal year 2001 to 75.8 percent in fiscal year 2002 (as of March 1, 2002)—a 7.9 percent improvement in 6 months.
- Following 6 months of increased operations and high aircraft utilization rates for certain high demand assets (not overall aggregate AF rates) there has been a slowdown in the improving trends. For example, the KC-10, E-3, and C-17 decreased slightly as a result of extremely high utilization rates after September 11. AF fiscal year 2002 aggregate rates are still improving over an already improved fiscal year 2001 trend, but not as much as surge in October-December timeframe.

EN ROUTE INFRASTRUCTURE

61. Senator THURMOND. General Jumper, one of the most critical shortfalls facing our combatant commands is strategic lift. At virtually every hearing, commanders at all levels have voiced the same concerns about our ability to move large numbers of troops and equipment over long distances. Although additional lift is critical, so is the en route structure of airfields and refueling points. What is your assessment of the en route facilities throughout the globe and where would you place additional emphasis?

General JUMPER. In general, we are pleased with the condition of our en route infrastructure. However, there are certain locations where we still need to invest.

Over the last decade, our overseas basing structure was in a state of flux. During this time, we intentionally minimized overseas infrastructure investment. As a result, our overseas installations suffered. In the latter half of the 1990s, we were able to target funding at our en route infrastructure through the Mobility Enhancement Fund (MEF) and the Defense Logistics Agency's (DLA) military construction programs (in conjunction with companion Air Force military construction projects). This targeted investment helped us offset some of that minimized investment previously mentioned.

We base our en route infrastructure investment priority on mission need, as advocated by the theater CINCs. In our fiscal year 2003 budget request, we have included strategic airlift (en route) infrastructure projects at Naval Station Rota, Spain, and at Wake Island. DLA has also included in their fiscal year 2003 program a number of fuels infrastructure projects (including Rota) that support strategic airlift. Unfortunately, we have not seen any MEF funding in the last 2 years.

Our investment strategy has targeted completion of aircraft parking ramps, hydrant refueling systems, and key support facilities to meet the strategic airlift throughput objectives defined during Mobility Requirements Study-2005 (MRS-05). These projects are well supported in the current AF and DLA fiscal year military construction programs through fiscal year 2005, with the projects coming to fruition into fiscal year 2006. Based on evolving guidance in the National Military Strategy and defense plans, our theater CINCs may define additional strategic lift requirements to support their future areas of concern. If and when those additional airlift requirements are defined, they will no doubt drive some additional infrastructure challenges.

RECONSTITUTION OF FORCE

62. Senator THURMOND. General Jones, our marines who made the first assaults into Afghanistan fulfilled their assignment in the great tradition of the Marine

Corps. We all saw the harsh conditions that both the marines and their equipment had to endure throughout their deployment, but we have not had any reports on what impact the operations had on your aging equipment. As you are reconstituting the force, what problems are surfacing with the equipment and are you sufficiently funded to repair fully or replace the equipment?

General JONES. The foremost problem impacting Marine Corps aging ground equipment in theater has been the harsh environment. Sand, dust, and wind along with the cold weather conditions has caused scheduled preventive maintenance to be expedited. Rolling stock, such as the HMMWVs, appears to have suffered more mechanical failures than expected. Fuel system problems have also been experienced. However, due to experience and interoperability, Marine Corps maintenance personnel at FOB Rhino, were able to overcome equipment failures and even assisted the Navy with their mechanical problems. Survivability of equipment in harsh environments continues to be a major area of concern when conducting operations. Additional analysis is required on equipment as it returns, since operations are ongoing. Additional funding may be required, and if needed will be identified via our resource requirement processes, to ensure maintainability of older equipment until new replacements are on line and fully integrated into the supply pipeline.

COUNTER-TERRORISM UNIT

63. Senator THURMOND. General Jones, the Marine Corps is requesting an increase of 2,400 marines to field the 4th Marine Expeditionary Brigade. I understand that this unit's principal role will be counter-terrorism. How will the organization of this unit differ from the other Marine units?

General JONES. The mission of the 4th Marine Expeditionary Brigade (Anti-Terrorism) is not "counter-terrorism," but rather anti-terrorism. Anti-Terrorism (defensive component) and Counter-Terrorism (offensive component) are combined together in Combating Terrorism.

This organization of the 4th MEB (AT) is different from other Marine units as reflected in its mission statement: To provide Unified Combatant Commanders with a rapidly deployable and sustainable specialized Anti-Terrorism Force to deter, detect, defend, and conduct initial incident response to combat the threat of worldwide terrorism.

Fourth MEB (AT) is an organization composed of existing USMC capabilities augmented by a newly created and permanently assigned Anti-Terrorism battalion that is undergoing specialized training consistent with its dedicated mission of Anti-Terrorism.

The 4th MEB (AT), like all Marine Air-Ground Task Forces (MAGTFs), can task organize their organic units and various other ground, air, and support elements, into a single force specifically focused on anti-terrorism operations. Leveraging capabilities already available within the Marine Corps, three commands with specific anti-terrorism/force protection missions were assigned to the 4th MEB (AT): the Marine Security Guard (MSG) Battalion, the Marine Corps Security Force (MCSF) Battalion, and the Chemical/Biological Incident Response Force (CBIRF). 4th MEB (AT) combines into a single command, under a common commander and supporting staff, the ability to perform all the elements of anti-terrorism operations and leverages current and emerging technologies to achieve economy of force. The Brigade possesses the combination of personnel, equipment, training, and tactics that exceed the capabilities of regular Marine Corps units to conduct anti-terrorism operations.

Fourth MEB's Anti-Terrorism (AT) Battalion was created from an infantry battalion. Its capabilities are built on the core Marine infantry battalion skills combined with the key element of a trained AT mindset. This mindset consists of the ability of an individual marine to recognize key indicators prior to a terrorist attack and take the appropriate action without hesitation. Key training includes understanding terrorist tactics and operations, reconnaissance/surveillance, surveillance detection and counter-surveillance skills. In addition, marines also receive enhanced NBC, marksmanship, and urban skill training. As a result, the marines of the AT Battalion are able to effectively operate in an urban environment with the skills necessary to engage terrorists while minimizing civilian casualties.

In summary, the 4th MEB (AT) is a unit whose mission is to conduct anti-terrorism operations. It has the capability to provide highly capable, scalable, and rapidly deployable anti-terrorist units from platoon to brigade size. Each unit, regardless of size, will be specifically trained in anti-terrorism operations and have the integrated intelligence and communications assets that will enable it to effectively detect, deter, and defend against terrorism threats worldwide.

HIGH SPEED VESSEL

64. Senator THURMOND. General Jones, the Marine Corps recently signed a lease with an Australian company for a high speed vessel to ferry marines from Okinawa to training sites on Japan and other training areas in the Far East. Considering the cost of the lease, what tactical capability does this vessel add to the Marine Corps?

General JONES. The High Speed Vessel (HSV) is not considered a tactical asset. It is viewed as an innovative means to increase unit readiness and reduce the burden of strategic lift required by MARFORPAC forces to meet their off-island training requirements. The lease and the utilization of this vessel enables Marine Corps units to move a battalion of marines (970) and 350 short tons of unit cargo in one lift at a rate of speed of 37–42 knots. This one-way lift is normally completed within a 30–36 hour period depending on distance to the training or exercise area. Utilization of the HSV replaces 17 individual one-way C–17 sorties. These C–17 sorties are normally accomplished over a 17-day period moving 100 marines or 45 short tons of cargo at a time. The estimated cost of moving a battalion of marines and 350 short tons of cargo via the HSV is \$104,000. Likewise; the estimated cost of moving the same marines and cargo via strategic air is estimated at \$500,000.

The WESTPAC EXPRESS is considered a “transformational” intra-theater administrative (non-tactical) lift asset, which is service-unique, and theater assigned specifically to ease the transportation shortfalls in support of Marine Corps units in the Western Pacific. It is transformational in that we have re-engineered the OCONUS transportation equation by introducing a new commercial “off the shelf” technology platform which has regional capabilities, supplanting the much more expensive use of U.S. military strategic transportation platforms, thereby reducing costs while simultaneously increasing operational tactical training and strategic engagement opportunities. Its acquisition was also transformational in that it was acquired under a 36-month lease rather than a purchase arrangement. This technology is turning over with the same rapidity that the automated data processing industry experienced in the 1990s. The Marine Corps can upgrade to a more capable model in 36 months as opposed to being restricted by the traditional acquisition process, which would normally lock us into a 96-month or longer time frame. It is undoubtedly the transformational acquisition success story of 2001.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

SHIPBUILDING

65. Senator MCCAIN. Admiral Clark, a January 28, 2002 article titled, “Responding to Lott, DOD Starts Funding LHD-9 And One More DDG-51” by Chris Castelli in *Inside the Navy* states: “At the urging of Senate Minority Leader Trent Lott (Republican—Mississippi), the Pentagon has made last minute adjustments to the Navy’s shipbuilding plan in the Bush administration’s fiscal year 2003 budget. The Pentagon put \$74 million more toward a third DDG-51 destroyer and allocated \$10 million in advance procurement for a ninth amphibious ship, LHD-9, that was not previously in the Navy’s budget.” Is this true?

Admiral CLARK. The OSD Comptroller made two late changes to the Navy’s fiscal year 2003 shipbuilding budget request by adding \$74 million in advance procurement funding for a third DDG 51 destroyer in fiscal year 2004, and shifting \$10 million for advance procurement funding for a fiscal year 2008 LHD-9. Any specific questions on the factors that precipitated the decision for these shifts should be referred to the OSD Comptroller.

66. Senator MCCAIN. Admiral Clark, are you aware of an effort going on by the Department of the Navy to look at an AOA to replace the current LHA with an LHA(R)? Are you aware that the Comptroller’s Office of the Secretary of Defense deleted the funding for the study on the AOA-cutting \$16 million from the research, development, testing, and evaluation effort for the LHA replacement?

Admiral CLARK. The Department is aware of this situation. During the November 2001 review of the Navy’s Fiscal Year 2003 Budget request, the OSD Comptroller’s Office deleted fiscal year 2003 and 2004 RDT&E funding for the LHA(R) program.

LHA(R) R&D funding throughout the FYDP was briefed to and approved by OSD (including the OSD Comptroller) at Milestone A as the minimum RDT&E funding necessary to support the least expensive LHA(R) AOA alternative—a repeat LHD-8. Since the AOA completes in fiscal year 2002, this fiscal years 2003–2004 RDT&E deletion does not directly impact the AOA study, the AOA final report, or the Navy’s ability to decide which LHA(R) alternative to pursue. However, the Department of

the Navy will select a preferred alternative based on the results of the AOA and adjust RDT&E and SCN profiles as required to move forward.

67. Senator McCAIN. Admiral Clark, does the \$10 million in advance procurement for LHA-9 that was added by the Office of the Secretary of Defense Comptroller, according to the Castelli article, predetermine the results of the AOA?

Admiral CLARK. No. The results of the LHA(R) AOA are not predetermined. The LHA Replacement Analysis of Alternatives is ongoing and will report out in summer 2002. Alternatives being considered include: Repeat LHD-8 with evolutionary modifications, Modified LHD-8 upgraded to enhance the ability to operate the larger and/or heavier new generation amphibious systems, and New Ship Designs spanning a wide range in size and capability. Based on the analysis presented in the AOA, the Navy will determine the optimal alternative for the LHA replacement as part of the LHA(R) program. The preferred alternative may not be based on the LHD-8. The \$10 million in the fiscal year 2003 budget request allows the Navy to begin refining the AOA selected alternative's detailed capabilities/characteristics and other developmental work.

PLANNED FUTURE AIRCRAFT AND VEHICLES

68. Senator McCAIN. Admiral Clark, I recently traveled to Afghanistan with other members of this committee. While there, I heard from several Navy and Marine Corps officers that the number one concern for replacing the LHA is safety because of a stability problem, especially with deployed aircraft. Their concern was that even with some minor fixes with fuel compensation systems, the problem will be exacerbated when the service deploys larger aircraft, such as the Osprey (MV-22) and the Joint Strike Fighter (JSF) which are replacements for the CH-46 and AV-8B respectively. I am told that the MV-22 is twice the weight of the CH-46 and that the JSF is believed to be about twice the weight of the AV-8B. Does the LHD class have similar stability problems as the LHA class, and would you agree that the problem could be exacerbated with the planned future aircraft and vehicles envisioned for the Marine Corps?

Admiral CLARK. The seven ships of the LHD class have improved stability characteristics over the LHA class and therefore do not experience weight and center of gravity issues to the same extent as the LHA. For example, LHD-7, commissioned in 2001, has greater than the required 1,000 long tons of service life weight growth allowance.

LHDs have the growth allowance to accommodate MV-22 and JSF with aggressive weight control measures and the fuel oil compensation ship alteration although LHDs have less vehicle storage space (square footage) than LHAs.

The Navy's five LHAs need to be replaced as soon as possible, as they are rapidly reaching the end of an already extended service life. The LHA(R) AOA was initiated to ensure that both Marine Corps and Navy 21st century requirements are addressed, including the issues the Senator raises regarding the impact of heavier and larger aircraft/vehicles and overall amphibious force vehicle storage area. An LHD repeat is just one of several alternatives being considered in the LHA(R) AOA to meet requirements.

69. Senator McCAIN. Admiral Clark, what growth percentages are currently planned for the LHD class of ships?

Admiral CLARK. The CNO-specified minimum Service Life Allowance for the LHD class at delivery from the shipyard is 1/2 foot for vertical center of gravity reserve and 1,000 long tons (about 2.5 percent) of displacement service life reserve. The requirement is documented in the LHD Class Top Level Requirements document.

70. Senator McCAIN. Admiral Clark, is the LHD a good replacement for the LHA class of ships, considering that the ship does not meet the requirement in planned future vehicles and aircraft for the Marine Corps or our special operations community and considering the amphibious lift requirement of 2.5/3.0 Marine Expeditionary Brigade?

Admiral CLARK. The ongoing LHA(R) AOA is addressing whether the LHD is a good replacement for the LHA class. Continuing to build LHDs, as well as ship design modifications to enhance the capability to operate the larger and heavier new generation amphibious systems are currently being examined as options. The AOA is also investigating the optimum way to reach the fiscally constrained amphibious lift requirement of 2.5 Marine Expeditionary Brigades. The AOA is expected to report out later this year and will present its conclusions at that time.

71. Senator MCCAIN. Admiral Clark, because of the well deck inside the LHD, isn't the LHD available square footage less than the LHA?

Admiral CLARK. See answer to question 70.

72. Senator MCCAIN. Admiral Clark, it seems to me that the LHD is not a very transformational program especially considering that it is the exact same hull of the current LHA class that is based on a 1950s design. It seems to me that if the LHA (R) class ship is built to have a lifespan of 50 years with no further research and development (R&D) funding, then the LHD-9 will be a 100-year-old design when it is decommissioned in the 2050 timeframe. Would the Navy develop an aircraft carrier, destroyer, or submarine without a robust R&D effort?

Admiral CLARK. The Navy is currently conducting an AOA for LHA(R). Numerous alternatives are under consideration, including a LHD-8 repeat design. If the results of the AOA support a repeat LHD or new ship design, additional RDT&E funds will be required. At that time, it may be necessary to revisit the current plan to use the \$10 million in fiscal year 2003 SCN AP for a LHD-9.

While the LHA(R) hull shape may be close to the original, its combat systems suite, communications gear, and information technology set up will be state-of-the-art.

73. Senator MCCAIN. Admiral Clark, where is the R&D funding for a major amphibious ship like the LHA (R)?

Admiral CLARK. See answer to question 72.

74. Senator MCCAIN. Admiral Clark, are you relegating the amphibious Navy to non-transformational status?

Admiral CLARK. See answer to question 72.

CRUISE SHIP PURCHASE

75. Senator MCCAIN. Admiral Clark, there are reports that the Navy is being approached to purchase a pair of unfinished cruise ships at the Northrup Grumman Shipyard in Pascagoula, MS that were left behind when American Classic Voyagers went bankrupt for use as mobile housing or hospital ships. Is the Navy in any way interested in purchasing such ships? Is there a need for such ships?

Admiral CLARK. The Navy has declined the offer to acquire or use the cruise ships under construction. A team of Navy engineers recently visited the partially completed passenger ships in Pascagoula, Mississippi, and concluded that the ships are not suitable for use as command and control ships due to their structural design and lack of military survivability features. We also looked at the ships' utility for other non-combat ship missions. While the ships are viable with modifications for use as hospital, recreational, or berthing vessels, the Navy does not have a requirement or need for any more of these ship types today.

T-5 TANKER BUYOUT

76. Senator MCCAIN. Admiral Clark, on February 8, 2002 Rear Admiral Church delivered to Congress the Department of the Navy's "Fiscal Year 2003 Budget Overview." On page 18 of the Navy's budget brief is a slide called "Promote Better Business Practices, Managing the Department in a Business-like Manner." I noticed a bullet that states "T-5 Tanker Buyout." Will you please tell me why the Navy has decided in its fiscal year 2003 budget to buy the T-5 tankers rather than continue leasing them as was the plan several years ago?

Admiral CLARK. The T-5 Tankers were leased in the early 1980s rather than purchased because of the budgetary circumstances that existed at the time. When the ships were leased, the Navy negotiated for favorable purchase options that, conditions permitting, could be exercised at the appropriate time. Those conditions exist and that time is now. We have a continuing need for these vessels beyond their lease terms, which end in 2005 and 2006. If we let our options expire, we will end up chartering (leasing) higher cost replacement tankers.

767 TANKERS

77. Senator MCCAIN. General Jumper, are you beginning to negotiate the lease of the 100 767 tankers, as well as the 4 737 VIP aircraft that were added by the Senate Appropriations Committee and enacted in the Fiscal Year 2002 Department of Defense Appropriations Act last December?

General JUMPER. The Air Force has begun separate negotiations with Boeing on the air refueling tanker and the 737 aircraft. Prior to entering into any contract, we will provide reports to the four defense committees as required by the fiscal year 2002 DOD Appropriations Act.

78. Senator MCCAIN. General Jumper, do you believe in competition? If you believe in competition, then why did the terms of the proposed lease arrangement exclude potential competitors/lessees?

General JUMPER. Yes, the Air Force believes in competition. Well before Congress provided us with an opportunity to attempt to negotiate a lease for new air refueling aircraft, we had engaged in extensive discussions with the major aerospace companies regarding future air refueling aircraft. After the Appropriations Statute was signed, Secretary Roche spoke with M. Phillippe Camus, Co-CEO of Airbus, and noted that the AF was interested in hearing from them. In February, the Air Force issued a non-binding Request for Information to both Boeing and to Airbus/EADS in order to conduct market research and to gauge available technology and business cases. The responses to this request for information clearly demonstrated that only the Boeing Company could currently meet the requirements of Section 8159 of the Fiscal Year 2002 Appropriations Act. The other offering presented a higher risk technical approach and a less preferred financial arrangement. The USAF encourages aerospace companies to continue their air refueling boom and other tanker developmental efforts to ensure a vibrant and fully competitive global defense industrial base well into the future.

79. Senator MCCAIN. General Jumper, I read in the *Air Force Times* article of January 21, 2002 that you said Plan A is to buy the Boeing 767 tankers and Plan B is to lease the tankers. If that is correct, why have you not included a single tanker in the fiscal year 2003 Air Force budget request recently submitted to Congress?

General JUMPER. The fiscal year 2003 Air Force budget includes seed money, with the intent of acquiring new air refueling tankers in the outyears.

TANKER ACQUISITIONS

80. Senator MCCAIN. General Jumper, in a letter dated December 7, 2001, to Senator Patty Murray, Secretary Roche wrote, "The most important and critical factor is that this replacement program starts as soon as possible. To this end we will work with the Assistant Secretary of Defense (Acquisition, Technology, and Logistics) and the Office of the Secretary of Defense Comptroller to amend the fiscal year 2003 budget currently being vetted through the Department." Again let me pose the same question: if Plan A is to buy the Boeing 767 tankers, then why haven't you included a single tanker in the fiscal year 2003 Air Force budget request recently submitted to Congress?

General JUMPER. Our Tanker "Plan A" is to begin acquiring new air refueling tankers in the out years of the FYDP. The fiscal year 2003 Air Force budget includes seed money to begin this effort.

81. Senator MCCAIN. General Jumper, what events caused the Air Force to circumvent the normal disciplines of the budget process—not ventilating a tanker modernization plan in the Office of the Secretary of Defense, Office of Management and Budget, or through the authorizing committees and appropriations committees about leasing Boeing 767 tankers?

General JUMPER. The USAF budget had funds in fiscal year 2002 to begin the process that would start replacing KC-135s with a follow-on tanker we call KC-X. We are pursuing this plan because the tanker age and corrosion situation has become increasingly worrisome to the USAF. The KC-135 tankers are 40-year-old-plus aircraft that are wearing out. The KC-135E models, our oldest and least capable, are spending over 400 days in depot being rebuilt every 5 years, and they require significant communications upgrades to allow them access to airspace worldwide. The remaining 545 KC-135 aircraft were purchased between 1957 and 1965. They will all age out at approximately the same time. It has become increasingly expensive for the Air Force to operate and maintain these aircraft. In May 2001, we sent letters to the chairmen and ranking members of all the defense committees requesting approval for accelerating our effort.

This fall, while we were well into the process of submitting the President's budget, we had a significant series of three events occur that focused USAF attention on reevaluating our tanker recapitalization, and thus potentially avoid having to replace the entire 545 aircraft fleet simultaneously. The first event came after the attacks on September 11; we started to fly our tanker aircraft at approximately twice

their annual rate to support Operations Noble Eagle and Enduring Freedom. Simultaneously, the second event occurred, and that was the softening of the commercial aircraft market, and announcements from the US aviation industry that they were starting to shut production lines, and lay off U.S. aviation workers. Lastly, the Boeing Company had expended their own capital and research and development to commercially offer Air Refueling Tankers, for delivery in 2005, based on their 767-200ER platform. The Japanese and Italian Governments have both selected this aircraft as their new air refueling tanker. The combination of these three events made us closely examine the possibility of jumpstarting the replacement of the oldest tankers in our fleet.

Given the apparently weak market demand for wide-body aircraft, we thought there existed a chance for a smart business opportunity to replace the KC-135Es with the commercially developed 767 tanker aircraft while maintaining a strong bargaining position for the USAF. Boeing provided the Air Force a briefing proposing a lease of 100 aircraft for 10 years with the option to buy at the end of the lease for the final payment. Leasing appeared to be a viable option since the aircraft were: (1) commercially derived, (2) commercially developed, and (3) quickly available in larger numbers through a lease to augment the aging fleet of tankers. In addition, the Air Force expects savings to result from operating and maintaining modern commercial aircraft rather than 40-year-old-plus KC-136 aircraft.

The USAF was then asked by members of the House and Senate to provide informational briefings on this proposal. The briefing was provided to members of Congress, including members of the SAC, SASC, HAC, and HASC, who requested it from the AF. It was also provided to members of the OSD staff, CBO, and OMB. CBO and OMB had concerns with scoring Boeing's lease proposal. They recommended an "operating lease" compliant with the existing provisions of OMB Circular A-11. CBO's and OMB's recommendations are reflected in section 8159 which permits the USAF to attempt to negotiate a lease arrangement, for up to 100 aircraft, for up to 10 years, for not more than 90 percent present value of the fair market value of the aircraft. The lease type specified ultimately returns the aircraft to the private sector.

The AF cannot enter into any lease deal without the permission of the four defense committees, and no funds can be expended. This, sir, is the genesis of this lease possibility. It was generated out of our perceived need to accelerate existing replacement plans and to assure that we can meet our mission in the future.

82. Senator MCCAIN. General Jumper, we all know that leasing Boeing 767 tankers was not in the fiscal year 2002 Air Force budget or the Air Force long-range 6-year procurement plan. The Air Force's unfunded priority list did not have tanker replacement listed until March 1, 2002. I have examined your previous unfunded priority list, totaling 60 programs at a total cost of nearly \$10 billion, which was prepared by you 6 weeks after September 11 and 3 weeks after the air war started, and tanker replacement is not listed. What would account for this?

General JUMPER. On October 22, 2001, the Air Force provided a copy of its July 2002 Unfunded Priorities List, with highlighted requirements that could boost the defense sector. Following that, on November 26, 2002, the July list was provided in its entirety with a note in the transmittal memorandum indicating that a tanker lease could help accelerate the replacement of our most aging KC-135E tankers.

83. Senator MCCAIN. General Jumper, the Operation Enduring Freedom chronology briefed by Secretary of Defense Rumsfeld and Joint Chiefs of Staff Chairman General Myers, and Commander in Chief of U.S. Central Command General Franks states that the air war did not start until October 7, 2002. Can you explain to me why Major General Paul W. "Bill" Essex, Assistant Secretary of the Air Force for Acquisition, briefed Senator Murray's staff on October 3, 2001, 4 days before the air war started, on the need to replace the KC-135 tanker fleet with Boeing 767 tankers?

General JUMPER. By October 1, 2001, the USAF had already flown a significant number of missions in support of Operation Noble Eagle and in preparation for Operation Enduring Freedom. Starting on September 11, the Combat Air Patrols provided over the USA's major cities by Operation Noble Eagle were made possible by the KC-135 air refuelers that kept the fighters in the air doing their job protecting us. The missions supporting Operation Enduring Freedom required the AF to establish extensive Air-Bridges composed of pre-positioned KC-135s and KC-10s. Without the Air-Bridges, our strike aircraft could not have accomplished the missions CENTCOM had in store for them. All of these actions were occurring well before the first strikes were made in Afghanistan. All of these actions were beginning to stress our oldest and least capable tankers.

PERSONNEL REQUIREMENTS

84. Senator MCCAIN. General Jumper, in the current issue of the *Air Force Times* a senior Air Force official is quoted as saying the Air Force will need upwards of 30,000 additional people in the coming years when reservists supporting Operation Enduring Freedom and homeland defense are demobilized and "stop-loss" ends. What are your requirements for additional personnel in the coming years?

General JUMPER. Initial projections show a 30,000 increase in total military (Active/Guard/Reserve) end strength requirement, but our production base could only execute 7,000 in fiscal year 2003. SECDEF challenged us to pursue more innovative solutions to offset the need for additional E/S. We are currently meeting E/S requirements through partial mobilization of the ARC and stop loss actions, but we can't use these tools indefinitely. In anticipation of demobilization and an end to stop loss, we are starting the lengthy process of determining the best and most efficient way to meet our increased requirements.

END STRENGTH

85. Senator MCCAIN. General Shinseki, Admiral Clark, General Jones, and General Jumper, more than a year ago, service men and women were promised that the frequent number of deployments that they became all too familiar with during the Clinton administration would ease and the number of worldwide commitments would be reduced. I am told that most of the Services feel that has not happened to the extent promised and may have even worsened because of ongoing war operations. While all support the budget recently submitted, privately all the Services admit they need additional end strength to get the job done. In fact, one service has told me that they may need as many as an additional 42,000 service members. Do you have any comment on the need for additional service men and women?

General SHINSEKI. The current operational environment places additional demands on the Army that were previously unrealized. Post September 11 events have increased demands placed on the force, and the Army will likely require an end strength increase to fully meet these demands.

The Total Army Analysis (TAA) process will determine the size and composition of the Army within a constrained budget. The current effort, TAA 09, is not complete, but will account for the additional emerging requirements in the area of homeland security and the global war on terrorism.

The immediate solution for the war on terrorism was the mobilization of our National Guard and Reserve soldiers and the implementation of "stop loss" for selected skill sets. The performance of these soldiers has been exemplary, but these are temporary measures, not a long-term solution.

The Army may seek to take advantage of the Fiscal Year 2002 Defense Authorization Act that permits the Department of Defense to allow the services to exceed their end strength by 2 percent in any fiscal year in which there is a war or national emergency. Taking full allowance of this provision would allow the Army to increase its Active component end strength to 489,600.

As the Army increases end strength, we must ensure the recruiting increase is achievable, the training base can meet additional requirements, and high standards and quality of life are maintained.

Admiral CLARK. Most of the Navy's current personnel needs are directly attributed to the increased requirement for anti-terrorism/force protection. The Navy has conducted a comprehensive study that identified requirements for additional personnel at entry control points, pier-side, and on the flight line. The total estimated personnel need is 4,383. The Navy is working to determine the proper mix of military, civilian, and contractors based on military essentiality and legal constraints placed on the use of contractors at Stateside installations. The Navy is working to determine the proper way to transition from Reserve mobilization to the right levels of Active and Reserve forces. The Navy is also exploring opportunities to exploit the use of technology to reduce manpower requirements.

General JONES. The Marine Corps fiscal year 2003 President's budget submission supports the Marine Corps growing to 175,000 Active Duty end strength. This growth of 2,400 marines was decided only after looking internally at how we could create efficiencies within our own organization. Over the last 2 years, the Marine Corps has been able to transfer many jobs and responsibilities over to the civilian sector which has promoted efficiency and allowed the Marine Corps to reassign our Active Duty marines to meet readiness concerns in the operating forces. The 2,400 increase in Active Duty end strength for fiscal year 2003 would provide the additional end strength needed to ensure our Nation gains a robust Anti-Terrorism force

without degrading personnel readiness that currently exists in our current Marine Corps units.

General JUMPER. See answer to question 84.

RESERVE DEPLOYMENTS

86. Senator MCCAIN. General Shinseki, Admiral Clark, General Jones, and General Jumper, I understand that there are over 85,000 National Guard and Reserve men and women supporting Operations Noble Eagle and Operation Enduring Freedom, citizen soldiers who juggle two careers: civilian and military. Also included in the category of "twice the citizen" are the employers who, for no incentive that I know of, hire Reservists and National Guardsmen and put up with monthly weekend drills, 2-week annual training periods, and recalls to active duty with little information on how long they will be away from their jobs. Today, every single one of the recalled 85,000 Reservists are told that they are on 1-year orders and may be continued for 2 years or more. What is the plan to bring the Reservists back home and back to their civilian jobs that they left, and who will replace them if we have a force structure, that according to the Services, is already stretched thin?

General SHINSEKI. Today's Active Forces are so thoroughly integrated with the Reserve components, that we are always mindful of the sacrifices of the Reservist or Guardsman, as well as the employers who support the citizen soldier. To help manage the burden on Reservists and deployed soldiers, the Secretary of Defense has limited all orders to 12 months, even though partial mobilization authority traditionally permits a period of up to 2 years. Currently, orders may only be extended over 12 months by specific approval authority. While manpower needs of our commanders in chief and services, and the actual deployment length of mobilized forces must be based on the evolving realities of current operations, we are taking several actions to help return Reservists and all soldiers home as quickly as possible. First, we are implementing a plan to readjust the distribution of soldiers being used in homeland defense force protection and installation security roles.

We are beginning to leverage the use of security technology to help reduce the number of security force soldiers required, as well as increasing the number of civilian guards at our installations. These actions will help keep our Active Forces performing their primary role of maintaining and sustaining combat readiness and will enable us to begin to systematically demobilize Reserve component soldiers providing force protection augmentation. To help better manage our total force, we have put into place a force rotation policy to provide our leaders and soldiers with more deployment predictability and stability for units and individuals. We are also currently analyzing our Active roster to determine if soldiers can be freed up from non-essential jobs, and continue to re-look our ongoing operations to identify where we can reduce or readjust our commitments. We have recently moved to reduce the size of our peacekeeping force in Bosnia and are examining the possibility of reducing or eliminating our peacekeeping deployment in the Sinai. Through better management of our planned deployments, redistribution of soldiers from nonessential jobs, re-engineering force protection needs, and reducing force commitments, we can return our citizen-soldiers home as quickly as possible, while also providing for our future force needs.

Admiral CLARK. The Navy has mobilized approximately 10,000 Reservists. Over 50 percent of those Reservists are meeting anti-terrorist/force protection requirements. The Navy has determined that the overall mobilization can be reduced by 25 percent. Over the next few months we will return approximately 3,500 Reservists to their homes and families. As the Navy increases the Active Duty security force by 4,383 in fiscal year 2003, the Reserve requirement will be further reduced allowing additional Reservists to be demobilized. The Naval Reserve has sufficient inventory to relieve all of the Reservists remaining after 1 year with the exception of those in the Master-at-Arms rating. Navy expects to retain these Reservists on Active Duty for up to 2 years to meet anti-terrorism/force protection requirements. As additional Active Duty Master-at-Arms are recruited and converted from other ratings, the Reserve Master-at-Arms will be relieved at or before the end of their second year mobilized. As mobilization requirements are reduced, Navy is contacting every reservist to identify those who are volunteers to be demobilized and those who would prefer to remain mobilized. Billet swaps are being arranged where possible to accommodate their preferences. Reservists for whom demobilization would cause hardship are being identified and every effort is made to find a swap, to mitigate or eliminate the hardship, or to delay the individual's demobilization until the hardship is eased. In short, Navy is going to great lengths to keep faith with our Naval

reservists who have sacrificed to serve their country and to return them to their patriotic employers as soon as the war effort permits.

General JONES. The Marine Corps was authorized by the Secretary of Defense to mobilize up to 7,500 Reservists to support Operations Noble Eagle and Enduring Freedom. The Marine Corps has been very judicious in using its mobilization authority. As of March 27, 2002, the Marine Corps had a total of 4,455 Marine reservists on active duty. Additionally, we have demobilized 66 reservists who are no longer needed on active duty. The Marine Corps is currently participating in a DOD sponsored mid-year review of USMC Component Activations to determine whether or not further reductions can be made. If we need to continue to fill these billets, we will either have to find another "volunteer," involuntarily extend the current individual, or find an active duty marine to fill the billet.

General JUMPER. The need to call up our Reserve component (RC) forces is driven by requirements to support our Combatant Commanders, as well as requirements driven by increased operations at our stateside bases (especially force protection). We do not take this responsibility lightly, and have worked diligently to ensure that we call up only what is absolutely required. In the early stages of the war on terror, we did indeed approve all mobilization authorizations for a 1-year duration with the opportunity to extend to the full 2 years allowed by Title 10. Subsequently, we have begun to limit the duration of the mobilization authorizations in those cases where we can forecast a limited need (90-day rotation is one example). This is giving the individuals and their employers a clearer idea of what our forecasts were showing. Due to the rapidly changing dynamics of the war on terror, we may eventually be in the position of having to once again request assistance from these forces in the future.

87. Senator MCCAIN. General Shinseki, Admiral Clark, General Jones, and General Jumper, is it possible that you may need to increase end strength at some point to replace the National Guard and Reserve service members who eventually will have to come home? If so, what options would you consider to increase our end strength?

General SHINSEKI. Yes, post September 11 events have increased demands on the force, and the Army will likely require an end strength increase to fully meet these demands.

In 1999, the Army started using the Reserve components in the rotational mix in Bosnia and the Sinai to reduce Active component operational tempo. These soldiers have performed magnificently in these enduring missions. Additionally, Reserve component soldiers are supporting emerging, immediate missions—both for the global war on terrorism and for homeland security. These missions, such as airport security, will eventually be turned over to civilian authorities. Mobilizing Reserve component soldiers to meet these immediate requirements is not a long-term solution.

To address the immediate need, the Fiscal Year 2002 Defense Authorization Act permits the Department of Defense to allow the services to exceed their end strength by 2 percent in any fiscal year in which there is a war or national emergency. Taking full allowance of this provision would allow the Army to increase its Active component end strength to 489,600.

The Army can realistically increase recruiting by an additional 4,000 soldiers per year in fiscal year 2003 and fiscal year 2004 to address the most immediate needs of the war on terrorism and homeland security, provide relief for Reserve component soldiers, and allow more time to analyze enduring requirements.

Admiral CLARK. The Navy identified a long-term requirement of 4,383 for anti-terrorism/force protection. These requirements are being filled with Reservists mobilized immediately after September 11. The Navy goal is to replace the Reserve personnel with Active Duty, civilian, and contract personnel. Other Reservists were mobilized to support operational requirements at forward locations or State-side units. These short-term requirements are more suited to be filled from the Reserve Forces. The non-ATFP Reservists will either be demobilized when the requirement for their service subsides, as is already happening for some Reservists, or they will be replaced with more Reservists.

General JONES. The fiscal year 2003 President's budget submission supports an Active Duty end strength of 175,000 and is fully funded. This is an increase of 2,400 over our fiscal year 2002 end strength. The additional 2,400 is the additional force structure required to activate the 4th MEB (AT). The 4th MEB (AT) provides designated supported commanders with rapidly deployable, specially trained, and sustainable forces that are capable of detecting, deterring, and defending designated facilities against terrorism, and conducting initial incident response in the event of chemical, biological, radiological, nuclear, or high yield explosive (CBRNE) terrorist

attacks worldwide. This contingency response force gives our Nation a dedicated anti-terrorism force without degrading personnel readiness in our existing Marine Corps units.

General JUMPER. See answer to question 84.

HOMELAND DEFENSE AND FORCE PROTECTION

88. Senator MCCAIN. General Shinseki, Admiral Clark, General Jones, and General Jumper, would you support a less expensive personnel program that would provide a cadre of people who could do many of the homeland defense and force protection duties that National Guardsmen and Reserve service members are performing at home in the United States and would ease both the active duty and Reserve open-ended commitments that the Department of Defense has put in place following September 11?

General SHINSEKI. While the Army is concerned about personnel tempo and the strains that heightened security requirements place on the force, it is important that any potential policy involving homeland defense and force protection get a thorough inter-agency review. This is especially germane in light of the recently established Homeland Security Office, the decision to stand up Northern Command, and the very high priority the President and Secretary of Defense have placed on defending the homeland.

Admiral CLARK. Approximately 50 percent of Navy's mobilized reserves are serving in Force Protection duties. Navy is working to determine the proper way to transition from Reserve mobilization to the right levels of active and Reserve Forces, while evaluating the appropriate mix of military, civilian, and contractors to provide force protection. The use of less expensive personnel may have a place in an optimized force mix, but could result in greater recruiting, training and permanent change of station expenses. This approach would have to be weighed against meeting the force protection requirements with career force military or civilian personnel.

General JONES. The Marine Corps would support such a program provided the program did not impact on the recruiting, training, and/or readiness of either our regular or Reserve components. In addition, the personnel involved in this program should not count against Active and Reserve component end strength and should not compete with Active and Reserve components for current MPMC/RPMC funding.

General JUMPER. We are always interested in the most effective ways to access quality young men and women into the Air Force. However, reducing expenses does not always translate into producing individuals who meet enlistment standards (education, test scores, physical, moral, etc.) and can complete the required training for the specialty in which they are needed. A cadre of people, if not properly trained and qualified, provides little benefit—regardless of the cost.

NATIONAL SERVICE

89. Senator MCCAIN. General Shinseki, Admiral Clark, General Jones, and General Jumper, if this less expensive personnel program would also offer the added benefit of allowing young men and women to fulfill their ideal of national service, would that be something that you would support?

General SHINSEKI. Yes, a less expensive personnel program that offers the added benefit of allowing young men and women to fulfill their ideal of national service would be something that we would support.

Admiral CLARK. Navy fully supports a military component to National Service. There is considerable merit in tapping into the enthusiasm and patriotism of youth who do not have the propensity to join the military for longer commitments. While Navy has successfully met its recruiting goals with an all-volunteer force for the last three years, a change to the dynamics of the recruiting marketplace could adversely impact Navy's ability to meet recruiting goals in a cost effective manner. This is of particular concern if benefits under a National Service Program for the less expensive, short-term personnel, are perceived in the recruiting market as better than those offered to long-term enlistees. Integrating a cadre of less expensive sailors for short enlistment periods presents challenges in execution, but Navy is prepared to work with Congress to support the President's call for service.

General JONES. See answer to question 88.

General JUMPER. We fully support national service and believe that voluntary military service is an outstanding means for young men and women to serve their country. This fiscal year alone, the Air Force will enlist nearly 38,000 young people to serve in over 130 specialties. Their 4- to 6-year enlistment allows them to garner

state-of-the-art training and experience while allowing the Air Force to recoup its training investment and remain mission ready. Many who do not choose to make the military a career go on to serve in the Air National Guard and Air Force Reserve because they have had the training and experience on Active Duty to make them productive in a Reserve capacity.

90. Senator MCCAIN. General Shinseki, Admiral Clark, General Jones, and General Jumper, Senator Bayh and I have submitted a "Call to Service Act of 2001" to the Senate. We envision this program not as an exact replica of existing, effective career military service programs, but as a complementary, vocational program to match Americans' propensity to serve their country with national community service opportunities, including military service opportunities, that are generally non-career-related and of short duration. The incentives proposed for such service cannot be compared on an apples-to-apples basis with those developed to attract and retain career military service men and women. To attract top-notch national service plan candidates to address immediate, short-term military service needs, our plan would not offer an incentive of TRICARE for Life and the full complement of Montgomery GI Bill benefits. Instead of accruing this tremendous long-term cost, we would propose offering a much more modest severance pay that would permit the National service plan participant to use that money for educational goals or other similar efforts immediately after concluding his or her service. Is this an effort that you and your staff would commit to working on with Senator Bayh and me this year? Please comment on your views regarding national service and more importantly the utility of a military component to national service.

General SHINSEKI. Yes, the Army fully supports national service of any kind and feels your proposal warrants further study. The Army also believes that serving in the military is the purest form of national service, so any national service plan must have a military component. The Army would commit to working with you and Senator Bayh to further study your proposal for possible impacts on recruiting, retention, and attrition and on any bills that may emerge from your proposal.

Admiral CLARK. Navy fully supports a military component to National Service but has some concern over elements of the initiative. In particular, short enlistments with near term benefits that equal or exceed those for long-term enlistments may negatively impact our ability to recruit career oriented sailors in a cost-effective manner. Navy has been working with the Under Secretary of Defense for Personnel and Readiness to develop a program that can meet the needs of the Navy, while also providing an opportunity for short-term enlistments for national service. The Navy is committed to working with the Congress to meet the President's call for service.

General JONES. The Marine Corps stands ready to assist DOD in evaluating the impacts of the "Call to Service Act of 2001." I believe that national service is an important part of our National culture and, each year, the Marine Corps gives approximately 39,000 of America's finest young men and women the opportunity for national service as marines. I share your concern for the need for providing forces for homeland security, yet remain cautious that we not create a program that will impact our ability to recruit, train, and maintain a high state of readiness in both our Active and Reserve components.

General JUMPER. The Air Force fully supports National Service for today's youth and supports in principle Senators McCain and Bayh and your efforts to expand opportunities to serve our country. However, it is our position that the best way to serve in the military is with a minimum 4-year enlistment. Shorter service obligations are not cost effective from a training and operational standpoint and could adversely affect our ability to attract individuals to our high tech needs that have longer training requirements. To ensure future readiness, the Air Force must secure and retain the technically qualified applicants required to maintain our force. The Air Force has very limited "low-tech" opportunities, with most such jobs having been outsourced through privatization. We are able to attract the required number of applicants for our lowest skilled jobs (those that might be appropriate for short-term enlistments) without paying bonuses.

QUESTIONS SUBMITTED BY SENATOR BOB SMITH

COBRA HELICOPTERS

91. Senator SMITH. General Jones, it is understood that the AH-1W to the AH-1Z conversion program is one of Marine aviation's highest priorities. The AH-1Z is not due to be introduced into the fleet until around 2008, and much later for the

Marine Reserve Cobra units. In order to maintain a high level of combat capability in the Reserve Cobras, the issue of upgrading the “first generation” forward-looking infrared radar (FLIR) in these Reserve helicopters needs to be addressed. As a means of increasing combat effectiveness and the usefulness of these Reserve Force helicopters in the counter terrorism and force protection roles, would the Marine Corps favorably support additional authorization and funding to upgrade the Night Targeting System FLIRs used in the Marine Reserve AH-1W Cobra helicopters with third generation FLIR systems pending the arrival of the AH-1Z model to the Reserve Force, and would this have economic cost savings benefits?

General JONES. Yes, the Marine Corps would support the upgrade of the Night Targeting System. The upgrade from a “first generation” configuration to a “third generation” FLIR for the Night Targeting System would enhance the operational capabilities of the USMC Reserves and ensure their warfighting relevance through the year 2015 when they will begin receiving the AH-1Z. The primary benefits with the system upgrade would be in the increased operational capabilities the Night Targeting System provides the Marine Air-Ground Task Force.

INDIVIDUAL EQUIPMENT

92. Senator SMITH. General Jones, one issue I do have a concern with is the Marine Corps’ continued ability to locate, designate, and hand off targets for attack aircraft and the growing importance of active night vision devices and laser pointers for the individual “trigger pullers” who are on the line each and every day. I also understand you are actively working to better improve your ties with, and coordination with, Special Operations Forces. Can you please explain the Corps’ plans to improve their ability to locate, designate, and hand off targets for attack aircraft?

General JONES. The war against terrorism highlighted the complementary capabilities of crisis response forces, the Marine Corps, and forces assigned to the United States Special Operations Command (SOF). Restraints imposed by today’s environment magnify their contribution because they are unencumbered by the requirements for extensive regional infrastructure. Moreover, as demonstrated during the recent campaign, the surgical precision of SOF coupled with the combined arms punch of forward deployed amphibious-based Marine Air-Ground Task Forces prove not only their individual utility, but illustrate the synergy in overcoming specific challenges such as:

- the remote and austere nature of the battlefields where forces prosecute our Nation’s campaign against terrorism;
- host nation concerns regarding the presence of American forces within their borders; and
- the need to conduct strike operations while maintaining increased operational security.

The recent events highlighted the need to establish service-level links between SOCOM directorates and their counterparts within the Marine Corps to develop detailed areas of mutual interest spanning the entire continuum of service level concerns. We believe this will enhance the mutual support our two organizations can provide one another. Through a recently signed Memorandum of Understanding (MOU) between the USMC and SOCOM, the focus of effort will be to:

- examine current capabilities and missions in order to leverage the unique capabilities of each organization, thus enhancing interoperability;
- establish and continue the interface between CONUS-based and theater-based SOF and deploying Marine Air-Ground Task Forces; and
- synchronize USSOCOM and USMC warfighting developments, as well as material research and procurement initiatives.

We believe the USSOCOM–USMC Board is a forum for Special Operations Forces (SOF) and the Marine Corps to interface and coordinate with regard to common mission areas and similar procurement initiatives.

How will we continue to improve target identification and designation using night vision devices and laser target designators? There is one program of record: Target Location, Designation, and Hand-off System (TLDHS). TLDHS is a Modular Universal Laser Equipment (MULE) replacement with an IOC of 4th quarter, fiscal year 2004. TLDHS can both target locate and designate and has night thermal capability. The Marine Corps Systems Command (MCSC) is looking at an interim Laser target location fix through a commercial off-the-shelf (COTS) solution that could make a binocular type device available this summer. An interim designator COTS solution would take 11 months manufacturers lead time to produce.

As a result of 15th MEU Aviation Command Element (ACE) Operation Enduring Freedom lessons learned and back briefs from the Marine Corps Combat Action Team, the Commanding General, Marine Corps Combat Development Command, signed a Statement of Need (SON) for the immediate procurement of 180 precision targeting systems. Presently, the Marine Corps employs the AN/GVS-5 Laser Observation Set to assist fire support observers in determining distance to a target. The AN/GVS-5 does not determine azimuth or inclination, which are critical in determining an accurate target location (target grid coordinate generation). It does not possess a data interface capability. Operating Force feedback and experimentation have identified the deficiencies of this legacy system. MCSC has a funded program called the Advanced Eye-Safe Laser Rangefinder (AEROS), which addresses the same requirement; however, programmatic dictate a system will not be fielded until fiscal year 2005. Through market research, MCSC has identified a commercial off-the-shelf (COTS) solution (Leica Vector/Viper II) to meet the SON (also being used presently by SOCOM in response to their Combat Mission Needs Statement). While this solution does not completely meet the requirements spelled out for AEROS, it is immediately available in mass quantities and does meet the requirements of the SON. MCSC evaluated this system the week of March 25, 2002. If funding could be identified and a production decision reached, the Leica Vector could be available to the operating forces as early as June 2002. The PTS-180 program will also serve as a test bed for the AEROS program, providing feedback on current capabilities and impacting future operational requirements. AEROS is not a redundant program to TLDHS. EROS is a separate program meant to compliment TLDHS' capabilities.

93. Senator SMITH. General Jones, can you provide an explanation on the Marine Corps' operational plans for utilizing night vision devices, both passive and active systems, to improve their ability to "own the night?"

General JONES. The Night Enhancements Capabilities for the Marine Air-Ground Task Force (MAGTF) (1995-2004) study conducted in 1993 provided the basis for subsequent night vision requirements definition and acquisition strategy. Drawing from the results of the study, the Marine Corps Combat Development Command (MCCDC) developed the Aided Battlefield Vision Implementation Plan (ABVIP) which provides direction for the experimentation, requirements determination, materiel development, and fielding of equipment designed to enhance the warfighter's battlefield vision. Following the publication of the ABVIP, MCCDC reviewed the Marine Corps' night vision requirements and determined that there were sufficient night vision devices in the inventory, however, they were not in all cases distributed correctly. Subsequently, the Commanding General, MCCDC, in the Night Vision Equipment Redistribution Plan of August 25, 1997, directed the redistribution of night vision devices throughout the Marine Corps. In order to update the results of the 1993 study and to account for technological changes, emerging threats, and tactical requirements associated with Expeditionary Maneuver Warfare, MCCDC will conduct a MAGTF Optical Capabilities Study which is scheduled to begin third quarter, fiscal year 2002. This study will assist us in determining our overall non-aviation and non-vehicular optical requirements by providing an operational requirements analysis and a cost benefit comparison of various materiel alternatives. The analysis will include impact assessments related to life cycle costs, training requirements, and operational readiness. The results of the study will provide the foundation for future night vision equipment acquisition initiatives.

PERSONNEL—QUALIFIED LINGUISTS

94. Senator SMITH. General Jones, I have seen several press accounts indicating that we may not have had sufficient numbers of linguists trained in the languages spoken in Afghanistan, such as Dari and Pashto, to communicate with the locals as quickly as we would have liked. As a force provider who works for and with the regional commanders in chief, and in preparing expeditionary units ready to respond around the world, do you have enough foreign language speakers in the appropriate language skills to provide the essential link between your forces and the native populations? Would you have like to have more, and do we need more language training programs? Last year we succeeded in enacting a provision that authorizes service secretaries to permit service members with critical skills to transfer up to half of their benefit to family members in return for a service commitment. This proposal gives the DOD and the services significant flexibility in how it is implemented. Would you outline what plans you have for using this new retention tool?

General JONES. In 1996, Headquarters Marine Corps established the 8611 Additional Military Occupational Specialty (AMOS) to identify marines with critical heritage foreign language skills to serve as interpreter/translators. In 1999, Headquarters Marine Corps initiated an aggressive effort to more accurately screen and identify all heritage foreign language speakers as they entered our ranks. The early identification of heritage speakers in "less-commonly-taught" languages such as Dari, Urdu, and Pashto and the assignment of these heritage language speakers as translators were essential in allowing the Marine Corps to meet emerging contingency foreign language requirements.

Under the Marine Corps' Language Identification Program (LIP), marines are screened during the recruiting process. Those determined to have heritage foreign language skills then have their language proficiency validated for potential future assignment. The success of this effort over the last 2 years has been demonstrated by the identification of thousands of native speakers who can be temporarily assigned additional duty as translators/interpreters, thereby ensuring that foreign language skilled marines in intelligence billets can remain focused on their assigned primary mission.

During 1998, in an effort to stabilize manning of the Intelligence Occupational Field, Headquarters Marine Corps temporarily doubled the number of basic language seats at the Defense Language Institute (DLI). As a result, the Marine Corps currently has approximately 320 Modern Standard Arabic (MSA) speakers in the Active Force. MSA is a common language linking the myriad extremist groups targeted in support of Operation Enduring Freedom (OEF). This robust inventory of Marine MSA speakers is a considerable asset that can be leveraged in response to emerging OEF foreign language requirements.

The Marine Corps continues to search for more efficient ways to identify, screen, and train marines with foreign language skills to support operational and intelligence requirements. The Marine Corps' foreign language requirements are identified by the Marine Operating Forces in response to planning guidance via the assignment of appropriate Military Occupational Specialty (MOS) billets on unit Tables of Organization (T/O). Given the constraints of authorized Marine Corps end strength and the large set of languages required to meet projected military missions, the Marine Corps has traditionally focused its foreign language training program on those core languages spoken in areas where large-scale military action is either planned or anticipated. The small population of marines with heritage foreign language skills in the "less-commonly-taught" languages such as Dari, Urdu, and Pashto has been augmented through the Headquarters Marine Corps directed action of selectively cross-training existing linguists at the DLI, and through the conduct of un-programmed contract language courses in a subsequent language. Additionally, as requirements are validated, marines are selectively recruited and cross-trained in these "less-commonly-taught" languages during lateral moves into a new MOS or during reenlistments.

During 1999, Headquarters Marine Corps initiated a comprehensive review of the Marine Corps' foreign language requirements. As a result of this review, the Marine Operating Forces were directed to determine their existing and anticipated foreign language requirements in an effort to better identify and project both the number of speakers and the variety of languages they require. In March 2001, the Director of Intelligence (DIRINT) approved a plan to restructure the intelligence occupational field to meet the increase in requirements for speakers in "less-commonly-taught" languages. Implementation of the plan in February 2002 resulted in the Headquarters Marine Corps directed modification of unit T/Os, leading to the addition of 122 intelligence linguist billets in a variety of "less-commonly-taught" languages. The Marine Corps is now executing a 5-year plan to recruit and train a sufficient number of marines to fill these newly identified billets.

Following the September 11 terrorist attacks on the United States, the Secretary of Defense tasked the services to identify emerging language training requirements to support the OEF campaign. Headquarters Marine Corps compiled a list of projected language requirements and, in cooperation with the DLI, implemented a training plan in December 2001 to satisfy the identified training shortfalls. The aggressive assignment of heritage language speakers as translators, combined with the quick response of DLI in setting up language training courses to meet the Marine Corps' contingency training requirements, has allowed the Marine Corps to successfully meet its current operational language requirements.

HANDHELD STANDOFF MINE DETECTION SYSTEM (HSTAMIDS)

95. Senator SMITH. General Shinseki, I understand that the Army, in response to critical needs in Afghanistan, will speed up the production of the new HSTAMIDS in order to field approximately 200 of these devices within the next 12 months. I applaud the service for its decision. Landmines present a serious threat to U.S. personnel and their allies, to say nothing of the civilian population. Equally clear, the low metallic content of most of today's landmines just screams for the deployment of this new mine detector, which is the best we have in picking up such mines. What concerns me is the overall production schedule of the HSTAMIDS. I note that after this emergency, there is no money for production in the fiscal year 2003 budget, and that everything seems to revert back to the pre-September 11 production schedule, calling for production to begin in fiscal year 2004 and of only a nominal quantity of less than 90. To abruptly stop the production is a significant cost to both the Army, with respect to unit costs, and to the manufacturer. Given the need and the economics of production, I would urge the Army to seriously examine speeding up the production schedule. The recent "emergency buy" clearly demonstrates there is a requirement for the new mine detector. I would like to know what plans the Army has for accelerating the production of the HSTAMIDS. I understand the recent buy is a one-time deal, and after that production reverts to the original slow-crawl schedule of less than 90 devices in fiscal year 2004. If that is so, it seems to me we're placing an unnecessary tax on the Army and the American people by this uneven production schedule. Can you tell me whether the Army plans to accelerate its production in fiscal year 2003 and beyond?

General SHINSEKI. As you have indicated, the Army has aggressively accelerated fielding of the HSTAMIDS system to support our troops participating in Operation Enduring Freedom. This acceleration will result in the emergency release of approximately 200 systems over the next 12 months. These systems will be tested prior to use by our troops under the specific conditions expected in Afghanistan. Production of this limited quantity of systems does not qualify it for full-rate production and use under all possible operating conditions.

Additional development is required to complete the remaining testing and pre-production engineering. This development will result in a superior detector for use by soldiers in the long term. Continued low-rate production for operational contingencies has not been ruled out at this time.

ENVIRONMENTAL ENCROACHMENT

96. Senator SMITH. General Shinseki, Fort Lewis, the home of the 1st Special Forces Group, has had 72 percent of its ranges designated for critical habitat, severely limiting training. Fort Lewis also sits above an EPA-designated sole source aquifer. Regulatory restrictions have the potential to curtail training even more. How will you work within the Army and with other departments to make sure that the training of Special Operations Forces are not degraded from the loss of these ranges?

General SHINSEKI. Special Forces training is comprised primarily of small arms weapons fire and dismounted maneuver. The 1st Special Forces Group has conducted this type of training in a manner that either avoids critical habitat or works within established restrictions. To date, they have been able to minimize the impact that endangered species restrictions have on their operations on Fort Lewis without unacceptably diminishing training effectiveness.

The Army is currently monitoring groundwater and surface runoff at Fort Lewis to ensure that explosive constituents do not negatively impact the surrounding communities. Fort Lewis is working with the State of Washington, the Environmental Protection Agency, and the Nisqually tribe as they plan and analyze results of this monitoring effort.

Fort Lewis recently held an installation sustainability conference with the local community and regulators to discuss a wide variety of training and environmental issues, including the effects of endangered species on military training. Outreach and partnership with the local community is critical to ensure continued community support for our major installations.

The Army as a whole is working internally and with other agencies with environmental regulatory responsibilities to mitigate the effects and potential effects that encroachment has on our training and readiness. Our principal internal effort is the Sustainable Range Program (SRP). The objective of SRP is to maximize the capability, availability, and accessibility of ranges and training land to support training and testing requirements. SRP is based on three tenets: (1) Scientifically Defensible Information. Develop and maintain complete data on all aspects of ranges—oper-

ational characteristics of training facilities, physical characteristics of real property, and data on the range as part of the natural and cultural environment; (2) Integrated Management. Integrate across the four disciplines that directly affect ranges: range operations and modernization; facilities and installation management; explosives safety; and environmental management; and (3) Outreach. Inform political leadership, regulators, and communities and improve understanding of the Army's need for training and resting and the Army's more sophisticated range management approach.

Although we believe our efforts will minimize the impacts of encroachment on our ranges and training lands, we also recognize the need to clarify the application of several environmental laws to military testing and training. The Army has been working with our sister services and the Office of the Secretary of Defense to develop initiatives that clarify our responsibilities under variety of environmental statutes. These initiatives focus on supporting our training activities and allow flexibility to consider impacts to military readiness in the implementation of environmental statutes.

97. Senator SMITH. General Jumper, the Air Force Special Operations Command (AFSOC) at Hurlbert Field faces challenges of an expanded mission while suffering from shrinking airspace due to proposed commercial air routes, noise restrictions, and over scheduling. What will you do to see that the only AFSOC range on the Atlantic Coast is protected from these urban encroachments?

General JUMPER. This is an important issue for the Air Force as well as for Americans across the country. Air Force requirements need to be met while addressing public, State, and Federal concerns. We require adequate airspace and land space to train our forces and test our weapon systems under realistic combat conditions. We are actively working with the Federal Aviation Agency (FAA) in their national airspace redesign effort to ensure we maintain our needed airspace both now and in the future. Noise issues are generally local and we strive to work with the local governments to encourage compatible development with our military mission. Therefore, the key solution to the Air Forces' encroachment issues is outreach, which includes building partnerships and coalitions with our local communities around our installations and ranges. Florida, specifically has initiated state level activities that are supported by military representatives. Finally, this issue is not limited to the Air Force, and proactive efforts alongside the other services and agencies will help fully meet this challenge.

98. Senator SMITH. Admiral Clark, the Navy SEALs have lost considerable live-fire and demolition training at Coronado and San Clemente Island in California due to critical habitat designations. What will you do to see that your SEALs do not lose any more valuable training?

Admiral CLARK. The OSD Readiness and Range Preservation Initiative coming forward to the Congress will aid in addressing these concerns while still meeting our environmental responsibilities. Also, the Navy is currently evaluating a sustainable range program in the fiscal year 2004 budget process to improve our management of range resources.

AERIAL REFUELING SHORTAGE

99. Senator SMITH. General Jumper, the special operations community has made a heroic account of themselves in the war in Afghanistan. The innovation, daring, and bravery of these troops played a major role in our successes in the conflict. We must give these people on the tip of the spear our utmost support. Lt. Gen. Paul Hester, Commander of Air Force Special Operations Command, recently said that there has been an acute shortage of tanking capability for our Special Operation Forces. He said last week that only about 36 percent of tanking requests are being met. Since then, we have suffered the loss of one of our MC-130 tankers. What is being done in the fiscal year 2003 budget to correct this deficiency and what are the long range plans to ensure our special operators have the tools they need to carry out their missions?

General JUMPER. SOF-unique requirements are funded by USSOCOM using MFP-11 dollars. The tanking requests referenced in this statement are for refueling both USA and USAF SOF helicopters. The shortage referenced is calculated using Active-Duty Forces only. When USMC and Reserve forces are used for augmentation, support increases to 67 percent. In the USSOCOM fiscal year 2003 APOM, an AFSOC initiative to outfit 24 MC-130H Talon II aircraft as tankers was funded through MFP-11. This initiative will increase AFSOC's special operations C-130 re-

fueling capable fleet from 37 aircraft to 61. The recent loss of one MC-130P during the war on terrorism in Afghanistan is factored in this total.

C-17 SAFETY ISSUES

100. Senator SMITH. General Jumper, it is my understanding that the Air Force is experiencing operational limitation issues with the C-17 attributable to the existing On-Board Inert Gas Generation (OBIGGS) fuel tank inerting system. What failure rate per flight hour are you currently experiencing with the existing C-17 OBIGGS when it is used?

General JUMPER. For the last 12 months, the C-17 OBIGGS has had a Mean Time Between Failure (MTBF) rate of 185.3 flight hours.

101. Senator SMITH. General Jumper, can you please describe your plans for developing a new OBIGGS for the C-17 to replace the existing system?

General JUMPER. The AF has been developing a more robust, simpler in design, less costly, and more reliable On Board Inert Gas Generating System (OBIGGS II). The 2-year development program is a fiscal year 2003 new start.

102. Senator SMITH. General Jumper, where is the development of a new OBIGGS or its replacement in your priority list?

General JUMPER. Air Mobility Command and Boeing have a planned replacement for the current OBIGGS system for the C-17. Replacement of the current C-17 OBIGGS is not tracked on an Air Force-Level priority list.

GLOBAL POSITIONING SYSTEMS

103. Senator SMITH. General Jumper, with the increasing reliance on Global 7 Positioning Systems (GPS), both in terms of our military and in the civil sector, it seems we should be very clear in our minds where we are headed with GPS issues such as frequency protection, military versus civilian control, signals, power, accuracy, and international involvement. I have not seen a clear plan for the future of GPS and how it will continue to support national security objectives while the commercial use of the system expands. Are we working on one? Are we making sure we focus on all elements of the system, both long and short term?

General JUMPER. GPS Modernization is based on numerous studies, Presidential Directive, and statute, which all recommend enhancements. A modernization plan was briefed to Congress in 2000 to initiate the upgrade of GPS in response to the jamming threat as well as the national policy to encourage civil use of the system without degrading military utility. Short term efforts are focused on modifications to Block IIR and Block I satellites as well as associated user equipment upgrades (to include antijam antennae). Longer term efforts are derived through GPS III, which provides maximum antijam benefits that are practical from space along with new user equipment to take advantage of the modernized signals and upgraded digital antenna electronics.

Prudent constellation management provided the opportunity to modernize satellites currently in storage. The current plan is to modify 10 IIR satellites (referred to as IIR-M) by adding a second civil signal and new military signal (first launch in fiscal year 2003). The IIF satellites will incorporate a third civil signal, L5 (first launch in October 2005). GPS III will include higher power military signals (first launch in fiscal year 2009).

GPS User Equipment consists of standardized receivers, antennae, and antennae electronics grouped together in sets to derive navigation and time information transmitted from GPS satellites. Due to the increasing military dependence and emerging Electronic Warfare (EW) threat, the Navigation Warfare (Navwar) program was established to address EW solutions for GPS. Key elements of Navwar include protecting U.S. military and allies' use of GPS, preventing hostile exploitation of GPS, and preserving civil use of GPS outside the area of operations (AOO).

PORTSMOUTH NAVAL SHIPYARD

104. Senator SMITH. Admiral Clark, I would like to first thank you and Secretary England for your attentiveness to my concerns for the engineered refueling overhaul of the U.S.S. *Albuquerque* last year. Representatives from the Navy have informed me that the U.S.S. *Albuquerque* will be completed under schedule and within cost. Even though we encountered a bump in the road concerning the reprogramming of funds for the U.S.S. *Albuquerque*, I believe the fact that the U.S.S. *Albuquerque*

work will be completed at a fixed price, under schedule, and within cost speaks volumes for Portsmouth Naval Shipyard's capabilities and its worth to the Navy. I do have another concern regarding Portsmouth Naval Shipyard (PNSY). The U.S.S. *Annapolis*, which was scheduled for a Depot Maintenance Period (DMP) in fiscal year 2003, is now unfunded for fiscal year 2003 and is being scheduled for a DMP in fiscal year 2004. As I understand it, this will create a workload gap, losing 40,000 man-days at PNSY. I am concerned about the gap in workload at PNSY due to the slippage of overhaul work on the U.S.S. *Annapolis*. According to the Navy, this was done to assist the Navy in meeting "wartime requirements," and it is desirable to fund the U.S.S. *Annapolis* in fiscal year 2003. However, the fiscal year 2003 budget was submitted without U.S.S. *Annapolis* at PNSY in fiscal year 2003 workload. When will the work be done on the U.S.S. *Annapolis*?

Admiral CLARK. The fiscal year 2003 workload phasing challenge at PNSY is primarily driven by the difficult decision to delay the U.S.S. *Annapolis* Depot Modernization Period (DMP). Delaying this DMP was considered the best option to fund Navy priorities within our financial resources.

The Navy is continuously evaluating the scheduling of ship availabilities to achieve the highest state of readiness balanced against shipyard workload and efficiency considerations. In formulating the fiscal year 2003 budget, the Navy carefully considered workload at PNSY. The budgeted workload is consistent with fiscal year 2002 budgeted levels.

The Navy considers several factors when assigning submarine availabilities. They include:

- (a) Assignment of effort to an industrial facility near the ship's homeport;
- (b) Maintaining reactor servicing skill levels; and
- (c) Avoiding, to the extent practical, major shifts in workload levels across all the shipyards.

The Navy is in the process of evaluating availability assignments through the FYDP. All four of the naval shipyard commanders are part of the planning process. Their inputs are extremely valuable as the Navy goes through the difficult effort of achieving the optimum balance between fleet readiness, fiscal realities, and shipyard workloading.

105. Senator SMITH. Admiral Clark, what are the plans to ensure the people at PNSY are not laid off or to ensure the workload is equally distributed due to the gap in coverage?

Admiral CLARK. We recognize that the expected phasing of the planned work at PNSY over the course of fiscal year 2003 is not optimum. There is value in level loading the workload, and we are reviewing options to achieve this at PNSY. I understand your concerns and assure you that we are actively working to provide an appropriate workload for PNSY within our budgetary constraints. There are no plans for layoffs at PNSY; we are committed to ensuring the continued efficiency and contribution to the Navy of the PNSY workforce.

106. Senator SMITH. Admiral Clark, additionally, I would like your insight into why the required funds to support the war were not paid for using the money specifically allocated for the war effort?

Admiral CLARK. All ship maintenance costs associated with the war on terrorism have either been accommodated with Defense Emergency Response Funds or are included in the supplemental request currently before Congress.

QUESTIONS SUBMITTED BY SENATOR RICK SANTORUM

ARMY TRANSFORMATION

107. Senator SANTORUM. General Shinseki, the Army has terminated 18 programs and/or systems as part of the fiscal year 2003 request. There have been 29 cancellations and 12 restructures since the unveiling of the "transformation" initiative. Among the terminations for fiscal year 2003 are TOW Fire-and-Forget, M113 recapitalization, Armored Combat Earthmover, Wolverine, Hydra Rocket, Improved Recovery Vehicle, and Bradley Fire Support Team. Is the Army or the Office of the Secretary of Defense (OSD) expecting Congress to "buy back" these terminations? Put another way, should Congress expect to see these programs/ systems on the Army's unfunded requirements list? While 18 programs/systems have been terminated, have the requirements that supported these programs gone away?

General SHINSEKI. To achieve the goals of Army Vision, we will transition to a force that is strategically responsive and dominant across the full spectrum of oper-

ations. To achieve this vision, the Army has planned to transform across three axes: the Objective Force, the Legacy Force, and the Interim Force. This is critical to force shaping and maintaining our current capabilities to fight and win today's wars while preparing for the battles of the future.

To ensure that we maintain a capability that guarantees warfighting readiness that supports the National Military Strategy, we have had to make hard choices regarding the modernization of the Legacy Force. During the last year, the Army terminated 18 programs that are not planned for the Objective Force. Eleven of those programs will be terminated in fiscal year 2003, while the remaining seven will be terminated between fiscal year 2004 and fiscal year 2007. The funding associated with these 18 systems has been reprogrammed to support higher priorities. We will not buy back any of the terminated systems through the unfunded requirements process. Rather, we will fund research, development, and acquisition for next generation solutions for the requirements to support the Objective Force.

INTERIM ARMORED VEHICLE

108. Senator SANTORUM. General Shinseki, press reports note the majority of the Army's new Interim Armored Vehicles (IAV) are too heavy to fly in C-130 transport aircraft, a key requirement of the new Interim Force. Army documentation notes that "8 of the 10 IAV variants exceed the load limits for the C-130; much of the support equipment is overweight/oversize as well." The non-compliant IAVs are the fire support and medical evacuation vehicles. The Army's Interim Brigade Combat Team (IBCT) program office has confirmed that some of the vehicles currently exceed the 38,000-pound weight limit to fly on a C-130, with the mobile gun system (MGS) exceeding the maximum by 3,000 pounds. The MGS had weighed as much as 45,000 pounds until an "aggressive" weight reduction program. The four requirements for the IAV are: C-130 transportability; carry a nine-man infantry or engineer squad and a crew of two; communications interoperability among the 10 vehicles; and 105mm cannon be able to destroy bunkers. In order to be C-130 transportable, the weight of the IAV cannot exceed 38,000 pounds. The Army plans to field the first IBCT by May 2003. The first IBCT will contain three surrogate vehicles, MGS, fire support, and nuclear, biological, and chemical reconnaissance vehicle, because not all variants will be available by May 2003. Can you execute this program within the time limits you have set and the total cost estimate given by the Army?

General SHINSEKI. Yes. The IAV program is executable within the established schedule and funding. We are confident that the Stryker will be able to meet the weight requirements. Vehicle weight is only one transportability consideration. Operational mission, range and payload, axle loading, and exterior dimensions also bear on vehicle design. Weather, altitude, and airfield surface conditions may also impact operations. The allowable weight to fly 1,000 miles under normal operating conditions is 38,000 pounds. All Stryker configurations are C-130 deployable today, though several require cross loading of some equipment. By prioritizing load lists for the eight production configurations and closely managing weight on the two developmental configurations, we will meet our C-130 transportability goal of 1,000 nautical miles, ready for immediate combat operations.

F-22 RAPTOR

109. Senator SANTORUM. General Jumper, on the basis of concern expressed by this and other congressional committees, Congress imposed a cost cap on both the developmental and production costs associated with the F-22 Raptor in the National Defense Authorization Act for Fiscal Year 1998. As part of its work on the National Defense Authorization Act for Fiscal Year 2001, this committee provided 1.5 percent relief from the development cost cap for the F-22. Last year, this committee led the way to repeal the F-22's development cost cap during deliberations on the Fiscal Year 2002 National Defense Authorization Act. Congress has not adjusted the production cost cap. The current Air Force procurement goal is 339 F-22s, well short of the initial 750 F-22s the service intended to purchase. Estimates are that the Air Force will need to procure 381 F-22 Raptors to fill out 10 squadrons for its aerospace expeditionary forces. Currently, the Air Force estimates that the F-22 program is \$2 billion above the congressional cost cap for production, while the Office of the Secretary of Defense's Cost Analysis Improvement Group (CAIG) estimates the program to be \$9 billion over the production cost cap. Congress has since learned of additional developmental test problems and a unit production cost increase. Reports are that the Air Force has begun lobbying members of Congress to either lift or modify the F-22 production cost cap. Can you address whether or not

the Air Force supports efforts to lift or modify the F-22 production cost cap? Have you had any discussions with members of this committee about lifting the production cost cap?

General JUMPER. OSD requested, "Congress remove the current production cost cap for the F-22 program" in a September 13, 2001, letter to the Defense Committees. OSD will be submitting a separate legislative initiative on this subject.

The F-22's combination of stealth, supercruise, maneuverability, and integrated avionics coupled with improved supportability, represents an exponential leap in warfighting capabilities and allows for the full realization of operational concepts that are vital to the 21st century Air Force. Using GPS guided bombs, the F-22's all-aspect stealth offers the capability to penetrate deep into enemy territory and destroy our greatest future threat—the next two generations of double-digit Surface to Air Missile (SAM) systems. Avionics improvements in the F-22 fire control system will enable it to engage mobile ground targets in any weather, 24-hours a day, deep within enemy territory. The future incorporation of the Small Diameter Bomb will double its precision capacity and result in a two-fold increase in effectiveness. With its internal weapons storage, the F-22's increased range and maneuverability will allow it to defend itself and protect the F-117 and the B-2, facilitating stealth operations to counter enemy attempts to deny access. The F-22 will enhance the joint fight by gaining and maintaining air superiority, thus providing ground, naval, and special operations forces with unimpeded access to their targets. Finally, the F-22 cannot be matched by any known or projected adversary aircraft. This transformational combat system will allow the Air Force to replace more than 700 air-to-air F-15Cs and air-to-ground F-15Es with F-22s. The Air Force will work within the production cap identified as part of the Defense Acquisition Board's Low Rate of Initial Production of between 303 and 339 aircraft. The F-22 will enable the world's premier air and space force to deliver air dominance in any threat environment for decades.

PRECISION MUNITIONS

110. Senator SANTORUM. General Jumper, the success of U.S. military operations in Kosovo and Afghanistan is due in large part to our inventory of precision munitions, both Joint Direct Attack Munitions and Laser-Guided Bombs. Like many members of this committee, I support the competitive procurement of weapons systems and munitions. I want to commend Admiral Clark and members of the Navy's acquisition corps who have been strong advocates for the competitive procurement of Laser-Guided Bombs. Do you, on behalf of the Air Force, support the competitive procurement of Laser-Guided Bombs?

General JUMPER. The Air Force absolutely supports the competitive procurement of Laser-Guided Bombs (LGBs) in fiscal year 2003 and beyond, contingent upon a second source becoming qualified and provided the operational requirement allows time for a competition. Even for those requirements that are urgent, the Air Force will employ a strategy that includes all qualified sources. In order to foster competition, the Air Force is in the process of qualifying Lockheed Martin as a second source for Paveway II LGBs.

111. Senator SANTORUM. General Jones, it appears that the Marine Corps has a shortfall in fire support. The DD-21, which was slated to provide offshore fire support, was restructured last year. The Land-attack Standard Missile, fitted with advanced navigation system and guided by GPS to provide the required range and accuracy needed to support Marine Corps power projection from the shore, has been canceled with this budget. The Lightweight 155 field artillery system has slipped, impacting modernization of the on-shore field artillery. How do you plan to address this apparent shortfall in Marine Corps fire support requirements?

General JONES. The Marine Corps' ground fires programs are addressing the need to field fire support systems to support Expeditionary Maneuver Warfare. The Lightweight 155 program is still on track for a production decision early in fiscal year 2003, and although the projected IOC has slipped 6 months, it is still on schedule to meet our IOC objective in fiscal year 2005. Fiscal year 2005 we will also introduce an interim High-Mobility Artillery Rocket System (HIMARS) capability with the fielding of one functional battery, with IOC to follow in fiscal year 2007, and the fielding of two HIMARS battalions. We are also pursuing an Expeditionary Fire Support System (EFSS) solution in POM04 that will provide an enhanced fire support capability to vertically-lifted maneuver forces. Planned IOC for EFSS fiscal year 2006-2007.

A credible Naval Surface Fire Support (NSFS) program is a critical component of forcible entry from the sea, especially during the critical time before the landing force's organic fire support systems can be established ashore. Three specific programs will significantly enhance NSFS capabilities through the mid-term (to fiscal year 2009); the 5 inch/62 caliber naval gun, the Extended Range Guided Munition (ERGM), and Supporting Arms Coordination Center (SACC) Automation. Although these systems will provide an enhanced NSFS capability, all of our NSFS requirements will not be met until DD(X) joins the fleet in strength. In the interim, we will continue to rely heavily on carrier and amphibious-based rotary and fixed wing close air support. Tactical attack aircraft, however, do not provide an all-weather, 24-hour, immediately responsive fire support capability that ground and naval surface fire support systems provide.

DD(X) is a vital component of expeditionary fire support and is essential if we are to realize the full potential of Expeditionary Maneuver Warfare in the far-term. The systems envisioned for DD(X), which include the 155mm Advanced Gun System and the Advanced Land Attack Missile, are essential elements of an expeditionary fire support system that will provide responsive, all-weather fire support "from the sea" in support of forces operating throughout the depth of the littoral battlespace.

I am concerned, however, that DD(X) will be fielded with less warfighting capability and in fewer numbers than previously planned for DD-21. The magazine capacity of DD(X) must be sufficient to provide sustained fire in support of Marine, joint, or coalition forces ashore, and there must be a sufficient number of ships available to sustain these fires for extended periods of time. Additionally, there must be enough Vertical Launch System (VLS)/Advanced Vertical Launch System (AVLS) cells dedicated to the Advanced Land Attack Missile (ALAM), which will provide the Landing Force Commander with responsive, medium-range interdiction and battlespace shaping fires throughout the duration of operations.

AMMUNITION INDUSTRIAL BASE

112. Senator SANTORUM. General Shinseki, Admiral Clark, General Jones, and General Jumper, according to recent testimony, the Air Force has a \$2 billion shortfall in its munitions accounts. For reference, the Department of Defense spent about \$6 billion on munitions in fiscal year 2001, compared to \$16 billion in fiscal year 1991. Recently, Colonel James Naughton, Deputy Chief of Staff for Ammunition, Army Materiel Command, said that there is not enough money to remanufacture obsolete ammunition stockpiles. While the budget increases funding for the procurement of "smart munitions," the portion of the industrial base that manufactures bullets, projectiles, propellants, fuses and pyrotechnics is not thriving. In addition, many of the subcomponents in the ammunition sector are military-unique items, with limited or no commercial market. An industry association, the Munitions Industrial Base Task Force, believes that our munitions accounts are underfunded by \$400 million. What actions can be done to shore up the entire ammunition industrial base, not just the precision or preferred munitions base?

General SHINSEKI. The best way to support the munitions industrial base is to buy ammunition. The end of the Cold War gave us a surplus of ammunition, but now that stockpile is either depleted or aged. Currently, the Army has a \$544.4 million unfunded requirement for ammunition, which includes stockpile management. Much of this ammunition UFR is for common use ammunition items such as small arms, pyrotechnics, artillery, mortars, and grenades. Funding procurement of these items would go a long way towards shoring up many of these critical, niche producers.

Admiral CLARK. The Department of the Navy (DON) supports the strategies developed by the United States Army, which acts as the Single Manager for Conventional Ammunition (SMCA). The Secretary of the Army was designated the single manager because the Army controls the majority of the industrial base. One of the more important functions of the SMCA is management of the Defense ammunition industrial base. To that end, Assistant Secretary of the Navy for Research, Development, and Acquisition has recently coordinated a memorandum that reminds and emphasizes the intent and importance of Section 806 of the National Defense Authorization Act for Fiscal Year 1999. The Act tasks the SMCA to examine the industrial base and make procurement decisions, which help to underpin the vitality of the ammunition industrial base. The DON is encouraged by the SMCA's implementation of multiyear procurements and long-term requirements contracts.

The DON will continue to investigate management architectures and SYSCOM relationships that satisfy warfighter needs, stabilize requirements and inventories, and yet still allow the industrial base flexibility enough to respond to inevitable

wartime surge demands. The Navy has also commissioned studies by Department of Commerce to examine the health of those portions of the industrial base where there is concern about the strength of the enterprise (e.g., high performance explosives).

The ammunition industrial base has suffered in the past, and the DON is working closely with our partners on the Munitions Industrial Base Task Force to help ensure that this important element of our industrial capacity is preserved.

General JONES. The majority of the responsibility for maintaining the munitions industrial base rests with the U.S. Army. The Secretary of the Army was designated the Single Manager for Conventional Ammunition (SMCA) as the Army controls the majority of munitions procurements which drives the industrial base. The United States Marine Corps supports the strategies developed by the U.S. Army in their role as the SMCA. The Marine Corps shares the concern over the stability of the industrial base and feels one of the most important roles the SMCA has is the management of the munitions industrial base. The Marine Corps understands the importance of Section 806 of the National Defense Authorization Act for Fiscal Year 1999 and to the extent possible "buys American." The act tasks the SMCA to examine the industrial base and make procurement decisions, which help to underpin the vitality of the ammunition industrial base. The Marine Corps continues to be supportive of the SMCA's implementation of multiyear procurements and long-term requirements contracts as tools to encourage stability in the industrial base.

The Marine Corps is working closely with the Munitions Industrial Based Task Force and the Army to develop a sound munitions industrial base that meets the needs of the services both in times of peace and war.

General JUMPER. The Air Force shares your concern about the health of the ammunition industrial base. Since the end of the Cold War, the Air Force has shifted its emphasis more towards precision-guided munitions, reducing the need for non-precision munitions. However, there are niches in the ammunition industrial base that warrant continual attention. In addition to funds already provided for the munitions and ammunition industrial base since September 11, a number of acquisition excellence strategies, such as multiyear procurement, contractor incentives, and lean enterprise practices, could be incorporated to support and strengthen the entire ammunition industrial base.

Successful application of these strategies could enhance corporate financial health and stockholder value by increasing a contractor's ability to capture corporate profits and realize sufficient returns on investment. This, in turn, could lead to expanded growth for both contractors and their supply chain plus a greater potential for attracting investors, recruiting fresh talent, and retaining valuable expertise. In addition, the Government could realize improved schedule performance, reduced cycle times, and reduced acquisition costs throughout the industrial enterprise as a result of these strategies.

Since the Army is the Department of Defense's Single Manager for Ammunition, responsible for consolidating Army, Navy, and Air Force ammunition procurements, we believe they would be in the best position to implement these strategies. Similar strategies were successfully incorporated in the Air Force's recent procurement of precision-guided munitions (e.g., Joint Direct Attack Munitions), and the Air Force would support the Army's efforts to implement these strategies.

QUESTIONS SUBMITTED BY SENATOR WAYNE ALLARD

SPACE-BASED CAPABILITIES

113. Senator ALLARD. General Shinseki, Admiral Clark, General Jones, and General Jumper, each of your services have described space-based capabilities as an enabler for transformation. Can each of you expand on what you see as the role of space assets in you respective Services' transformation? Can you also discuss your view of the role of commercial space-based assets, such as commercial space-based imagery, in transformation?

General SHINSEKI. Army transformational air and space requirements are articulated in the operational concept for the Objective Force, which General John Abrams and his staff at the Army Training and Doctrine Command (TRADOC) are defining. The Objective Force will conduct operations to, from, in, and through the space medium in support of national interests both on Earth and in space. Not only will commanders of Objective Force units be able to better maneuver in the vertical dimension, but they will also leverage other combat capabilities based hundreds of miles above the Earth.

In an environment where space-based and aerial assets enhance the mobility, communications, intelligence products, and lethality of ground forces, the Objective Force must strive to create a seamless, vertical continuum through which the commander can exploit space-based and aerial assets to see first, understand first, act first, and achieve decisive overmatch. Space operations and systems provide the essential underpinnings for robust and effective command, control, computer, communications, intelligence, surveillance, and reconnaissance (C⁴ISR). Consequently, the Objective Force will be equipped and trained to exploit space-based capabilities. A responsive, integrated, and interoperable C⁴ISR system that collects, processes, and disseminates information in a timely manner is critical to the development of situational awareness on the future battlefield. The Army is following a strategy that supports digitization by implementing a sound, integrated, information technology architecture, and horizontal technology integration that incorporates a “space to mud” C⁴ISR approach.

While the Objective Force will be postured to exploit space-based capabilities, it will also be developing and executing protective measures for space systems as well as avoiding absolute dependency on them. U.S. dominance in space is not guaranteed. Adversaries may probe our space systems and segments for vulnerabilities, or they might alter the space environment to disrupt or deny our space operations. Space control, a mission shared by all the services, ensures freedom of action for Objective Force units and, when directed, denies an adversary freedom of action in using space-based systems and products.

Commercial space resources are an important augmentation of Department of Defense-owned systems, providing efficiencies in meeting information requirements. The Army position on commercial space resources is that they augment, but do not replace, Department of Defense-owned systems. With commercial systems, the Department of Defense has no real control over the resources. It is the Army's position that it be the owner, operator, and decision-maker for mission-critical applications.

Admiral CLARK. The transformation of our Naval Forces focuses on achieving the capabilities which are necessary for a networked, sea-based power projection force. Space will provide the connectivity to, and thus the early in-theater backbone for, a powerful grid of national, joint, and sea-based sensors. These space-based intelligence/surveillance/reconnaissance sensors, navigation, and meteorology/oceanography capabilities will only increase in importance. The immediately employable naval elements of the joint force are able to strike with ever increasing speed and precision using both networking to increase speed of decisions, and high-speed weapons to increase speed of attack. Navy takes advantage of cost effective commercial satellite communications today with programs like our Challenge Athena Commercial Satellite Communications effort, and will continue-in the future to seek out and use the best available commercial space-based assets.

DOD relies heavily on imagery from space for a variety of missions. Several missions, such as precision targeting, still can only be satisfied by sophisticated U.S. reconnaissance assets. Other missions which have historically been supported primarily by U.S. national imagery could be assisted by commercial imagery in certain scenarios, assuming military issues such as tasking, image quality and speed of delivery could be guaranteed and established.

General JONES. Space-based systems provide the ultimate “high-ground” that can support the demanding requirements of Expeditionary Maneuver Warfare (EMW). The capabilities we acquire from space systems will play a significant role in future Marine Corps operations as we expand operational maneuver from the sea (OMFTS) to over-the-horizon (OTH) amphibious assault and power projection deep into the littoral area. The intelligence, surveillance, and reconnaissance (ISR) efforts in these denied areas prior to and during the execution of a military operation are significantly dependent on space-based assets, including those commercial assets that can be effectively and efficiently leveraged in support of military operations. The scope of this requirement will only increase in the future.

This is particularly true in the case of the Marine Corps, where forward deployed units are routinely the first called upon to react to crises. Rapid and on-call expeditionary operations are unique among military operations in that significant challenges are posed by a lack of timely terrestrial ISR asset access in the operation area from the planning phase through the transition to shore. This challenge is enhanced by the requirement to provide predictive analysis to compensate for relatively longer periods of uncertainty and, in many cases, total chaos. The initial stages of over-the-horizon amphibious operations will always rely heavily on space-based collection assets. This reliance is endemic in all aspects of amphibious force intelligence operations that are conducted across the strategic, operational, and tactical spectrum.

The space segment of any communications network is a major piece to the overall communications capability desired. Often times, space-based communications provide the best means to support the Marine Corps' communications requirements because it is more suited for units on the move and widely dispersed.

Commercial satellite communications (SATCOM) can certainly be used to augment our capabilities, and the fielding of the Lightweight Multiband Satellite Terminal (LMST) gives our operating forces the ability to take advantage of commercially available bandwidth.

The Global Positioning System (GPS) continues to be an enabler for almost every type of operation we conduct and with its integration into more weapons systems, our ability to conduct precision strike missions is being enhanced. GPS also plays a significant role in being able to conduct Blue Force Tracking (BFT) in beyond line-of-sight situations. This nascent capability contributes to a more comprehensive Common Operational Picture (COP), reduces the risk of fratricide, and has the potential to significantly enhance the commander's conduct of operations.

General JUMPER. The Quadrennial Defense Review (QDR) operational goal number 5 is the foundation of our space transformation efforts: "Enhance the capability and survivability of space systems and supporting infrastructure." To meet this goal, the Air Force is pursuing next generation satellite and launch systems to provide the warfighter with the tools they need to effectively execute joint operations. Early warning will be transformed as the old Defense Support Program (DSP) is replaced by the new Space Based Infrared Radar System, High Component (SBIRS-High) Legacy launch vehicles, based on 1950s-era ICBMs, will be replaced with the new, efficient, and cost-effective Evolved Expendable Launch Vehicle (EELV). Persistent intelligence, surveillance, and reconnaissance (ISR) will be enhanced with the new Space Based Radar system, providing denied area access to joint warfighters. A study on satellite communications is underway, with an expected July 2002 completion, to transform MILSATCOM warfighter capabilities.

As you are aware, the new Under Secretary of the Air Force, Mr. Peter Teets, has been assigned milestone decision authority for all major DOD space acquisition programs. Army, Navy, and Marine Corps space transformation efforts are of significant interest to the AF in being good stewards for space. I will defer to my associates on the specifics of how space will enable their transformations. However, let me say that the Air Force, as the primary provider of the space capabilities, recognizes the inherently joint nature of space and the importance it will play in enabling robust communications on the move; real-time tracking, targeting, and sensor to shooter capabilities; and protected precision navigation capabilities. The Air Force will work hard with the National Reconnaissance Office (NRO) to transform air and space ISR capabilities into persistent, global, on-demand joint assets for tomorrow. Seamless integration of space with joint land and air forces is imperative.

Finally, the role of commercial space-based assets is significant, providing key support to the warfighter in the areas of communication and imagery.

114. Senator SANTORUM. General Jumper, Mr. Aldridge recently signed a directive delegating milestone decision authority for all military space systems to the Air Force. The Air Force is now charged with being a steward for all the services' space program needs. This is a significant new responsibility for the Air Force. During Secretary Roche's testimony to this committee last month, Secretary Roche indicated that some of the problems encountered with the Space-Based Infrared Radar System, High Component (SBIRS-High) acquisition program was "in the fundamentals." What specific steps are you taking to ensure the "fundamental" problems encountered with SBIRS-High will not be repeated by other satellite systems that the Air Force is acquiring?

General JUMPER. I would agree that the acquisition issues I have been made aware of concerning SBIRS-High would fall into the category of "acquisition fundamentals." The task of helping us solve our National Security Space system acquisition problems has been given to the new Under Secretary of the Air Force and Director of the National Reconnaissance Office, Mr. Peter B. Teets. Given Mr. Teets' space industry experience, I can think of no one better prepared to help us get our major National Security Space programs back on track. Mr. Teets has already begun this effort by making it a priority to reestablish program stability and management discipline within the Air Force space programs. In the past, increased management discipline was accomplished through the addition of oversight layers within the Air Force and OSD. Unfortunately, it appears the current levels and/or types of oversight were not enough to prevent the current SBIRS-High problems. Instead of adding additional oversight layers, Mr. Teets is taking a different approach by developing a space-focused process that will reduce the number of oversight staff layers while increasing the senior level space system decision maker insight. The resulting

streamlined process will decrease the opportunity for unintentionally causing program instability, facilitate timely senior level decisions, and provide space-oriented expertise and direction when needed.

115. Senator ALLARD. General Jumper, the National Security Space Commission last year reported on the vulnerability of our space-based systems, including their associated ground systems, to enemy attack. As the role of space expands in the military, it became increasingly important that we ensure the protection of these systems. What steps is the Air Force taking to protect our space-based assets?

General JUMPER. Protection of our space systems is a critical priority for us. Our adversaries could attack our systems by various means, to include physical attacks against our ground control nodes, interference with the space-to-ground communication links, and in the future, kinetic, or directed energy attacks against our satellites from either terrestrial or space platforms. No single approach will ensure protection against all potential threats. We'll need to ensure that protection requirements are enforced and that appropriate protection capabilities are included as our space systems go through their acquisition milestones.

As prerequisites to our implementation of protection measures, we'll need to know where we might have vulnerabilities, and be able to detect and characterize attacks against any element of our space systems. Toward this end, the Air Force will use the 527 Space Aggressor Squadron in joint and service exercises to help identify potential vulnerabilities and guide protection investments and non-materiel countermeasures. We're also developing the Rapid Attack Identification and Reporting System (RAIDRS) to detect, characterize, and report attacks on our space systems.

COMMERCIAL ASSETS VULNERABILITY

116. Senator ALLARD. General Jumper, are you working with industry to also assess the vulnerability of commercial assets used by the military, such as satellite communication systems?

General JUMPER. Last summer, the Air Force Scientific Board completed a study to assess availability and survivability issues associated with military use of commercial satellite communications. This study concluded that the use of commercial space assets was fundamentally a risk management problem. There are no "silver bullet" solutions to the problem but there are strategies and investments that will reduce risk associated with using commercial assets. The study made five recommendations: (1) create a dependable surge capacity; (2) focus investment on mission robustness and flexibility rather than defense of specific systems; (3) develop an operational discipline that includes commercial space; (4) focus investment on cost effective technologies that improve availability and survivability of space systems; and (5) establish an architectural approach to space communications. To the extent these recommendations can be implemented, they will go a long way to reducing risks associated with the use of commercial systems and lead to a strong long-term relationship with commercial system owners/operators.

117. Senator ALLARD. General Jumper, looking out into the future, could you please discuss your vision for accomplishing space control?

General JUMPER. To ensure that our national security space systems continue to provide the strategic advantage, we'll pursue a range of improvements to our space control capabilities. Key focus areas include:

(1) Space situational awareness: We must improve our capabilities to track and characterize objects in space, to understand which objects are threats and what they are doing, to detect and characterize terrestrial threats to our systems, and to differentiate attacks from natural effects of the space environment. Space situational awareness is the critical enabler for timely defensive and offensive responses against space threats.

To transform our space situational awareness capabilities, we'll pursue a spiral development program for Space-Based Space Surveillance (SBSS), while we sustain and upgrade key ground-based sensors. Evolving the existing ground-based network into space will enable much more timely access to objects of interest. Our transformation initiatives will also emphasize development of a space "common operating picture" which integrates traditional space surveillance with additional ISR sources through enhanced command and control.

(2) Defensive counterspace: Our counterspace strategy first emphasizes defense of vital U.S. space capabilities. We'll ensure that protection requirements are enforced and that appropriate protection capabilities are included as our space systems go through their acquisition milestones. We'll continue to support and equip the 527th

Space Aggressor Squadron, which provides a credible “red force” space control threat to help our forces identify potential vulnerabilities to hostile actions and to develop effective protection and countermeasures. We’re developing the Rapid Attack Identification and Reporting System (RAIDRS) to detect, characterize, and report attacks on our space systems.

(3) Offensive counterspace: We also need to be able to deny adversaries their use of space systems and services for purposes hostile to U.S. national security interests. We’re developing mobile/transportable capabilities to deny space-based communications and surveillance/reconnaissance information.

(4) Space control infrastructure: We’ll develop a space range to provide the opportunity to test, train, and exercise for space control in an operationally realistic environment.

118. Senator ALLARD. General Jumper, the Air Force’s fiscal year 2003 budget includes a significant funding increase for R&D programs. What are your priorities for space-related R&D programs?

General JUMPER. My top priority is ensuring warfighters have the space-borne capabilities necessary to fight and win our wars. We need an upgraded missile surveillance and warning capability to replace our aging Defense Support Program constellation. If the SBIRS-High program cannot meet those requirements, we will deliver a system that can.

The warfighter needs more MILSATCOM capability, too. Although we’ve made great strides in the last 10 years, we aren’t finished. Right now, we’re looking at cutting-edge areas such as laser communications, optical links, and the development of a network-centric architecture to deliver what the warfighter needs.

Access to space and space control are critical to warfighting. We are delivering new launch capability in the Evolved Expendable Launch Vehicle and turning our attention to systems, tactics, and policies that can guarantee the security and performance of our space based assets.

Space-based radar will be added to the multi-theater targeting and tracking architecture to provide world-wide, near continuous situational awareness of moving surface targets. It will add needed depth and persistence to the current airborne system and provide a unique capability to observe areas currently denied due to surface threats and terrain masking. SBR will be critical to decreasing the find fix target track cycle time.

Finally, we’re modernizing GPS with a more robust signal providing the warfighter with more accurate location and targeting information. These new systems will also give theater commanders more options to protect the signal from disruption by hostile forces, enabling our units to successfully continue the fight even when faced with a jamming threat.

QUESTIONS SUBMITTED BY SENATOR JEFF SESSIONS

COST TO OPERATE OLDER SHIPS VERSUS CONSTRUCTING NEW SHIPS

119. Senator SESSIONS. Admiral Clark, *Spruance*-class destroyers that are now 25 years old have performed strike missions and maritime interception operations superbly during Operations Desert Shield, Desert Storm, Desert Fox, Allied Force, and Enduring Freedom. Yet the Navy is decommissioning them prior to their 35-year service life is completed. I visited the U.S.S. *O’Brien* in Japan in January 2002 shortly after she returned from combat operations in Operation Enduring Freedom. I also received briefings on the role U.S.S. *Kitty Hawk* played in the war. The Navy plans on decommissioning U.S.S. *Kitty Hawk* in 2007. The retirement of the *Spruance*-class will generate requirements for additional new ships and brings the Navy below the Quadrennial Defense Review (QDR)-directed number of surface combatants. On Tuesday, Admiral Blair said that if the pace of operations and the requirement to maintain two carrier battle groups and two amphibious readiness groups in the Central Command’s area of responsibility continues that his theater may not have the forces necessary to deter conflict on the Korean peninsula or other flashpoints. In fact, the U.S.S. *Kitty Hawk* battle group is scheduled to deploy again in support of Operation Enduring Freedom later this spring with her full air wing. How much would it take to keep these ships in service to keep the Navy at the QDR levels and maintain sufficient forces to meet presence requirements of the warfighting Commanders in Chief? I ask this question because it seems to me that the remaining ships and crews will have to make up for the missing surface combatants because the presence requirements for ships has not decreased.

Admiral CLARK. The *Spruance* decommissioning decision is driven by affordability (manpower and maintenance costs) and capability (older technology) concerns. This decision results in a force level that temporarily drops below the QDR level of 116 surface combatants until newer, more capable DDG's are commissioned.

The cost to crew, maintain, and operate a *Spruance* buyback plan that maintains a surface combatant force level of 116 is about \$1.2 billion as articulated in the table.

Total Savings	Fiscal Year					Total
	2003	2004	2005	2006	2007	
Ship Operations	14.9	48.3	74.8	68.4	46.5	252.9
Maintenance	23.9	41.0	87.1	81.3	67.0	300.3
Manpower	13.6	117.8	192.5	201.2	134.6	659.7
Total	52.4	207.1	354.4	350.9	248.1	1,212.9

120. Senator SESSIONS. Admiral Clark, it would be useful to hear your comments on lessons learned as we assess the future utility of some of the aging ships in the Navy. I would like to point out that this is an issue that Senator Kennedy and I are focusing on and we sent a letter to the Secretary of the Navy and you last week asking you to look into four focus areas for getting the most out of the ships we do have.

Admiral CLARK. The primary lesson learned is that significant investment in modernization is required to keep ships serviceable and retain them to the end of their full service life. In a fiscally constrained environment, Navy must balance between transforming and building the future Navy to meet emergent warfighting requirements, and operating the current force to meet existing missions, while remaining within the President's budget.

Force Structure: New ship procurement decisions dominate force structure recapitalization, yet the retention or decommissioning of ships has the greatest near-term impact on force structure size and composition. The key element in decisions to extend or contract the service life of a ship class is affordability versus capability.

Service Life Considerations: The service life of our warships has a significant impact on force structure. Extending service life by delaying decommissioning can maintain or increase force structure and, correspondingly, accelerating decommissioning can reduce force structure. The decision to extend or accelerate decommissioning of a ship class is based on a cost/benefit analysis focusing on the affordability of the platform and what warfighting capabilities it brings to the joint commander's tool box. In some cases, such as *Ticonderoga* (CG 47)-class cruisers and *Perry* (FFG 7)-class frigates, it is considered prudent to invest in conversion and modernization of ships to extend their service life. In other cases, such as *Spruance* (DD 963)-class destroyers, it is more economical to decommission the ships.

Historical Service Life vs. Estimated Service Life: Sophisticated combat systems must keep pace with advancing threat technology. As the combat systems and the hull, mechanical, and electrical (HM&E) systems of a platform age both must be maintained and upgraded, but the combat systems upgrades tend to be more extensive and expensive. Additionally, as ships age, the cost of operating and maintaining the ships may increase as a function of the overall material condition of the vessel. For example, if a ship has deferred a number of maintenance actions over the course of its operating life, and has had a high operational tempo, the cumulative effects on the ship can lead to higher operating and maintenance costs. This must be considered in investment decisions. In making service life decisions, warfighting capability gained from an upgrade is balanced against the cost of the upgrade and the operations and maintenance cost of the ship. Unless modernized, a surface combatant's Historical Service Life (HSL) is shorter than the Estimated Service Life (ESL) established via current Navy policy and design specification requirements provided to shipbuilders. For destroyers, HSL is 20 years compared to an ESL of 35 years. In the case of frigates, HSL is 20-22 years compared to an ESL of 30 years.

Cruiser Conversion: The Navy has made the commitment to extend the service of our primary air defense platforms through the conversion program for CG 47-class cruisers. The program will upgrade the Aegis combat systems and install warfighting improvements including Area Air-Defense Commander (AADC) capability, upgrades to the Aegis Baseline to accept Sea-Based Ballistic Missile Defense capability (pending Missile Defense Agency (MDA) approval and funding of development), land attack, and force protection. Additionally, service life extension features

include Smart Ship upgrades, the all electric alteration, weight and moment adjustments, and other distributive systems improvements. Modernizing these ships will make them more capable to project theater-wide offense and defense while providing up to an additional 20 years of service life beyond the HSL of 17 years.

Frigate HM&E and Self Defense Upgrades: In the fiscal year 2003 budget submission, FFG 7 Class frigates will receive HM&E upgrades to reduce their operating costs and extend their service life. Additionally, the combat systems will be upgraded with selected ship self defense technology. These ships with their relatively small crew size and low operating costs provide affordable warfighting capability for the investment required.

Amphibious Assault Ship Sustainment: The requirement for amphibious ships is driven by two factors, the Amphibious Ready Group (ARG) deployment cycle and Marine Corps lift requirements. Today's 12 ARGs are the minimum required to meet presence requirements and each ARG consists of an LHA/LHD, LPD, and LSD. Overall lift is currently below the 2.5 Marine Expeditionary Brigade (MEB) lift programmatic goal and the full requirement of 3.0 MEB lift. Austin (LPD-4) Class ships will be required to serve an average of 41.5 years, well beyond their original ESL of 30 years, in order to meet amphibious requirements until the LPD-17-class ships are delivered to the fleet. We are funding the LPD-4 Class Extended Sustainment program, which is designed to improve the dependability of HM&E systems and living conditions for the sailors and embarked marines. Additionally, it is expected that LHAs with their mid-life upgrade will be required to serve a median 42 years, significantly beyond their ESL of 35 years, before being replaced by the LHA(R) ships currently being studied.

Destroyer Decommissionings: DD 963 Class destroyers are expensive to maintain because of their large crew size and age while providing only limited warfighting capability. These ships received an earlier modernization with the introduction of the Vertical Launch System (VLS), which extended the combat system relevant life beyond the historical 20 years. However, while the ships still provide some warfighting capability with two 5 inch 54 cal. guns and an Anti-Submarine Warfare (ASW) suite, the higher manning requirements and operational costs do not justify additional funds for further modification or extended service life. New Burke (DDG 51) Class destroyers being introduced to the fleet provide substantially more combat capability and an ample number of VLS tubes to support current Tomahawk inventory. It is not cost effective to keep the DD 963 Class in the inventory. The currently structured decommissioning schedule will save the Navy about \$1.25 billion over the FYDP that can be applied to transformational efforts such as electric drive, advanced networks and stealth technology bringing new warfighting capabilities to the fleet.

USING AVERAGE AGE OF SHIPS TO MAKE INVESTMENT DECISIONS

121. Senator SESSIONS. Admiral Clark, the Secretary of the Navy stated before this committee that because Navy ships have an average age of 16 years, they are not as high on the priority list for funding as other systems. If the Navy uses average age as criteria for investment decisions, doesn't that hide problem areas? For instance, in this budget request you have one less submarine than required by the 2001 Quadrennial Defense Review, yet your unfunded requirements list does not include funds to correct this. You also propose decommissioning ships prior to the end of their planned service life. Would you explain your priorities for shipbuilding and why you are not asking to build more ships that have insufficient force levels?

Admiral CLARK. Procurement of new ships to maintain force structure is one of the Navy's top priorities. However, the fiscal year 2003 budget preparation proved to be an exceptionally challenging process to balance the funding requirements of the war on terrorism, training of our sailors and marines and readiness of their equipment, with the need to re-capitalize our aging ship and aviation assets. We believe that the fiscal year 2003 budget request represents the best balance of available resources to meet the continued needs of our great Navy.

Additionally, the Navy agrees that we must and can do more in future budgets to increase the shipbuilding procurement rate to support force structure requirements. To this end, the fiscal year 2003 budget has built a strong foundation to posture the Navy's shipbuilding programs for the future. For example, starting this year, we have properly funded shipbuilding programs to realistic, independent cost estimates, greatly reducing the likelihood that future budgets must fund prior year completion costs: The fiscal year 2003 budget request has stabilized surface combatant production across the Future Years Defense Program, providing for an improved

transition to DD(X). The budget continues to support the development and construction of LPD-17, which has stabilized and remains on track.

Finally, the Navy continues to work with our industry partners to make best use of shipyard resources to build the most affordable, and strongest Navy that our Nation's security demands.

ADEQUACY OF FORCE STRUCTURE

122. Senator SESSIONS. General Shinseki, Admiral Clark, General Jones, and General Jumper, the Quadrennial Defense Review (QDR) described the force structure required to carry out the defense policy goals of: (1) assuring allies and friends; (2) dissuading future military competition; (3) deterring threats and coercion against U.S. interests; and (4) if deterrence fails, decisively defeating any adversary. The QDR further stated that as the "transformation effort matures, Department of Defense will explore additional opportunities to restructure and reorganize the Armed Forces." Does your service's budget request support the QDR force structure? If not, what transformation efforts will enable you to go below the QDR force levels?

General SHINSEKI. Yes. The QDR directed force structure did not change the current Army end strength of 1,035,000 with 480,000 in the Active component (417,000 Force Structure Allowance (FSA), 63,000 transients, trainees, holdees, and students (TTHS)); 350,000 in the Army National Guard (385,000 FSA); and 205,000 in the Army Reserve (225,500 FSA). The FSA provides for 18 combat divisions in the Army today—10 Active and 8 National Guard. Our budget submission provides for this force and fully supports the levels outlined in the QDR report.

The fiscal year 2003 budget adequately funds all of the Army's known Interim and Objective Force transformation requirements. First, the budget, and its associated FYDP, funds the procurement of six Interim Brigade Combat Teams and its associated equipment. Next, the Army is funding over \$8 billion in the FYDP for science and technology, 95 percent of which is oriented on the Objective Force. In order to fund these requirements, the Army has accepted risk by underfunding the modernization requirements of the current Legacy Force. Over the past 3 years, we have terminated 29 programs to garner over \$8.2 billion in savings. As the Army moves forward with transformation, we will have to make more tough funding decisions, and where possible, seek additional funding from the Office of the Secretary of Defense and Congress.

Admiral CLARK. The Quadrennial Defense Review Report listed the current force structure of the Navy and Marine Corps as a baseline from which the Department will develop a transformed force. The fiscal year 2003 budget request supports maintaining this force structure with the following exceptions:

Active Surface Combatants fall below the baseline level of 108 across the FYDP:

	Fiscal Year				
	2003	2004	2005	2006	2007
Active Surface Combatants	101	99	96	99	103

Attack submarines fall below the baseline level of 55 from fiscal year 2003 to fiscal year 2006:

	Fiscal Year				
	2003	2004	2005	2006	2007
Attack Submarines	54	54	54	54	55

Navy's fiscal year 2003 budget request focuses on funding requirements in personnel and operational accounts to support our current readiness to conduct a full spectrum of joint military activities. Top priority on funding current readiness was a matter of choice justified by the ongoing war effort. Even so, high on the list of unaffordable requirements is an attack submarine refueling overhaul that would increase the inventory to 55 from fiscal year 2004 out, and additional DDG-51 procurement that would bolster the surface combatant force structure.

We have also decided to divest ourselves of older, less capable ships by retiring them in order to free resources that can be used to fund transformational capabilities on the remaining ships and submarines of the fleet. The impact on force structure requirements of the improved capabilities brought by, for example, programs funded in the fiscal year 2003 President's budget such as Cooperative Engagement Capability (CEC) and Trident SSGN conversion is still being studied. CEC provides

a revolutionary new capability, allowing surface and air platforms to share and fuse sensor information. This will allow Aegis ships to engage contacts beyond the sight of onboard sensors resulting in a dramatic enhancement in the total force capability to track in a jamming environment. The Trident SSGN program converts four Ohio class SSBNs to SSGNs. Available for operational use starting in 2007, these SSGNs provide unique Special Forces capabilities, including hosting the Advanced SEAL Delivery System (ASDS), and large-scale strike capabilities in one clandestine, survivable platform. SSGNs will also serve as a transformation "bridge" for submarine encapsulation of joint payloads and will provide the volume for experimentation and development of offboard sensors and vehicles.

General JONES. Yes. Our fiscal year 2003 President's budget submission supports an Active Duty end strength of 175,000 and is fully funded. This is an increase of 2,400 over our fiscal year 2002 end strength. The additional 2,400 is the additional force structure required to activate the 4th Marine Expeditionary Brigade Anti-Terrorism (4th MEB (AT)). The 4th MEB (AT) provides designated supported commanders with rapidly deployable, specially trained, and sustainable forces that are capable of detecting, deterring, and defending designated facilities against terrorism, and conducting initial incident response in the event of chemical, biological, radiological, nuclear, or high yield explosive (CBRNE) terrorist attacks worldwide. This contingency response force gives our Nation a dedicated anti-terrorism force without degrading personnel readiness in our existing Marine Corps units.

General JUMPER. In the last decade, the Department of Defense has undergone three major QDR reviews beginning with the Bottom-Up Review. Since 1991, the Air Force reduced its force structure so that today it is little more than half of what it was in aircraft, people, and units. During this same period, the Nation's leaders have asked the Air Force to do more. Our estimates indicate the Air Force has been asked to do nearly four times what we were asked to do when these reviews assessed our requirements. Our budget supports the QDR force structure. It does not include adequate funding to sustain today's very high operations tempo associated with our global war on terror.

In response to these demands, the Air Force formed the Expeditionary Aerospace Force (EAF) concept in 1999 to make itself more flexible and stable in order to stem the recruiting and retention downturn. Last summer, the Department asked the services to create and implement a capabilities-based recapitalization plan consistent with DOD and service goals for transformation. It is extremely important to adopt this capability-based approach when we make decisions about organization, concepts, and system procurement. Cost per unit is often used today as a measure of merit in making such decisions, but a more accurate measure of merit that captures the real value or capability of a particular system is cost per target engaged or, better yet, cost per effect desired. The Air Force is in the midst of building this recapitalization plan. The plan will result in a balanced sustainable portfolio of systems. It will incorporate the transformational character of air and space power to redefine our Nation's strategic and operational alternatives for military success around the world. Recognizing the necessity of change, the Air Force is continuing to transform itself to best serve the Nation's interests and demands.

OVERDUE ATTACK SUBMARINE REPORTS

123. Senator SESSIONS. Admiral Clark, sections 123 and 124 of the Fiscal Year 2001 Authorization Act require the Secretary of Defense to submit two reports on attack submarines. The first report is a plan to maintain at least 55 attack submarines and the second is on production rates for *Virginia*-class submarines. Both reports are overdue by more than one year and are key for our deliberations regarding the Navy's new construction request. Has the Navy completed their portion of these reports and do you know when they will be submitted to the congressional defense committees?

Admiral CLARK. The Secretary of the Navy is continuing to work with the Office of the Secretary of Defense (OSD) to complete these reports for submission in support of the congressional review of the President's budget 2003 budget. The reports were initially drafted by the Navy during Congress' President's budget 2002 deliberations and the Department of Defense' preparation of the President's budget 2003 budget. The reports were revised to accurately reflect President's budget 2003 decisions. The reports are currently being reviewed by the Department of the Navy and will be forwarded to OSD for final approval and submittal to the congressional defense committees.

DEPLOYABLE JOINT COMMAND AND CONTROL

124. Senator SESSIONS. Admiral Clark, the QDR stated the pressing need for a Deployable Joint Command and Control Center. The Secretary of Defense's testimony before this committee last week indicated that this budget request included \$40 million for "a program for new land- and sea-based joint command and control centers." What is the Navy's share of that \$40 million fund and what is your vision on the future of Navy command and control ships?

Admiral CLARK. The \$40 million in question (actually \$39.8 million as submitted in the President's budget) represents RDT&E funding specifically added to the Navy's TOA to initiate the effort known as the Deployable Joint Command and Control (DJC2) system. DJC2 will be a joint program with the Department of the Navy as the Executive Agent, and is presently in the definition stage. The Joint Requirements Oversight Council approved the DJC2 Mission Needs Statement in February 2002. DJC2 is envisioned to provide Joint Force Commanders with a deployable joint Command and Control (C2) system to fully command, control, and direct CINC and Joint Task Force (JTF) operations. DJC2 will provide this capability for the envisioned Standing JTF headquarters staffs (about 250 personnel) in a set of collapsible shelters or transportable vans. The communications infrastructure, capability, and support functions are to be provided separately by the respective service component(s). DJC2 is envisioned to provide the land- and sea-based joint C2 functionality that can be easily relocated as tactical situations require, and provide this functionality when component commanders transition ashore from afloat. DJC2 functionality is intended to be present in the Joint Command and Control [JCC(X)] Mission System core.

Navy command ships currently provide worldwide, forward deployed, and robust joint C⁴I capability without the limitations inherent with fixed shore sites. This capability is consistent with the QDR and its emphasis on forward deployed, robust command and control. The Navy's new JCC(X) program will provide up to four ships to replace today's command ship capability, which will reach their ship service life by the end of the decade. The JCC(X) ship with its integrated Mission System, provides the C⁴I, collaborative workspaces, Information Infrastructure, communications capability, as well as habitability spaces to support the Joint Forces Commander, complementary Component Commanders, coalition as well as providing for the Numbered Fleet Commander and staffs. The Navy leadership is currently assessing alternative platform approaches to meet the JCC(X) Mission Need Statement.

The JCC(X) and DJC2 programs are separate, yet complementary efforts. While they both must be interoperable and support the CJTF HQ function, the JCC(X) Mission System also supports the operational and tactical functions associated with naval forces afloat and the Numbered Fleet Commander and staff. DJC2 plans to have its first variant available to support PACOM operations by 2005, while JCC(X) initial ship delivery will not be until 2011. JCC(X) will leverage on the DJC2 development and support its functionality within the JCC(X) Mission System to provide the very necessary capability for the CJTF and the Component Commands and Staffs around the world, regardless of on land, at sea, or in the air.

ARMY AVIATION FLIGHT SIMULATORS

125. Senator SESSIONS. General Shinseki, in your opening statement you said that the Army must "fully modernize training ranges, combat training centers, and training aids, devices, simulators, and simulations to provide adequate and challenging training." This quote was repeated verbatim from Secretary White's testimony before this committee 1 month ago. I have been thoroughly impressed with the performance of Army aviation during Operation Enduring Freedom and can offer well-deserved praise to the professionals at the home of Army Aviation in Fort Rucker, Alabama. One item I observed during a recent visit to Fort Rucker was an urgent requirement for advanced simulators and simulator technology, specifically for Flight School 21 (XXI). Do you feel that the requirement for more advanced simulators is adequately addressed in this budget or should we be looking at an aviation cultural change that considers privately financed initiatives resulting in shared savings for simulators? If you agree that similar Army initiatives at Fort Carson, Colorado are applicable, then would you support a legislative change changing the contract length from 8 years to 20 years to create the efficiencies you seek?

General SHINSEKI. No, the requirement for advanced simulators and supporting technology is not adequately addressed in this budget. United States Army Aviation Center is pursuing several options to acquire advanced technology and simulators to meet its training requirement. One of those options includes using a service contract to satisfy this urgent training requirement.

The cultural changes proposed closely resemble initiatives at Fort Carson, Colorado, U.S. Air Force Distributed Mission Training, and Wright-Patterson Air Force Base where corporate investment funds build, own, maintain the devices, and perform services in accordance with contractually established standards. This allows industry to make significant upfront investments that are recovered incrementally over the duration of the contract.

A long-term contract under existing legal authority can significantly reduce the annual cost, allow amortization over a longer period, and realize efficiencies and savings to the government.

Fort Rucker supports a long-term contract for Flight School XXI.

SPACE LAUNCH PRODUCTION POLICY

126. Senator SESSIONS. General Jumper, the Air Force was designated by the Secretary of Defense as the Executive Agent for Space in 2001. In your opening statement, you said that this means that the Air Force is responsible for DOD-wide "planning, programming, and acquisition of space systems." One of the fundamental goals of the National Space Policy is assuring reliable and affordable access to space through U.S. space transportation capabilities. The policy directs that U.S. government payloads be launched on space launch vehicles manufactured in the United States unless exempted by the President or his designated representative. One of the programs you identified in your opening statement that is designed to meet the future launch demands of national security, civil, and commercial payloads is the Evolved Expendable Launch Vehicle (EELV). The Atlas V program that is being proposed for the EELV utilizes a Russian-designed and Russian-built RD-180 engine for propulsion. It is my understanding that the EELV engineering and manufacturing contract was awarded in October 1998 and that the DOD agreed to allow a Russian engine to be used in the development only if a U.S. manufacturing capability was developed within 4 years of the contract being awarded. Those 4 years are up in October of this year. Can you tell me what progress has been made with developing a U.S. production capability?

General JUMPER. The license agreement necessary to begin the transfer of the manufacturing data from the Russian company (NPO Energomash) to the U.S. company (United Technologies, Pratt & Whitney) took 18 months to get through the U.S. Government approval cycle. The license agreement is currently awaiting approval by the Government of Russia. We anticipate approval in late spring, after which the data will begin to flow. The revised U.S. co-production schedule will provide the capability to produce U.S. built engines by 2008. We are managing the risk of relying on Russian built engines by stockpiling enough engines to launch all US Government Atlas V missions on contract.

127. Senator SESSIONS. General Jumper, I understand that the first Atlas V launch is scheduled for fiscal year 2004 with a classified payload. Is it still U.S. policy to assure our access to space through space launch vehicles manufactured in the United States?

General JUMPER. The first Atlas V will fly this summer with a commercial payload. The first U.S. Government payload on an Atlas V, Wideband Gapfiller Satellite #2, will fly in November 2004 (fiscal year 2005). A May 1995 DOD policy directive requires national security payloads to be launched on space launch vehicles manufactured in the United States. The same policy allows the use of engines manufactured in nations of the Former Soviet Union if we have sufficient quality and quantity of stocks to preclude a launch stand-down during transition to U.S. sources. The Atlas V RD-180 main engine is built in Khimki, Russia. Therefore, the Air Force requires Lockheed Martin to stockpile engines as an interim risk mitigation measure during the conversion to U.S. production.

PRECISION GUIDED MUNITIONS

128. Senator SESSIONS. General Shinseki, Admiral Clark, General Jones, and General Jumper, members of this committee have received testimony from the regional and functional commanders in chief (CINCs) over the past month and many of us have held individual meetings with the CINCs to receive their views on the challenges facing their areas of operations. One of the consistent themes I have heard during these hearings and briefings has been the higher than expected expenditure rates for precision guided munitions during the war in Afghanistan and the increasing reliance our forces are having on these weapons. There have also been public comments by military leaders, including Admiral Natter, about the fact

that we nearly ran out of precision weapons, particularly the Joint Direct Attack Munitions, during Operation Enduring Freedom. General Jones, I just asked you a question on Tuesday during our Subcommittee on Seapower hearing about Marine Corps requirements for Hellfire missiles. We spend a lot of money on expensive platforms and the training for their operators. I am concerned that we may not have enough munitions to equip these platforms. I am concerned that if we are faced with a substantial increase in demand for precision weapons that might accompany a major regional contingency, your Services may not have the stocks of weapons necessary to fight the battle the way they have become accustomed to. Do you feel that the fiscal year 2003 budget submission and the supplementals that have been granted since September 11 adequately fund the replenishment of our stocks of precision weapons?

General SHINSEKI. The Army's fiscal year 2003 budget submission includes funding for 1,797 Longbow Hellfire missiles. The Army has also forwarded a fiscal year 2003 unfunded requirement list to Congress to procure an additional 1,000 K-Model Laser Hellfire missiles to replace missiles anticipated to be used in the global war on terrorism and those that will soon exceed shelf-life that must be used and replaced. The Army requested but did not receive any funding in the fiscal year 2002 Anti-Terrorism/Force Protection Supplemental to conduct rocket motor retrofits on the Longbow and Laser Hellfire missiles to ensure that catastrophic damage does not occur to aircraft during missile launch. The Army will be able to begin replenishment of Hellfire missiles in accordance with the capabilities based requirements process if Congress grants the funding requested in the fiscal year 2003 unfunded requirement list for Hellfire missiles.

Admiral CLARK. Yes, the replenishment of precision weapons stocks (Laser Guided Bomb Kits and Joint Directed Attack Munition Kits) is currently funded to appropriate levels. The fiscal year 2003 budget submission and supplemental funding provided by the DERF, PDM-2, and PBD-736 enable procurement of over 45,000 Laser Guided Bomb kits and 58,000 JDAM kits across the FYDP.

However, additional procurement of ancillary components (bomb bodies and fuzes) is required to prosecute the target sets for both guided and unguided weapons.

General JONES. The fiscal year 2003 budget submission and supplementals granted since September 11, do not adequately fund the replenishment of our stocks of precision weapons. The fiscal year 2003 budget focused on the shortfall in LGBs and JDAMs, highlighted by the expenditures in Operation Enduring Freedom, and did not adequately address the replenishment of Hellfire missiles. The fiscal year 2002 supplemental funding helped the naval service increase precision weapons inventories for both JDAM and LGBs to address the global war on terrorism. Our efforts to secure additional funding for the Hellfire missile were not successful in the fiscal year 2002 Defense Emergency Relief Funding. This weapon is critical to our attack helicopter force and saw recent service with 15th MEU (SOC) augmentation of the U.S. Army during Operation Anaconda. The Hellfire inventory continues to age and will reach critical shelf life age in fiscal year 2008 (the weapons have been extended to 200 percent of design life to reach fiscal year 2008). Additional funding for this weapon would assist us in fielding increased numbers of the new Blast Fragmentation Warhead variant (AGM0114M) of this weapon. Additionally, the Marine Corps is working with the Defense Threat Reduction Agency to evaluate a thermobaric warhead for this weapon to increase operational flexibility and address a more diverse target set. Any additional funding for Hellfire would be used to procure both blast fragmentation and thermobaric variants to support forward deployed forces.

General JUMPER. Yes. The Air Force Fiscal Year 2003 Budget Submission and supplementals adequately fund precision munitions. The Air Force has taken steps to assure that the 2003 budget submission and supplementals will replenish our expenditures of preferred munitions used in Operation Enduring Freedom. The Air Force took action to respond to immediate concerns with preferred munitions and also increased our investment in munitions across the FYDP by over \$2 billion. With respect to the JDAM, the Air Force invested in facilitization of the plants that produce this weapon. The contractor already significantly increased tailkit production, and is funded to continue to increase their monthly production of tailkits. The JDAM funds included in the fiscal year 2002 supplemental request will allow us to achieve near maximum production at a faster rate. In addition to these actions, the Air Force is currently assessing the impact of the latest wartime planning scenarios on munitions requirements. The results of this analysis will be used to determine future procurement needs.

AIRCRAFT MAINTENANCE ON UNFUNDED REQUIREMENTS LISTS

129. Senator SESSIONS. Admiral Clark, one of the items you have listed on your unfunded requirements list is a request for funds to correct, "emerging deficiencies impacting aircraft mission capable rates." The description for this line item says, "funding is required to preclude grounding three critical weapons systems as a result of unforeseen maintenance requirements." You list problems with the B-1B, B-2, and F-15 fleets. In fact, you say that the B-2 hot trailing edge damage has already degraded six aircraft and that these aircraft are "en route to becoming non-flyable." Six B-2s represent almost one third of the total B-2 fleet. Your unfunded requirements list requests funding for eight center wing sections for EA-6B aircraft to restore these aircraft to full capability. Your line item description says, "51 EA-6Bs are currently limited to 3 Gs." Secretary England has testified that your number one priority for funding is aircraft recapitalization. These problems sound pretty serious to me. Why are they on your unfunded list instead of a supplemental cost of war request?

Admiral CLARK. EA-6B Wing Center Sections (WCS) are included in the fiscal year 2002 Defense Emergency Response Fund Spring Supplemental Request and the fiscal year 2003 unfunded requirements list. This takes advantage of maximizing the WCS procurements in both fiscal years. Based on the amounts appropriated, we will optimize WCS production, thereby reducing the number of g-restricted aircraft in the fleet inventory.

130. Senator SESSIONS. Admiral Clark and General Jumper, there have been many reports that we are flying our aircraft at a much higher operational tempo than planned. Can your services afford to wait to fund these aircraft fixes?

Admiral CLARK. The Navy EA-6Bs are currently flying 50 percent higher operational tempo than normal. We have requested additional funding to ensure the continued viability of the EA-6B, and we will process further requests should the need arise.

General JUMPER. The AF was aware of problems with the B-1, B-2, and F-15 but they were not severe enough to ground the aircraft until recently. Therefore, these problems did not make it into the fiscal year 2002 President's budget. The purpose of the \$163.3 million in the UPL is to fund additional maintenance requirements that were not serious problems during the fiscal year 2003 President's budget development. Over the last 3 to 5 months, the B-1, B-2, and F-15 issues have risen to a level which cannot wait for correction within normal programmed maintenance schedules.

The B-1 wing pivot shear bearing is an item that was designed to last for the life of the airframe. The B-1 System Program Office discovered unanticipated wear and has determined that some aircraft cannot wait until normal depot maintenance prior to repair. There is a potential of 2-3 B-1s being grounded by the end of fiscal year 2002.

The B-2 hot trailing edge is a problem discovered last fall and is being investigated by structural engineers to determine the best course of action. The trailing edge will have a significant impact on B-2 operations if not corrected immediately.

F-15 horizontal stabilizer delamination issues have now exceeded normal Air Force organic maintenance capabilities. Air Combat Command believes these maintenance problems cannot wait until the fiscal year 2004 President's budget. This problem will exceed depot level capacity in fiscal year 2003 if actions are not taken immediately.

Since these problems have become serious operational issues, the AF recently added them to the top 5 of the fiscal year 2003 unfunded priority list.

LITENING PODS FOR UNITED STATES AIR FORCE AIRCRAFT

131. Senator SESSIONS. General Jumper, it is my understanding that many of the Marine Corps and Air National Guard aircraft flying in Afghanistan are equipped with Northrop Grumman Litening targeting pods which provide the pilots with greater operational capability for precision strike and nighttime navigation than those of some Air Force planes. Is the Air Force looking at this system to help our pilots and troops in the current conflict, and if so what is the status of Air Force plans to acquire Litening in the near future?

General JUMPER. The Litening Pod has a laser spot tracker. This feature enables the aircraft to identify targets that are laser-designated by special forces personnel in the current conflict. The current USAF targeting pod (LANTIRN) doesn't possess this attribute. The USAF's newly funded advanced targeting pod will possess this feature and many other critical capabilities (CID, J-series weapons coordinate gen-

eration, more powerful laser for standoff). Deliveries of this pod begin this fall. However, in support of the immediate need for more laser spot trackers, a Combat Mission Need Statement was approved in December 2001. Currently, the Air Force is requesting to reprogram money for an additional 24 Litening II pods as part of the Fiscal Year 2002 Omnibus Reprogramming package.

QUESTIONS SUBMITTED BY SENATOR SUSAN COLLINS

SHIPBUILDING—DD(X)

132. Senator COLLINS. Admiral Clark, as you stated, the DD(X) represents the future for the Navy and is expected to make a significant contribution in the Navy's ability to achieve affordability breakthroughs with dramatic reductions in fleet operations and support including personnel costs. DD(X) should allow the Navy to field a fleet of highly capable and affordable warships. Would you discuss the value that you believe DD(X) and its family of ships will provide the Navy team, and further would you provide details on the \$961 million investment proposed in the fiscal year 2003 budget for this family-of-ships?

Admiral CLARK. Maritime Dominance in the 21st century requires a naval force capable of projecting power and defeating anti-access threats. U.S. naval forces will be required to project power forward, provide assured access in the littoral environment, and support a wide variety of joint and combined operations. Defeating and deterring future national threats will require a wide range of capabilities provided from a family of ships. These ships will be required to provide:

- Precision Strike and Volume Fires;
- Anti Access Littoral Missions; and
- Missile Defense.

In order to accomplish these complex and challenging missions, the future surface naval force will consist of four elements:

- Advanced, multi-mission destroyers, DD(X), capable of providing precision strike and volume fires;
- Advanced cruiser, CG(X), providing sustained air superiority against air-breathing and ballistic threats;
- Agile Littoral Combat Ships (LCS) capable of defeating enemy littoral defenses including mines, small boats, and diesel submarines; and
- In-service Aegis equipped fleet.

Transformation of the future naval force starts with the DD(X) technology development effort. Many of the cutting edge and future technologies that will assure maritime dominance are being developed under the DD(X) program for the future family of ships.

The fiscal year 2003 budget request for DD(X) will provide funding for development of transformational systems. The DD(X) design agent will focus on the development of Engineering Development Models (EDMs) during fiscal year 2003 including:

- Advanced Gun System and Magazine;
- Integrated Power Systems;
- Radar Suite (Multi-Function Radar/Volume Search Radar);
- Total Ship Computing Environment;
- Advanced Vertical Launch System;
- Integrated Deckhouse and Apertures;
- Autonomic Fire Suppression System;
- Infrared Mock-ups;
- Hull Form Scale Model; and
- Integrated Undersea Warfare System.

In fiscal year 2003, the design agent will also perform design studies to support the spiral design review/requirements revalidation and the integration/evolution of the overall DD(X) ship design in fiscal year 2005. Full funding is critical to achieve the innovation and transformational technologies that DD(X) will bring to the fleet.

133. Senator COLLINS. General Jones, Admiral Clark stated the DD(X) represents the future for the Navy and is expected to make a significant contribution in the Navy's ability to achieve affordability breakthroughs with dramatic reductions in fleet operations and support including personnel costs. DD(X) should allow the Navy to field a fleet of highly capable and affordable warships. Do you have any comments to add since this family of ships will also fulfill requirements, specifically fire support, for the Marine Corps?

General JONES. A credible Naval Surface Fire Support program is a critical component of forcible entry from the sea, and DD(X) is a vital component of that capability, essential to realizing the full potential of Expeditionary Maneuver Warfare. The systems envisioned for DD(X), which include the 155mm Advanced Gun System and the Advanced Land Attack Missile (ALAM), are essential elements of an expeditionary fire support system that will provide responsive, all-weather fire support “from the sea” in support of forces operating throughout the depth of the littoral battlespace.

I am concerned, however, that DD(X) will be fielded with less warfighting capability and in fewer numbers than previously planned for DD21. The magazine capacity of DD(X) must be sufficient to provide sustained fires in support of Marine, joint, or coalition forces ashore, and there must be a sufficient number of ships available to sustain fires for extended periods of time. Additionally, there must be enough Vertical Launch System (VLS)/Advanced Vertical Launch System (AVLS) cells dedicated to the ALAM, which will provide the Landing Force Commander (LFC) with responsive, medium-range interdiction, and battlespace shaping fires throughout the duration of operations.

In order to provide sustained fire support, DD(X) must be capable of rapid underway replenishment within the theater of operations. Sustainment is a key element in providing sustained fire support, and there must be sufficient numbers of ALAM and 155mm Long-Range Land Attack Missile projectiles available to replenish the magazines and VLS/AVLS cells of DD(X).

AMPHIBIOUS LIFT CAPABILITY

134. Senator COLLINS. Admiral Clark and General Jones, the fiscal year 2003 proposed budget would reduce our force structure by two amphibious warfare ships, one combat logistics ship, one mine warfare ship, and 42 active aircraft. What short- and long-term impacts do you anticipate this force structure reduction will have on the OPSTEMPO and the PERSTEMPO of our fleet?

Admiral CLARK. The proposed fiscal year 2003 budget will reduce the force structure by 2 amphibious warfare ships, 1 combat logistics ship, 1 mine warfare ship, and 42 active aircraft. This reduction in the number of ships and aircraft will have minor impact on personnel tempo (PERSTEMPO) and operations tempo (OPSTEMPO) for the remaining force. Planned and on-going operations are the primary drivers for PERSTEMPO and OPSTEMPO changes. The global war on terrorism is currently the primary worldwide operation causing increases in the PERSTEMPO and OPSTEMPO of naval forces.

The current active amphibious fleet exceeds the 2.5 MEB AE lift threshold in all areas except that of vehicle square—currently at 2.07 MEB AE. Vehicle square will be reduced to 2.01 MEB AE with the planned reductions in force structure.

General JONES. These reductions should have little impact on the OPSTEMPO and PERSTEMPO of marines. However, while it has long been recognized that we require an amphibious ship force structure capable of simultaneously lifting the assault echelons of three Marine Expeditionary Brigades, today’s amphibious lift can only support two-thirds of this requirement in certain aspects of the lift footprint. We need to commit to redress this shortfall as a matter of urgent priority.

We remain concerned that further schedule slippages in the LPD-17 programs will directly impact our ability to maintain forward deployed naval capabilities sufficient to meet the challenges of both peace and war. In addition to LPD-17 development, it is critical to replace the aging LHA-1 *Tarawa*-class ships. Congressional support for amphibious shipping is vital to our continued success.

Decommissioning one LSD 36 class ship and the remaining LST in fiscal year 2003 will result in the following amphibious ship lift reductions:

- Troops: 649;
- Vehicle (square feet): 27,500;
- Cargo (cubic feet): 4,800; and
- LCAC Spots: 2.

The Marine Corps amphibious ship lift requirement is 3.0 MEB AE in order to support our warfighting and forward presence requirements. The current Navy amphibious shipbuilding plan results in an active amphibious force capable of lifting a fiscally constrained 2.5 MEB equivalents, which is not achieved until 2015 upon delivery of the twelfth and final LPD-17-class ship. Today, amphibious lift force structure can support only two-thirds of the 3.0 MEB AE requirement in certain aspects of the lift footprint. This reduced force structure, coupled with the decommissioning of active amphibious ships, adversely impacts Marine Corps warfighting and crisis response capabilities, thereby increasing operational risk.

WORKLOAD IMBALANCES

135. Senator COLLINS. Admiral Clark, you testify that your fiscal year 2003 proposed priorities invest in current readiness for our naval forces. However, I am aware that there have been some deferred depot maintenance periods due to current operations (i.e., combating terrorism) on the *Los Angeles*-class submarines in fiscal year 2002, which will impact fiscal year 2003 and out-year workload schedules, placing the fleet ready submarines at risk to meet future missions as required by the Commanders in Chief. These delays not only adversely affect fleet readiness; they can also cause dramatic workload imbalances at our shipyards. I am concerned that continued shifts in the workload to future years will place undue stress on the fleet and the yards. I would like your commitment that your workload plans will be adjusted to maintain a stable workload and workforce at the shipyards.

Admiral CLARK. Ship depot maintenance plans are continuously updated to incorporate actual execution, operational impacts, and financial resources. Availabilities are deferred only after the risk to fleet readiness associated with deferring the work is determined and deemed acceptable.

The Navy actively works to refine and schedule ship depot availabilities for effective shipyard execution. Keeping the shipyard workload level is essential to efficient operation and is a key consideration in scheduling availabilities.

A skilled and motivated shipyard workforce is essential to maintain the Navy's high state of material readiness. Recognizing that many in the public shipyard workforce are rapidly approaching retirement eligibility, a primary focus of the Navy's depot maintenance program is maintaining a stable workforce with the skills we need. We appreciate the support Congress has given the naval shipyard apprentice programs.

AVIONICS AND NAVIGATION SYSTEMS

136. Senator COLLINS. Admiral Clark, the Multi-Mission Aircraft is scheduled to replace the aging P-3 platform in 2010 to 2012. Currently, the high OPTEMPO of the platform is rapidly diminishing its service life significantly. The P-3 platform, while it has been upgraded incrementally, has an average age of 25.5 years. Are there plans in this budget to continue upgrading the existing platforms' avionics and navigation systems to keep the P-3s viable, in order to bridge the procurement to its replacement in future years?

Admiral CLARK. Yes. The fiscal year 2003 President's budget (PB-03) contains funding for three P-3C modernization programs. Four P-3C Anti-surface warfare Improvement Program (AIP) kits and installations are funded in fiscal years 2003 and 2004 (\$96.6 million). The AIP provides upgrades to sensor; command, control, communications, and intelligence (C³I); weapons; and survivability systems. A comprehensive Communications, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) program is also funded across the fiscal year 2003 FYDP (\$58 million). This program will develop an open cockpit architecture that will support present and future CNS/ATM requirements and will begin to procure and install equipment needed to support CNS/ATM requirements. Finally, a Communications Improvement Program (CIP) is funded across the PB-03 FYDP (\$31.8 million). The CIP provides a common configuration of VHF and UHF communications radios, a satellite communications system that is compliant with current bandwidth and transmission protocol requirements, and an Advanced Narrowband Digital Voice Terminal encryption device.

These programs will combine to keep the P-3 a valuable warfighting tool and will allow it to be the bridge needed until its replacement, the Multi-mission Maritime Aircraft (MMA) reaches full operational capability.

DEFENSIVE WEAPON SYSTEM

137. Senator COLLINS. General Jones, I have been told that a Defensive Weapon System (DWS) for the V-22 is required. I understand that the competition for that system has been completed for almost 2 years, however the Corps has not executed the contract for this DWS. In reference to this program, could you tell me when the Corps plans to initiate that DWS program?

General JONES. The General Dynamics, GAU-19 (.50 cal multi-barrel gatling) was announced as the winner of our gun competition in August 2000. The events of the past 2 years forces us to prioritize the funding and engineering efforts for the V-22. We must ensure the V-22 is a safe, flyable aircraft that is operationally capable, before we commit to acquiring the Defensive Weapon System. Our primary focus of

effort, near term, is to return the aircraft to flying in the test mode. The V-22 program is following an "event driven" philosophy with regard to major program changes and decisions. Integrating the Defensive Weapons System at this early stage would cause additional delays and potential program event risks.

138. Senator COLLINS. General Jones, even if production began immediately, will there still be 90 aircraft built before the weapon system is available?

General JONES. No. If the Defensive Weapon System integration and production began today, we would be putting the gun system on the Lot 11 aircraft first. This means there would be 107 aircraft built before this weapon system is available. However, we are anticipating that we would only retrofit approximately 70 of the 107 aircraft. The 37 aircraft not requiring the Defensive Weapon System include projected attrition, basic training aircraft at the Fleet Replacement Squadron, and the Continued Development aircraft used by the test community.

139. Senator COLLINS. General Jones, aren't the retrofit costs for the DWS continuing to grow with these delays?

General JONES. Yes. The cost to outfit a V-22 with the Defensive Weapon System on a retrofit basis is approximately \$900,000 more than a forward fit. The longer we delay the start of this Defensive Weapon System integration development effort, the more aircraft we will have to retrofit.

C-17 STRATEGIC AIRLIFT

140. Senator COLLINS. General Jumper, I believe Congress authorized another multiyear procurement of 60 aircraft for the C-17 strategic airlifter. I think most people thought that would be 15 aircraft per year for 4 years, starting in fiscal year 2003. Why are there only 12 C-17s in the fiscal year 2003 budget?

General JUMPER. Due to Air Force funding constraints, the Air Force requested and received congressional approval for a 6-year multiyear. The Air Force notified Congress during this request of the intent to buy 12 aircraft in fiscal year 2003. Since this contract is a multiyear procurement, Boeing will be able to maintain the optimum production rate of 15 aircraft per year. This funding approach will execute the 60 aircraft follow-on multiyear within the Air Force Total Obligation Authority.

[Whereupon, at 12:52 p.m., the committee adjourned.]

**DEPARTMENT OF DEFENSE AUTHORIZATION
FOR APPROPRIATIONS FOR FISCAL YEAR
2003**

THURSDAY, MARCH 14, 2002

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

**ATOMIC ENERGY DEFENSE ACTIVITIES OF THE
DEPARTMENT OF ENERGY**

The committee met, pursuant to notice, at 9:37 a.m., in room SH-216, Hart Senate Office Building, Senator Carl Levin (chairman) presiding.

Committee members present: Senators Levin, Reed, Bill Nelson, E. Benjamin Nelson, Dayton, Warner, Inhofe, Allard, Collins, and Bunning.

Committee staff member present: David S. Lyles, staff director.

Majority staff member present: Madelyn R. Creedon, counsel.

Minority staff members present: Judith A. Ansley, Republican staff director; L. David Cherington, minority counsel; Mary Alice A. Hayward, professional staff member; George W. Lauffer, professional staff member; Patricia L. Lewis, professional staff member; and Scott W. Stucky, minority counsel.

Staff assistants present: Daniel K. Goldsmith, Andrew Kent, and Thomas C. Moore.

Committee members' assistants present: Elizabeth King, assistant to Senator Reed; Richard Kessler, assistant to Senator Akaka; Peter A. Contostavlos, assistant to Senator Bill Nelson; Eric Pierce, assistant to Senator Ben Nelson; Margaret Hemenway, assistant to Senator Smith; Robert Alan McCurry, assistant to Senator Roberts; Douglas Flanders, assistant to Senator Allard; Kristine Fauser, assistant to Senator Collins; and Derek Maurer, assistant to Senator Bunning.

OPENING STATEMENT OF SENATOR CARL LEVIN, CHAIRMAN

Chairman LEVIN. Good morning, everybody. The committee meets this morning to receive testimony from Secretary of Energy Spencer Abraham on the budget request for the Department of Energy's (DOE) national security activities, which account for approximately two-thirds of the entire Department of Energy budget.

We welcome a friend back to what was, for a time at least, his home away from home. We all know Spence well. We are delighted

that he is the Secretary of Energy and that he is with us this morning.

We have a number of important issues to discuss with Secretary Abraham, including the adequacy of the Department of Energy's environmental management (EM) budget; the progress of its programs to combat the proliferation of weapons of mass destruction; and DOE's plans, if any, for modifying existing nuclear weapons or developing new ones.

Today, the United States is confronted by a wide range of threats to our security from a wide range of potential adversaries. In the past, our Nation has led efforts to reduce these threats to the United States and to our allies through diplomacy and, when necessary, through military action.

The United States led by example in 1959 when we initiated the Antarctic Treaty to internationalize and demilitarize the Antarctic continent. We led by example when we signed the Nuclear Non-Proliferation Treaty (NPT) on the first day it was open for signature in 1968. We led by example in our efforts to reach an Intermediate Range Nuclear Forces (INF) Treaty and the Strategic Arms Reduction Treaties (START).

We led by example, when we took our long-range bombers off nuclear alert status, when we unilaterally eliminated tactical nuclear weapons from the Army and the Marine Corps, and removed them from Navy surface ships and submarines.

We have also led the way to increase the safety and security of nuclear weapons and materials. Through the Cooperative Threat Reduction (CTR) program in the Defense Department and the non-proliferation programs of the Department of Energy, the United States has secured tons of nuclear materials in the countries of the former Soviet Union.

We have helped deactivate, dismantle, or destroy thousands of Russian nuclear weapons and delivery systems that once threatened our security. We have helped provide employment for hundreds of Russian scientists and engineers with expertise in building nuclear, chemical, or biological weapons and who otherwise might be tempted to sell that expertise to unfriendly nations, or even terrorist organizations. All of these efforts to reduce the dangers from nuclear, chemical, and biological weapons have directly contributed to our own national security.

Today the United States has an opportunity to lead again by carrying out real reductions in the number of nuclear weapons in our arsenal and by reducing the incentives for other countries to build or keep nuclear weapons.

In May 2000, President Bush recognized this opportunity for leadership when he said, "America should rethink the requirements for nuclear deterrence. The premise of Cold War targeting should no longer dictate the size of our arsenal."

The United States has the opportunity to lead a safer world. The United States should be prepared to lead by example, because it is in our best interests and the best interests of the world.

This would be an act of principled leadership, seizing the moment and beginning a new era of security, a new era of cooperation on proliferation and nuclear security.

But I have to wonder if we are really providing the leadership needed to combat the proliferation of weapons of mass destruction and the means to deliver them. Are we setting an example for the rest of the world to reduce the threat of nuclear weapons or are we setting the opposite example?

What kind of an example do we set for other nations when we say we are reducing our strategic nuclear stockpile to 1,700 or 2,200 nuclear warheads, when what we really are doing is moving nuclear warheads from missiles and bombers to warehouses, where they could be quickly and easily brought back to service?

What kind of an example are we setting when we say that we are studying ways to modify existing nuclear weapons, or even develop new nuclear weapons to give us new capabilities and options to use them, possibly in a preemptive manner in specific scenarios or against specific targets? Does that not signal to the world that there is a new and broader range of contingencies in which the United States would consider using nuclear weapons and, most significantly, that we are considering increasing rather than reducing our reliance on nuclear weapons?

If we are unwilling to reduce our own nuclear weapons stockpile in a more meaningful way, and if we are looking at ways to make nuclear weapons more usable in future conflicts, does that not reduce our standing to persuade other countries to reduce their nuclear arsenals, or to forego the development of a nuclear capability, or to refrain from transferring nuclear weapons technology? "Do as I say, not as I do" has never been a very effective way to influence the behavior of other countries. It is not leadership by example. In my view, it is certainly not an approach that will make our Nation more secure when it comes to reducing the threat of nuclear weapons and the proliferation of weapons of mass destruction.

I know, Secretary Abraham, that some of those issues are outside of your jurisdiction, but we will be glad to have your comments relative to any of them. I know there will be a number of questions relative to those issues since they are very prominent at this time.

Senator ALLARD. Mr. Chairman?

Chairman LEVIN. Senator Allard.

Senator ALLARD. Mr. Chairman, I just visited with Senator Warner and he is going to be here momentarily. He had originally asked me to make his opening comments; now he has decided he is going to be here, so he'll make those opening comments.

I have a few comments I would like to make as the ranking member of the Strategic Subcommittee.

Chairman LEVIN. Sure.

Senator ALLARD. I do not know exactly what your format is going to be this morning.

Chairman LEVIN. We would be happy to either have those comments now or you can make them at your turn.

Senator ALLARD. I will proceed now, if I may, Mr. Chairman.

Chairman LEVIN. There are going to be a few of us, so I am going to call on each of us for an opening comment then.

Senator ALLARD. That is fine, Mr. Chairman.

Chairman LEVIN. Will that be all right with everybody?

Secretary Abraham, please proceed.

STATEMENT OF HON. SPENCER ABRAHAM, SECRETARY OF ENERGY; ACCOMPANIED BY DR. EVERETT BECKNER, DEPUTY ADMINISTRATOR FOR DEFENSE PROGRAMS, NATIONAL NUCLEAR SECURITY ADMINISTRATION; AND AMBASSADOR LINTON F. BROOKS, DEPUTY ADMINISTRATOR FOR DEFENSE NUCLEAR NON-PROLIFERATION, NATIONAL NUCLEAR SECURITY ADMINISTRATION

Secretary ABRAHAM. Mr. Chairman, thank you. First, let me thank you and the members of the committee for having me here today. I last testified before the committee at the time—actually after my confirmation, but in what, I guess, we termed a confirmation-related hearing and I have appreciated, and I know our staff has and our team at DOE, working with your staffs as well as the members of the committee over the last year.

Today I would like to just report a little bit on our 2003 budget and would be glad to submit for the record my full testimony and make some comments here that might highlight a few of the important points of that.

Chairman LEVIN. We appreciate that, and, of course, the full statement will be made part of the record.

Secretary ABRAHAM. Thank you. Before I begin I would just like to take a moment to express—although he is not here today, my appreciation and thanks to Gen. John A. Gordon, who heads up our National Nuclear Security Administration (NNSA).

Upon my arrival at the secretary's post, General Gordon, of course, had already assumed his position as the administrator of NNSA. He has become a trusted friend and colleague during a very challenging time and I wanted the committee to know that I certainly appreciate him and I think we all at DOE appreciate the enormous contribution which he and his team are making to our national security.

Two of those team members are here—with me today and—who have now been officially confirmed in their positions as deputy administrators at NNSA: Ambassador Linton F. Brooks, and Dr. Everett Beckner, who are respectively our deputy administrators for non-proliferation programs and defense programs. They are also very welcome and important additions to a very strong team that we have at the Department.

This has been an eventful year for most every agency of the Federal Government, certainly for ours. A severe energy supply shortage confronted us our first day in office, as you all know, and heating oil, natural gas, and gasoline price spikes took place. Significant events have happened in the energy markets and, of course, the terrorist attacks of September 11 all combined to make this an extremely challenging year for the men and women at the Department of Energy.

I just want to comment here that certainly a lot of us in elected office, and I would join that group or be included in it, have from time to time raised concerns about the effectiveness of various government agencies. I was one who, as this committee noted when I appeared last year, had been critical of the actions at times of the Department of Energy. I am sure not every action that the Department takes will be viewed universally as ideal.

But I would just like to pay special tribute to the folks at the Department. I have gotten to know a lot of them, career people who worked very hard for this country and who rose to a tremendous challenge this last year, both at our sites around the country in meeting some severe challenges, particularly after September 11, and the people at our headquarters. They really do a very good job, Mr. Chairman.

Last October, I spoke to the Department's managers to address an issue that I think had been an overriding concern to some, which was whether or not this Department had a core mission and declarative mission. I spoke to them to emphasize that we do, and that that mission really is still very much wrapped around the topic of national security.

Our national security mission has obviously appeared in the Department's national nuclear security activities, but it shapes our other programs as well.

Our energy programs advance energy security, which is a critical part of national security. Our science programs contribute directly both to the technology base critical to today's military and to energy security as it looks over the horizon to sources that can increase our energy independence.

Even our environmental management program, in my judgment—by cleaning up the legacy of the Cold War and protecting communities and restoring the environment, plays an important role in furthering the broader objectives of the Department's security mission.

To ensure that everything we do at the Department is consistent with our mission in national energy security, we have initiated no-holds-barred reviews of most of our key programs. Those reviews have and will continue to help guide us as we change and improve the way the Department of Energy does business.

As a result, in no small measure of reviews already completed, we have this year's budget submission. So let me talk about that briefly.

Mr. Chairman, you and the members of this committee have oversight of, as you indicated, two-thirds of the DOE budget. Our budget for 2003, our submission request totals \$21.9 billion, which is an increase from last year of \$580 million, and that is the largest amount ever requested for this Department. Not counting the fiscal year 2002 supplemental, in fact, our increase is nearly a billion, and covers critical needs related to national security, energy, and the environment.

Mr. Chairman and members of the committee, our Department has enormous responsibilities for safety here at home and for our national defense. Under DOE's defense programs, we maintain our nuclear deterrent through our Stockpile Stewardship Program (SSP).

We also play a critical role in non-proliferation, counter-terrorism, and homeland security, and we provide, of course, the power plants for our fleet of nuclear-powered submarines and aircraft carriers.

Each of these areas sees budget increases in our 2003 request. Overall, we are requesting just over \$8 billion for NNSA, a \$433 million increase over the 2002 level, signaling a major boost in sup-

port for security programs and a broader role for the agency in support of the administration's defense requirements.

It also reflects a broadening scope of responsibilities for homeland security in the aftermath of September 11. For weapons activities, a subset of those programs, we are requesting \$5.9 billion, an increase of over \$300 million from last year's level.

Our budget supports a healthy Stockpile Stewardship Program, a comprehensive weapons certification program, and a robust infrastructure for nuclear weapons production.

The highest priority of our stewardship program is ensuring the readiness of nuclear weapons through maintenance, design, life extension and manufacturing, and funding for the Directed Stockpile program will increase by 18 percent.

We have also begun a concerted and, believe me, a much needed effort to address a serious maintenance and modernization backlog at our various facilities. After years of neglect, our scientists and engineers are forced to work in buildings where literally ceilings can fall in on them. This is a disgrace.

Consequently, we are requesting a 23 percent increase over last year's appropriated level, a boost of about \$46 million, which will provide \$243 million for infrastructure modernization as part of a longer-term plan to get the facilities into appropriate condition.

For non-proliferation-related activities, we are requesting over \$1.1 billion, the highest amount at which these programs have ever been funded. When we came into office, we began working closely with the White House to review these non-proliferation programs with an eye toward a new comprehensive non-proliferation objective and program.

Presidents Bush and Putin further shaped that agenda when they met and agreed to share information and expertise to counter bio-terrorism, improve protection and accounting of nuclear materials, and prevent illicit nuclear trafficking.

Shortly after the Bush-Putin agreement, I met with my Russian counterpart, Minister of Atomic Energy Alexander Rumyanstev, to discuss how we could accelerate, perfect, and expand cooperative measures on material security and accountability. I believe our meeting was a major success. We agreed on the need for greater cooperation, improved steps for protection of dangerous materials, enhanced safeguards of fissile materials, and ways to boost safety and security in the peaceful use of nuclear energy. This administration is fully committed to the success of this deepening cooperation in this area.

We are asking for \$800 million to support our non-proliferation programs with Russia, an increase of \$115 million, 17 percent above the 2002 appropriated level.

The Department is also on the cutting edge of homeland security and energy assurance. To that end, we have requested \$283 million for non-proliferation research and development, and \$27 million for an expanded energy security and assurance effort.

Additionally, our outstanding naval reactors program, which supports the submarines and carriers now on station around the world, remains a critical part of our security mission. We are requesting over \$700 million for this program, an increase of about \$19 million.

Finally, I know there have been concerns expressed about security for our facilities. Our 2003 request attempts to address this. For all safety and security programs, the request totals in excess of \$1 billion.

Let me also say a word about our EM programs. Mr. Chairman, EM is one of the Department's most important tasks. When I came into office last year, I was presented with the old plan for cleaning up our weapons sites, which called for a timetable of about 70 years to complete at a cost of up to \$300 billion.

I think this committee would agree with me that the citizens in the communities where these sites are located and the taxpayers deserve a better plan than that. At the time, the question seemed quite simple: Do we follow that course, or seek something better?

Immediately upon their confirmations, I have asked our under secretary and our assistant secretary for environmental management to conduct a top-to-bottom review of our environmental management programs, with the goal of expediting cleanup in these various sites to try to reduce that time dramatically, from 70 years to something which would give the citizens in these communities a chance to see, in their own lifetimes, the completion of these programs.

That report review is now complete. We propose in this budget a request of \$6.7 billion for this program at this time in fiscal year 2003. That budget has two categories; one for basic funding at every site; and then an \$800 million expedited cleanup account, out of which those sites who agree and come to an agreement with the Department to participate in a new approach would receive additional funds to begin to speed up the cleanup.

This additional \$800 million—this initial \$800 million expedited cleanup account represents our current estimate of the number of agreements for accelerated cleanup that can be established with state and Federal regulators this year. However, we are ready to expand this account with more money in the fiscal year 2003 budget as we indicated in our budget document, should sufficient sites agree to move to expedited schedules to justify it.

Mr. Chairman, the Department is strong and, I think, getting stronger. We have an extraordinarily talented and dedicated workforce, as I said, that has been ahead of the curve during a difficult and challenging year.

As a department, I think we are poised to increase the contribution we make to the war on terrorism, to enhancing America's deterrents, to fulfill our environmental responsibilities, and to try to build a stronger foundation for energy security in the 21st century.

Mr. Chairman, thank you very much. I appreciate the chance to be here.

[The prepared statement of Secretary Abraham follows:]

PREPARED STATEMENT BY HON. SPENCER ABRAHAM

Mr. Chairman and members of the committee, it is a pleasure to appear before you today to discuss the Department's fiscal year 2003 budget request for defense related programs.

On September 11, our Nation changed as did our national security challenges. The Department of Energy's \$21.9 billion budget responds to that change—in our focus as an agency and in the way we do business. This budget meets these challenges through investment in our national defense and in an important component of that, our Nation's energy security addresses the new security challenges we face

as a Nation after the events of September 11, as well as increased concern regarding our dependence on foreign oil and the security and reliability of our critical energy infrastructure. This budget request also reflects the results and recommendations of several government-wide and DOE internal policy reviews recently completed. The incorporation of these broad strategic and policy reviews into the fiscal year 2003 budget reflects our intention for serious reform in some important program areas and continue us on a course toward a comprehensive change in the way we do business.

PRINCIPLES GUIDING THE FISCAL YEAR 2003 DEPARTMENT OF ENERGY BUDGET

Of the total fiscal year 2003 budget request of \$21.9 billion for the Department, approximately 70 percent, or \$15.4 billion, is for programs within the jurisdiction of this committee.

In October 2001, I laid out for the Department's managers and employees a strong statement of mission and purpose and a series of principles to guide the Department's programs and operations. With an emphasis on measurable performance objectives and accountability, I am holding Department of Energy (DOE) managers responsible for ensuring the safety of our employees and the communities surrounding our facilities, respecting and observing the highest standards of security, and building a culture where merit determines promotion and diversity is viewed as key to recruiting and retaining the best people. My vision for excellence requires that we set priorities, discipline our focus, and measure everything we do by reference to our missions and priorities.

To achieve this vision, the key is understanding our overarching mission. That mission, put simply, is national security. Our national security mission is readily apparent in the Department's National Nuclear Security Administration, but it is also inherent in our Energy and Science programs that advance the Nation's energy security, and in our Environmental Management programs that clean up our sites to ensure that legacies of the Cold War are resolved and meet our future responsibilities in a manner that protects the security and safety of the individual American taxpayer, our environment, and our future. An effort is underway to review DOE activities, including those at the national laboratories, to ensure they adhere to the Department's core mission and objectives.

The Department is also addressing long-standing criticisms of DOE management and moving toward the administration's model as set forth in the President's Management Agenda. With an emphasis on measurable performance objectives and accountability, we are holding DOE managers responsible for making these changes. We have set priorities, disciplined our focus and will measure everything we do by reference to our missions and priorities.

Last year's budget maintained the administration's flexibility to respond to government-wide policy reviews then underway, including the Department of Defense Nuclear Posture Review, the National Security Council reviews of U.S. deterrence requirements and nonproliferation programs, as well as an internal review of the Office of Environmental Management. These reviews are now complete, and the results and recommendations are reflected in the fiscal year 2003 budget request. We stand ready to work with you to address the recommendations from these reviews.

In addition, we are implementing the President's Management Agenda. The President has called for an active but limited government, one that empowers States, cities, and citizens, ensures results through accountability, and promotes innovation through competition. The administration has targeted areas for improvement throughout the Federal Government. Our work to fully implement these initiatives will continue through fiscal year 2004 and beyond, but we have a path forward and are making changes now.

Human Capital

In order to eliminate unnecessary layers of management, direct personnel to high-priority missions, address skill imbalances, and achieve a 5–10 percent savings in management expenses through comprehensive, creative management reform, DOE will accelerate workforce planning and work with the Office of Personnel Management to conduct complex-wide organizational surveys to analyze and evaluate DOE field and headquarters redundancies, fragmentation and duplication of effort.

Competitive Sourcing

We are initiating formal competitive sourcing reviews under the provisions of Office of Management and Budget Circular A–76 on approximately 1,000 positions. In addition, line managers are planning other reviews that may lead to formal studies. The longer-term goal is to conduct reviews on 50 percent of the Department's inventory of Federal positions that are not inherently governmental.

Improved Financial Management

We will continue to build on the Department's unqualified audit opinion on the consolidated financial statements and work to integrate better financial, budget, and program information in order to provide costs information related to performance. Key to the success of this initiative is the completion of the Financial Management module of the Department's Corporate Management Information System (CMIP).

E-Government

To make better use of computer information systems to improve management, promote efficient use of resources, and make our systems provide more people friendly information, the Department will strengthen its Information Technology investment portfolio by linking investment control processes, using enterprise architecture, and improving security policies and capital planning.

Budget and Performance Integration

We have strengthened the Department's ability to measure performance by establishing the Program Analysis and Evaluation Office and developing a 5-year planning, programming, budgeting and evaluation process for the entire Department. Building on the integration of performance metrics into our fiscal year 2003 budget submission, we are improving the performance measures contained in our fiscal year 2003 budget request and will continue to improve performance measures and their integration into the fiscal year 2004 budget. These improvements will provide clear, quantifiable outcomes to support budget requests.

Now I will turn to the details of the Department's fiscal year 2003 budget submission for defense related programs.

NATIONAL NUCLEAR SECURITY ADMINISTRATION

The National Nuclear Security Administration (NNSA) is in its third year of implementation. Created by Congress to respond to the changing and complex set of challenges in the national security environment, this year the NNSA takes on a national security role in a way Congress could not have envisioned. The fiscal year 2003 budget request for programs within the NNSA totals \$8.0 billion, a \$433 million increase over the fiscal year 2002 appropriation, and includes:

- *Weapons Activities* (\$5.9 billion)
- *Defense Nuclear Nonproliferation* (\$1.1 billion)
- *Naval Reactors* (\$708 million)
- *Office of the NNSA Administrator* (\$348 million)

The administration's national security strategy is transforming to meet the threats of the 21st century. The NNSA is intimately involved in the formulation of the administration's strategy through participation in the Strategic Review, Nuclear Posture Review and the review of nonproliferation programs. We have accelerated research and development into technologies to detect and deter weapons of mass destruction. We responded swiftly and comprehensively to the terrorist events of September 11, protecting our valuable national security assets and employees, and offering our unique capabilities to the national response. We have contributed directly to the homeland security needs of Governor Ridge with our technology and scientific staff. Work such as this will extend into fiscal year 2003 and beyond.

While policies and priorities established by the administration and Congress will determine the scope of our work over the years to come, nuclear deterrence remains the cornerstone of our national defense strategy for the foreseeable future. The NNSA will also be deeply involved in arms reduction and nonproliferation activities, and will make significant contributions to the administration's new capabilities-based national security strategy that requires us to maintain our military advantages in key areas while developing new capabilities. The NNSA will continue to be involved in the Nation's homeland security efforts. The Naval Reactors program will continue to be responsible for all naval nuclear propulsion work.

The NNSA faces major challenges during the next 5-year period in responding to evolving customer requirements while maintaining and improving the health of the Nation's national security enterprise. The expanded focus on international terrorism following the September 11 attacks underscores the importance of maintaining a strong capability in the science and technology of national security.

NNSA's ability to perform its national security functions depends upon renewing our internal capabilities. As we conduct our daily technical work of maintaining the reliability, safety, and security of the Nation's nuclear weapons and developing the scientific tools necessary to perform our work, we need to ensure that our national security enterprise remains capable. Both the physical and intellectual infrastructure of the national security enterprise were built during the era of underground

nuclear testing, and have eroded to the point that we are no longer able to perform some essential tasks. It is imperative that we address these issues during the upcoming 5-year period. NNSA's program and budget planning emphasizes maintaining an adequate workforce of scientific, technical and business skills, and building a diverse, multi-talented leadership. We must be able to recruit, train, and develop quality employees throughout our organizations in a highly competitive employment environment. We must implement our plans to renew the physical infrastructure to ensure adequate capability and capacity as well as compliance with environment, safety, health and security standards.

Another key element to NNSA's ability to perform its national security functions is an organizational plan to achieve greater effectiveness and efficiency. Last month, Under Secretary John Gordon submitted NNSA's "Report to Congress on the Organization and Operations of the NNSA" describing our accomplishments to date and our strategy for operating an integrated national security enterprise.

WEAPONS ACTIVITIES

In spite of the many challenges we are facing, the NNSA has continued to meet the core Stockpile Stewardship mission—that is to maintain the safety, reliability, and performance of the nuclear stockpile to meet national security requirements.

As stated earlier, the NNSA actively participated in the strategic reviews of national-security related activities conducted by the administration. Participation by NNSA ensured that the choices, plans, and requirements being developed were within the realm of the technical and production capabilities of the NNSA. It also increased the awareness of our issues and technical capabilities by the administration's national security senior management team.

While there are many important points and conclusions in the Nuclear Posture Review (NPR) including the goals to reduce operationally deployed nuclear weapons to between 1,700 and 2,200 by calendar year 2012 and the maintenance of a "responsive force" for use as a hedge against unforeseen problems, several points are of particular relevance to the NNSA:

- First, nuclear weapons, for the foreseeable future, remain a key element of U.S. national security strategy. The NPR reaffirms that NNSA's science-based Stockpile Stewardship Program is necessary to assure the safety and reliability of the nuclear stockpile in the absence of nuclear testing. This includes basic surveillance of our aging weapons, systems refurbishment, chemistry and metallurgy of materials aging, detailed understanding of weapons physics, reestablishment of warhead advanced concepts teams, and development of additional diagnostic and predictive tools for long-term stewardship. The NPR revalidated the stockpile refurbishment plan previously developed and approved by the NNSA and the Department of Defense.

The fiscal year 2003 budget request for Directed Stockpile Work is \$1.2 billion, an increase of \$190 million, or about 18 percent over last year. Principally, this increase allows us to support life extension activities for the W80, W76, and B61 warheads, including supporting research and development and additional hydrodynamic testing for assessment and certification. Also, \$2.1 billion is requested for the 17 scientific and engineering campaigns that provide the knowledge, technologies and capabilities to address current and future stockpile issues.

- Second, more than any previous review, the NPR's concept of a new triad emphasizes the importance of a robust, responsive research and development and industrial base. This calls for a modernized nuclear weapons complex, including contingency planning for a Modern Pit Facility, which will provide the Nation with the means to respond to new, unexpected, or emerging threats in a timely manner. The fiscal year 2003 budget request supports our industrial base in two key ways: a request of \$1.7 billion for Readiness in Technical Base and Facilities, a 10 percent increase supporting the operations of weapons complex facilities; and, a \$243 million request for the Facilities and Infrastructure Recapitalization program to continue this important multi-year initiative into its third year.

- Third, a study examining the aspects of reducing test readiness lead time below the 24 to 36 month requirement for a fully diagnosed test—the NPR states that the lead time needs to be shortened out of prudence, not because there is a current need to test. In fiscal year 2002, the NNSA and the DOD will study the optimum test readiness time that best supports the new triad as directed by the NPR. Pending the outcome of the study, the fiscal year

2003 request includes \$15 million for Enhanced Test Readiness activities at the Nevada Test Site.

- Finally, the NPR calls for a stable, adequately funded Future Years Nuclear Security Program (FYNSP). The NNSA's costs will not be reduced in the immediate future as a result of NPR. Near-term costs are driven by restoring production capabilities and revitalizing the infrastructure, not by the number of warheads in the stockpile or even the number to be refurbished. In fact, we expect that cost savings from refurbishment of a smaller number of weapons will not be realized until about fiscal year 2010. The NNSA enterprise's capacity will be stretched, approaching maximum capacity while our systems are on the process line for refurbishment, thereby limiting our ability to dismantle significant numbers of weapons over the next 10 years. The FYNSP document is in final preparation and is expected to be provided shortly.

Another result of the conduct of the NPR has been improved cooperation and coordination between the NNSA and DOD. The Nuclear Weapons Council is working, policy levels between the agencies are effective, and the DOD has offered strong support for needed programs in NNSA.

In addition to the activities discussed above, the fiscal year 2003 budget request for the Stockpile Stewardship Program will support:

- Assessment of manufacturing concepts for a Modern Pit Facility.
- Production of tritium in Tennessee Valley Authority reactors beginning in fiscal year 2003.
- Manufacture of a certifiable pit, and the capability to certify a pit by 2009 with the goal of achieving an earlier date of 2007.
- Maintenance of ability to conduct underground testing.
- Complete National Ignition Facility internal infrastructure required for "first light", eight beam, stockpile stewardship experiments in fiscal year 2004.

NONPROLIFERATION ACTIVITIES

At \$1.114 billion, the fiscal year 2003 budget request for nonproliferation related activities is the highest at which these programs have ever been funded.

When I came into office I began working closely with the White House to review our cooperative assistance programs with Russia. It was important that nonproliferation programs were responsive to the new strategic environment being shaped by Presidents Bush and Putin. At the Crawford summit, the two Presidents called for improved cooperation with respect to the protection and accounting of nuclear materials, and the prevention of illicit nuclear trafficking.

Shortly after the Bush/Putin summit, I met with Russian Minister of Atomic Energy Romyansteve to accelerate and expand cooperative measures on materials security and accountability. This meeting with the Russian minister was a major success. Agreement was reached on the need for greater cooperation, improved steps for protection of dangerous materials, enhanced safeguards of fissile materials, and ways to boost safety and security in the peaceful use of atomic energy. The administration is fully committed to the success of this deepening cooperation.

This commitment is reflected in the diversity of our programs to address nonproliferation concerns in Russia and indeed, throughout the world. NNSA uniquely integrates technical and policy expertise to guide and implement the full range of U.S. nonproliferation priorities and initiatives. Whether ensuring that former Russian weapons experts are able to put their skills to use on peaceful and commercial initiatives, reducing the footprint of Russia's "closed" nuclear cities, or leading on-the-ground programs to secure at-risk nuclear materials in Russia, North Korea, or elsewhere, NNSA is at the forefront of U.S. efforts to halt the proliferation of weapons of mass destruction and advance U.S. nuclear security interests. As a scientific organization and working closely with our national laboratories, NNSA brings to the table unique assets that have allowed us unprecedented access to foreign scientific communities. In Russia and other former Soviet states, for example, the great strides that have been made to secure nuclear materials and WMD expertise or improve reactor safety are made possible by the access NNSA has to its counterpart organizations in these countries.

The administration's strategic review of NNSA's nonproliferation programs with Russia confirmed the importance of these programs and resulted in a significant policy change reflected in the fiscal year 2003 budget request. In January 2002, the administration announced plans to proceed with a workable, technologically possible, and affordable approach to disposal of surplus U.S. plutonium. The United States plans to dispose of 34 metric tons of surplus weapons grade plutonium by

turning the material into mixed oxide fuel (MOX) for use in commercial nuclear reactors. This decision follows a review by the administration of alternative technologies to dispose of surplus plutonium to meet the nonproliferation goals agreed to by the U.S. and Russia while making the program less costly and more effective.

In September 2000, the U.S. and Russia signed the Plutonium Management and Disposition Agreement committing each country to dispose of 34 metric tons of surplus weapons-grade plutonium each, in rough parallel. With the U.S. decision, we will be able to move forward on meeting our obligations under this agreement.

Previously the U.S. government endorsed a dual-track approach to dispose of the plutonium by turning some of the material into MOX reactor fuel and immobilizing the remaining plutonium for long-term storage. Eliminating immobilization from the disposition pathway saves nearly \$2 billion in life cycle funding, decreases plutonium storage costs, and facilitates closure of the former nuclear weapons complex sites. Importantly, the MOX fuel technology is proven, having been used by European countries in their reactors for more than 20 years.

The MOX conversion process is expected to cost \$3.8 billion over 20 years, including the construction of new disassembly and fuel fabrication facilities at the Savannah River Site in South Carolina. Construction of the facilities is set to begin in fiscal year 2004. The Department of State and the NNSA will work with their counterparts in Russia to achieve the disposition of Russian surplus weapons-grade plutonium through the MOX process. Bilateral cooperation and inspections will assure progress and compliance with the agreement. The fiscal year 2003 budget request for the Fissile Materials Disposition program, including both Operating and Maintenance and Construction funding, is \$384 million.

SECURITY AND COMBATING TERRORISM

The NNSA employees and assets responded aggressively and immediately in the aftermath of the terrorist attacks on September 11, 2001. Specifically, the NNSA:

- Strengthened physical security at our sites to assure the safety and security of nuclear weapons, the weapons complex and its employees, special nuclear material and other high value assets in custody of NNSA.
- Provided technical assets and staff to aid in the recovery efforts in New York City and at the Pentagon.
- Worked closely with intelligence and law enforcement by providing NNSA experts in their facilities, on the working groups, on the White House Counter Terrorism Task Force, and in the Office of Homeland Security.
- Began studies to analyze the potential of high-energy, high-velocity attacks at key nuclear material and nuclear material storage locations.
- Established NNSA's Combating Terrorism Task Force to coordinate a systematic review of twelve key areas of NNSA security and operational responsibilities to recommend immediate improvements.
- Established a working group, drawing from all the work at NNSA facilities, to define what capabilities we can bring to bear on the problems at hand, and not just in the nuclear arena. NNSA has capabilities in many technical areas ranging from chemical/biological weapons to sensors, to aircraft and airport security. In the area of sensors, we have the best capability in the world and are working to promote greater integration across our research and development programs.
- Responded to the changed threat by joining with the DOD in an immediate review of the "design basis threat."
- The NNSA laboratories are being used to improve homeland security in ways that are not perhaps fully recognized by the public. The laboratories develop advanced technologies that detect chemical, biological and nuclear agents. These technologies help protect us today. Chemical and biological technologies and agents developed by the NNSA laboratories were used to help clean up the congressional office buildings of anthrax.

In the aftermath of the September 11 attack, the NNSA efforts required substantial additional funding in order to achieve a safer security posture. This needs to be considered when making comparisons between the fiscal year 2003 request and the total fiscal year 2002 available funds. The fiscal year 2002 emergency supplemental appropriation for terrorism related activities provided \$357 million to the NNSA. Weapons Activities Safeguards and Security program received \$106 million to hire and train additional protective force personnel, initiate physical security upgrades, and to address cyber-security infrastructure upgrades. The Secure Transportation Asset program received supplemental funding of \$25 million to enhance security against the emerging threat.

The Defense Nuclear Proliferation program account received \$226 million in supplemental funding to accelerate priority efforts in Nonproliferation Research and Development, International Nuclear Materials Protection and Cooperation, International Nuclear Safety and Cooperation, and additional Federal staffing.

The fiscal year 2003 budget request continues to emphasize NNSA's security and nonproliferation programs. The Weapons Activities Safeguards and Security program request is \$510 million. This allows for continued enhancements to protective forces and security systems. The National Center for Combating Terrorism at the Nevada Test Site is separately requested in fiscal year 2003 at \$10 million.

FACILITIES AND INFRASTRUCTURE RECAPITALIZATION

Improving the condition of the nuclear weapons complex facilities and infrastructure remains a priority effort. Your support for these efforts is both necessary and timely. The restoration, revitalization, and rebuilding of the physical infrastructure is key to the maintenance of mission-capable facilities which contribute to credible nuclear deterrence. Recently, the NPR validated the findings of the NNSA regarding the condition of the complex and our path forward.

Currently, Defense Programs acts in a landlord capacity and manages the complex day-to-day through its Readiness in the Technical Base and Facilities activities. From internal studies, we have determined that the complex deteriorates by about \$200 million annually. To arrest this deterioration and eventually begin to improve the condition of the weapons complex, the NNSA established the Facility and Infrastructure Recapitalization Program. The fiscal year 2003 budget request places a high priority on this activity, with a request of \$243 million—a 23 percent increase over the fiscal year 2002 level.

The budget also includes a corporate facilities management program that complements the infrastructure spending and addresses a major concern regarding responsible fiscal accountability. We have instituted Ten-Year Comprehensive Site Planning, established industry standard performance measures, and accurate reporting measures that now provide for measuring progress.

The recapitalization program will focus on working off maintenance backlogs, prioritized to reduce or eliminate the risk of unplanned operational downtime due to equipment failure, extend the expected effective life span of equipment, optimize facility efficiencies, and repair, renew and refurbish existing structures. Also, the program supports dismantlement and removal of deactivated facilities and infrastructure that are excess to current and future mission requirements, and infrastructure planning activities to prepare and develop necessary plans for the execution of outyear Facilities and Infrastructure Recapitalization Program projects.

The condition of the nuclear weapons complex is poised for improvement across its eight sites. The response has been substantial. The NNSA will continue this initiative until the complex has restored lost capabilities, modernized other capabilities, and is sound, safe, and secure.

NAVAL REACTORS

The Naval Reactors program, which supports the nuclear powered submarines and carriers now on station around the world, remains a critical part of the national security mission. This program is requesting the smallest increase in the NNSA's fiscal year 2003 budget. We are requesting \$707 million, an increase of about 3 percent. The increase will help to maintain the constant progress and consistent contribution to the Nation's nuclear deterrent force that we have come to rely upon from the Naval Reactors program. The small increase above inflation is primarily for work to bring the dry spent fuel storage facility in Idaho online while continuing Naval Reactors activities to ensure the safety and reliability of the 102 Naval reactor plants, upgrade and improve existing reactor plants, and develop new reactor plants.

OFFICE OF THE ADMINISTRATOR

The budget request for the Office of the Administrator is 6 percent higher than the fiscal year 2002 appropriation—a \$21.2 million increase. This account provides corporate direction and oversight of NNSA operations consistent with the principles of protecting the environment and safeguarding the safety and health of the public and the workforce of the NNSA. The fiscal year 2002 Energy and Water Development Appropriations Act consolidated the program direction funds from weapons activities and defense nuclear nonproliferation within the Office of the Administrator appropriation. The Naval Reactors program direction and the Secure Transportation Asset program direction retain separately funded program direction accounts. The increase in the Program Direction budget supports annual cost-of-living increases in

salaries and benefits while support services and other related expenses remain at their fiscal year 2002 program levels.

NNSA ORGANIZATION STANDUP

At the beginning of this testimony, I noted that management reforms are underway and they include the NNSA organization. Under Secretary Gordon approached an NNSA organization standup by implementing a two-phase plan. The first phase, essentially complete, focused on creating an integrated Headquarters organization, and defining the structural relationship between the Federal elements at Headquarters and the field locations. The second phase focuses on realigning our field structure and improving efficiencies through eliminating overlaps in responsibilities within the Federal structure and reducing unnecessary administrative burdens placed on those performing the mission.

Last month, the Department submitted a "Report to Congress on the Organization and Operations of the NNSA" describing accomplishments to date, a plan for assigning roles and responsibilities to and between Headquarters and field organizational units, and the strategy for operating an integrated national security enterprise.

The recently released report summarizes the first-ever NNSA Strategic Plan, provides a detailed plan for assigning roles and responsibilities between Headquarters and field elements, and discusses our objectives in fiscal year 2002 and beyond. We plan to eliminate a layer of management and oversight over the nuclear weapons complex by removing the Operations Offices from the NNSA chain of command and converting these offices to service centers providing support services such as procurement and human resources. Each of the eight NNSA contractors will report to eight site offices which will in turn report to the Administrator. This locates NNSA support, decision making and oversight close to the contractor, consolidates service functions, and allows staff reductions downstream.

Contract and project management will rest with each NNSA site office. Integration of weapons production activities will be performed in Albuquerque, New Mexico. Headquarters staff will continue to be responsible for program planning, budgeting, policy development, and management of weapons research and development and nonproliferation activities.

NNSA will launch a systematic re-engineering campaign to reduce the number of separate offices and layers of Federal management, reduce the overall number of Federal employees, and correct skills mismatches. Federal staff not performing core functions will be redeployed and retrained as necessary. We intend to use incentives to encourage higher-than-average attrition, career development, and retention of highly skilled employees to right-size and reinvigorate our staff.

We will need your support in funding the Office of the Administrator Program Direction request of \$348 million to implement the re-engineering campaign. Successful re-engineering cannot be accomplished without adequate resources to retain highly skilled employees, retrain employees with skills mismatches, recruit the right technical skills, and to cover the significant costs associated with separation incentives.

NNSA has instituted an Administrative Workload Reduction Initiative using comprehensive input from the laboratories and plants, with task forces identifying specific improvement and reducing administrative burdens. As a result, NNSA contractors will be given clearer and more consistent expectations. They will also continue to comply with all environment, safety and health and security policies.

When these changes are fully implemented, we will realize the goals set by Congress in establishing the NNSA. By clearly defining roles and responsibilities, we will increase accountability and reduce duplication. By reducing administrative burdens on the NNSA contractors, we will operate more efficiently and hold the contractors accountable for delivering on our expectations.

OTHER DEFENSE ACTIVITIES

The fiscal year 2003 request for Other Defense Activities is \$472 million which is allocated as follows:

- *Energy Security and Assurance* (\$27.7 million)
- *Office of Security* (\$187.2 million)
- *Intelligence* (\$41.6 million)
- *Counterintelligence* (\$46.1 million)
- *Independent Oversight and Performance Assurance* (\$22.6 million)
- *Defense Environment, Safety and Health* (\$99.9 million)
- *Worker and Community Transition* (\$25.8 million)
- *National Security Programs Administrative Support* (\$25.6 million)
- *Office of Hearings and Appeals* (\$3.1 million)

Of prime importance is \$27.7 million requested for Energy Security and Assurance, an essential, expanded national security program to help reduce America's energy supply vulnerability from severe disruptions due to natural or malevolent causes. An additional \$2 million is requested in the Departmental Administration account for Energy Assurance policy analysis in the Office of Policy and International Affairs. The program will work in close cooperation with the private energy sector by providing technical expertise to correct or mitigate disruption vulnerabilities, plan for response to and recovery from disruptions, and provide technical response support during energy emergencies. The tragic events of September 11 justify the need for this program aimed to protect our Nation's critical energy infrastructure.

SAFEGUARDS AND SECURITY CROSSCUT

The Department's request for Safeguards and Security is \$1.01 billion. Excluding fiscal year 2002 supplemental appropriations that provided one-time funding of \$108.5 million to bolster security in the aftermath of the September 11 attacks, the fiscal year 2003 request is 7.0 percent higher than the fiscal year 2002 enacted level. The fiscal year 2003 request reflects both increased and decreased safeguards and security needs. In particular, increased requirements in the NNSA are reflected in a \$61.1 million increase over fiscal year 2002 funding level, excluding supplemental appropriations, or a 13.6 percent increase. Reduced safeguards and security requirements in Environmental Management Defense Facilities Closure Projects are reflected in a 31.2 percent decrease commensurate with the planned removal of special nuclear materials from the Fernald and Rocky Flats sites, and completion of security upgrades in Miamisburg this year.

DEFENSE ENVIRONMENTAL MANAGEMENT

The budget request for Defense Environmental Management activities totals \$6.7 billion, including privatization, essentially the same as the comparable fiscal year 2002 appropriation. The budget request is composed of two parts: a base budget request and a new Environmental Management Cleanup Reform appropriation request of \$800 million. Should this new program be successful, the administration is prepared to request additional funds for it in fiscal year 2003. The request consists of:

- *Defense Environmental Restoration and Waste Management* (\$4.6 billion)
- *Defense Facilities Closure Projects* (\$1.1 billion)
- *Defense Environmental Management Privatization* (\$158 million)
- *Environmental Management Cleanup Reform* (\$800 million)

The Environmental Management (EM) program was created in 1989 to safely manage the cleanup of the environmental legacy from 50 years of nuclear weapons production and nuclear energy research at 114 sites around the country. The program manages the remediation of sites contaminated by defense and civilian activities, and receives appropriations in separate defense and non-defense accounts. The current cleanup program is projected to cost in the area of \$220 billion and take 70 years to complete. Costs have continued to increase annually while schedules slip. Consequently, EM completed a top-to-bottom review of the program to find ways to achieve greater risk reduction and cleanup more efficiently and cost effectively.

The review indicates that the EM program has failed to significantly reduce the risk presented to the public and the environment by the Cold War's nuclear legacy. If the program continues along the present path, DOE will not accomplish the very goal EM was originally established to achieve, the cleanup of the former weapons complex and closure of sites with no continuing mission. The report describes the program's weaknesses and provides specific proposals for improving EM's performance. The goal is to quickly and markedly improve the program's performance in achieving cleanup and closure, and ensure that the Department is reducing risk to its workers, the public, and the environment. Over the next 18 months, the Department will pursue implementing proposals, many of which will require reaching new understandings with State and Federal regulators, as well as fundamental changes in how DOE conducts its business.

Therefore, the EM fiscal year 2003 budget request has been structured to begin this process. But it is only a beginning and must be viewed as the first step in the transition between the program left by previous administrations and where the Department will head in fiscal year 2004 and beyond when the recommendations of the top-to-bottom review are implemented. An integral part of the reform is EM's commitment to the President's emphasis on performance-based budgeting.

The budget request will allow the program to continue to protect worker and public health and safety and the environment; continue surveillance, maintenance, and support activities needed to maintain waste, materials, facilities, and sites in a safe and stable condition; fully protect nuclear materials from terrorist threats; support accelerated cleanup and closure of the Rocky Flats Environmental Technology Site in Colorado, Fernald Environmental Management Project in Ohio, and the Mound Site in Ohio; achieve the increased numbers of shipments to WIPP, critical to meeting cleanup and closure goals; and continue to make progress in completing cleanup projects in accordance with existing approaches and under existing agreements.

A major new aspect of this budget request that will begin the immediate implementation of the recommendations of the top-to-bottom review, is the new Environmental Management Cleanup Reform appropriation. The new account is designed to enable the Department, the states, and the American taxpayer to begin realizing the benefits of alternative cleanup by making funds available to those sites that both demonstrate their ability to realign to a more risk-based approach and that provide to DOE specific proposals that achieve greater risk reduction, faster. This account will provide the stimulus necessary to encourage DOE sites and headquarters, contractors, and state and Federal regulators to quickly forge agreements to enable more effective cleanup approaches. Once agreement is reached, funds will be made available from the Cleanup Reform Appropriation to fund these new approaches or supplement existing funding from the base budget.

Consistent with the recommendations from the review, the EM budget also reflects a refocusing of the Science and Technology program to address specific, short-term applied technology needs for cleanup and closure. Longer-term and more basic research and technology activities will be transferred to the Office of Science. In addition, the Savannah River Ecology Laboratory will also be transferred to the Office of Science. The fiscal year 2003 request also includes the transfer of safeguards and security responsibility for Argonne National Laboratory-West from the Office of Science to EM.

DEFENSE NUCLEAR WASTE DISPOSAL

The Office of Civilian Radioactive Waste Management fiscal year 2003 budget request is \$527 million, an increase of \$150 million above the comparable fiscal year 2002 appropriation. Within this total is \$315 million requested for Defense related Nuclear Waste Disposal activities. The request supports my recommendation to President Bush that the Yucca Mountain site is scientifically sound and technically suitable for development as the Nation's long-term geological repository for nuclear waste. On February 15, 2002, after receiving my recommendation, President George W. Bush considered the Yucca Mountain site qualified for an application for the authorization of construction of a repository, and recommended the Yucca Mountain site to the U.S. Congress for this purpose. A repository at Yucca Mountain would help ensure America's energy and national security, homeland security, nuclear non-proliferation policy, secure disposal of nuclear waste, and ongoing efforts to clean up the environment at former nuclear weapons production sites.

CONCLUSION

Mr. Chairman and members of the committee, this concludes my prepared statement. I will be glad to answer any questions you may have at this time.

Chairman LEVIN. Well, thank you very much, Secretary Abraham.

That last subject that you discussed, the environmental cleanup money, I would like to pursue it with you for a bit. The cleanup account, the \$800 million, which you indicated you believe would represent all of the expedited agreements that could be reached during the upcoming fiscal year, you also indicated that you are ready to expand that next year for any additional expedited agreements that can be reached for cleanup.

This is an important new initiative, if it is funded.

Secretary ABRAHAM. Right.

Chairman LEVIN. What commitments do you have from the Office of Management and Budget (OMB) that they will, in fact, pursue that course? Because unless there is a commitment to do that, it seems to me we are right back in the same boat, where we are

holding out promises to people who have been waiting a long time for cleanup but not following through with the funds. What is the OMB commitment to you, if any?

Secretary ABRAHAM. First of all, let me just clarify. The \$800 million account for fiscal year 2003 submission could be expanded in this year and we are prepared to amend that request to expand it if more sites reach agreements with us than we had estimated.

Chairman LEVIN. Expanded through a supplemental appropriation?

Secretary ABRAHAM. I think it could be that approach. It could possibly be that during the course before the final appropriations for this account are completed for 2003 we would reach more agreements and then acquiesce to a higher amount than we requested. I think that is open in terms of how we might proceed.

Chairman LEVIN. But specifically and briefly, since we are going to be on a 6-minute round here, what is the OMB commitment to this program?

Secretary ABRAHAM. In future years, and I think that is really what you are asking, the administration is prepared to support funding for states who reach agreements consistent with the performance schedules contained in those agreements in future years. That gives predictability to these various communities that they will know not only what their 2003 number will be, but what we are going to request in subsequent years, because this road map will be quite clear.

Chairman LEVIN. When you say the administration, you are specifically referring to the OMB?

Secretary ABRAHAM. I am.

Chairman LEVIN. Thank you. On the issue of new nuclear weapons or modifications to existing nuclear warheads, has the Department of Energy been told by the Defense Department to work on the development of any new nuclear weapons?

Secretary ABRAHAM. What we have done, Mr. Chairman, is the following. I think that in the context of the Nuclear Posture Review and the other reviews that have been conducted by the Department of Defense, the identification of a particular challenge has taken place. That is the challenge of these hard deeply buried underground types of facilities.

It is my understanding that a number of agencies within our Department, as well as at the Department of Defense, have been asked to examine a full spectrum of options available to defeat hardened and deeply buried targets. This spectrum includes all options ranging from conventional munitions to modified nuclear warheads.

We have been asked to study what the potential is for the modification of weapons in our system to try to accomplish that objective. The DOE is not developing a new warhead. There is currently no military requirement for one. Any requirement for such a new warhead would, of course, have to be established by DOD and approved by Congress.

At this point, we are studying the issue. Others who have different tools available to them are studying it in the conventional weapons context. My understanding is, at the end of that process

all the different options will be studied before any decision would be made as to which approach to pursue in the future.

Chairman LEVIN. When you say there is no requirement for the development of a new nuclear weapon, would you include in that that there is no requirement to modify or develop a modified existing nuclear weapon?

Secretary ABRAHAM. No. At this point we are studying this challenge, and—

Chairman LEVIN. Both? Both a modification and new one?

Secretary ABRAHAM. Right. Right.

Chairman LEVIN. But beyond the study, there is no developmental work going on?

Secretary ABRAHAM. Not at this point. As I said, and we are not the only folks studying how to deal with this challenge. Others in other areas of our defense programs, not in our Department but in others, are doing the same. I think that at some point all the options will be considered and some decisions as to which to move to additional stages will occur.

Chairman LEVIN. Will that be which if any?

Secretary ABRAHAM. I am sorry, which?

Chairman LEVIN. You noted that the stages will be moved too.

Secretary ABRAHAM. If any, yes. Currently, I mean we are assisting in two engineering, research and development assessments basically to examine—that are broad—to examine the full range of options for destroying hardened and deeply buried targets.

Chairman LEVIN. Is there any specific money in the fiscal year 2003 budget request that was submitted by your Department relative to that study and examination?

Secretary ABRAHAM. I believe so. Let me just consult, if I could quickly here, with Dr. Beckner. [Pause.]

Over \$10 million.

Chairman LEVIN. That is a specified account for that examination? There is a provision in law that says you may not conduct or provide for the conduct of research and development which could lead to production by the United States of a low-yield nuclear weapon. That was a 1993 law, I believe. Are you complying with that law?

Secretary ABRAHAM. I believe we are, sir.

Chairman LEVIN. You have a fiscal year 2003 plan for a robust nuclear earth penetrator. Would that require a nuclear test if it is going to be included in the stockpile?

Secretary ABRAHAM. At this time, no, not at all. I say again this is, I think, basically the same type of the study is the stage we are at. If at some stage that study were to be decided to be followed further, there would be a lot of additional steps involved.

But as to whether—but we have not examined, nor is it even in the current discussion stages as to the issue of any kind of need for testing.

Chairman LEVIN. Thank you. Before I call on Senator Inhofe, without objection, I have Senator Thurmond's statement to be inserted into the record at this time.

[The prepared statement of Senator Thurmond follows:]

PREPARED STATEMENT BY SENATOR STROM THURMOND

Mr. Chairman, I am truly pleased to welcome our former colleague Secretary of Energy Spencer Abraham to the Senate Armed Services Committee to testify on the posture of the Department of Energy and the adequacy of the fiscal year 2003 budget request. Mr. Secretary, by all accounts you have had an outstanding year.

Mr. Secretary, last year when you appeared before this committee, the Plutonium Disposition program was undergoing a National Security Council review that called into question the future of the entire effort. At your direction the Environmental Management program was undergoing a "top to bottom" review. Additionally, the Panel to Assess the Reliability, Safety, and Security of the United States Nuclear Stockpile detailed worrisome signs regarding our nuclear arsenal. Finally, the Nation, especially California, faced the most significant energy crunch since the 1970s. What a difference a year makes.

This year, as a direct result of your efforts, the Plutonium Disposition program is on solid ground. In fact, the fiscal year 2003 budget request fully funds the revised program, which calls for burning 34 metric tons of surplus weapons-grade plutonium here in the United States and in Russia as mixed oxide fuel. Not only does the program eliminate the possibility that these nuclear materials can ever be used in weapons but it ensures that Russia will eliminate enough plutonium to make more than 4,200 nuclear weapons. Moreover, you will save the American taxpayers \$2 billion over the life of the Plutonium Disposition program, reduce peak-year funding, accelerate the completion of the program by 3 years, and reduce technical risks.

Since your last appearance before the committee your "top to bottom" review of the EM program has been completed. The outcome of the review, better known as the Accelerated Cleanup Initiative, is the most significant breakthrough in the history of the EM program. You stated over a year ago that the program had taken too long and cost too much. In fact, the baseline estimates for the EM program suggested that it would ultimately cost more than \$200 billion and take more than 70 years to complete cleanup throughout the DOE complex. You projected that they could cut costs and they could accomplish the job of cleaning up these legacy materials more quickly.

Again your vision has become reality. Just this past week, you announced the first accelerated cleanup agreement. Officials from Washington State and the Department of Energy agreed to a new schedule that will accomplish the cleanup of the Hanford Site 35 to 45 years sooner and billions of dollars cheaper than previously planned. In my home state, I have been advised that the Department of Energy will soon sign a similar agreement that will eliminate threats to the environment and ultimately save the American taxpayer billions for the cleanup of the Savannah River Site. I look forward to joining you in the announcement of this agreement. Moreover, I am aware that officials from your Department are reaching out at DOE sites across the Nation to accomplish this same accelerated cleanup. I look forward to hearing your comments on the progress of this truly worthy initiative.

At this time last year, the Nuclear Posture Review was still a work in progress. In the meantime, the Strategic Subcommittee of this committee held a second hearing with the Foster Panel and the conclusions were startling. Now that the Nuclear Posture Review is complete and has reaffirmed that nuclear weapons remain a vital element of the U.S. National Security Strategy, I am pleased that you are working to guarantee the safety and reliability of the U.S. nuclear stockpile. Moreover, I am especially heartened to know that you are pressing ahead to reverse the deterioration of the nuclear weapons infrastructure and restore lost production capabilities. I believe this is the right course, however, I remain concerned with the pace of progress, especially with regard to a Modern Pit Facility. I hope you will address your decision to defer progress on this crucial facility for fiscal year 2003.

Finally, 1 year ago energy prices were soaring, and concerns were mounting that a new energy crisis was upon us. While the energy crunch has passed, you are continuing to work toward the development of a comprehensive national energy strategy. Although not directly within the jurisdiction of this committee, clearly energy is a national security issue.

I am especially interested in the success of your Nuclear Power 2010 initiative. When you announced this initiative, you identified the Department of Energy's Idaho National Engineering and Environmental Laboratory in Idaho, the Savannah River Site in my hometown of Aiken, South Carolina, and the Portsmouth site in Ohio, in addition to a number of private sites, as locations that would be considered for co-location of an advanced technology nuclear power plant.

I firmly believe that utilizing Department of Energy facilities would mitigate any number of problems associated with building new nuclear plants. To begin with, there is no need to secure new land. In addition to the fact that this is already Fed-

eral property, in general, DOE facilities are large isolated areas that are highly secure. Also, individuals living near these locations are usually supportive of nuclear initiatives. They know that having a nuclear facility nearby is not a safety issue. As such, we avoid the “not in my backyard” syndrome. Finally, building new nuclear reactors on existing DOE facilities reduces the requirement for new infrastructure since companies would be “leveraging” against what already exists at these locations. This initiative is good government and I support it.

Again, Mr. Secretary, welcome and congratulations on a truly remarkable year as Secretary of Energy. I look forward to your testimony.

Thank you, Mr. Chairman.

Chairman LEVIN. Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

Mr. Secretary, thank you for your opening statement, because we went through quite an uncomfortable time with the Department of Energy in the previous administration. At that time, we had the opportunity to talk to a lot of people within the Department of Energy, and I share the statements that you made this morning about them.

You have some really good people that are in there. I think some unfortunate things happened prior to Bill Richardson being Secretary of Energy that worsened those problems. So do you feel confident now that you can take full responsibility for what is happening at DOE and that there is a chain of command that is going to be more reliable than those in the past?

Secretary ABRAHAM. Well, from day one when I was in charge, we obviously are working very hard to try to do a couple of things to address this.

We have begun to implement a number of management changes on a complex-wide basis. But also, because of the decision to create a semi-independent agency within the Department, the National Nuclear Security Administration, where General Gordon and I basically are working together to try to streamline the program systems that are operated as Congress, I think, intended so that we can bring up-to-date the effectiveness of the weapons development programs, and the various projects that are included under our non-proliferation agenda. I think we are making good progress on improving that by eliminating levels of management so that we really put program directors into an accountable position to produce their—

Senator INHOFE. I know that is not the purpose of this hearing today, but I think it is important that we get that on the record, because I believe that is true, too. I appreciate it.

In July 2001, we had Admiral Richard Mies, the Commander in Chief of the United States Strategic Command, testify. At that time, he talked about the difficulty in certifying the nuclear warheads with reasonable certainty—the words he used—by 2008, and in the years beyond that.

He said that the answer depends on the success of the science-based Stockpile Stewardship Program. He also stated that the Department of Energy is required to certify, you are required to certify, the reliability and safety of the Nation’s nuclear stockpile.

Now, are you in a position to say that DOE has more confidence in our ability to certify warheads by the year 2008 and beyond than Admiral Mies said you were at that time?

Secretary ABRAHAM. Well, much of the budget we have submitted is designed to support the science-based Stockpile Stewardship Pro-

gram. One of its principal responsibilities, obviously, is to give us the capacity, for me to, along with the Secretary of Defense, to certify the reliability of the stockpile.

That is, up to this point, the Secretaries of Energy and Defense have been able to do this annual certification. We have not quite finished the process for this year, but it is near completion. At this time, we have that capability, and I think we are confident that the investments we have been making give us the expertise for the foreseeable future to do that. Every year we make this assessment and, obviously, I do not think I have any more important responsibility in the job than to make sure that certification is accurate.

Obviously, if we ever reached the point when we felt we could not certify the reliability of the stockpile, that would be a very serious situation for us.

Senator INHOFE. I characterize this as a self-imposed moratorium on underground testing, and I would think at some point you are going to have to review that. I mean, out in the future, there has to be some date in the future where you lose confidence in the stockpile if no testing has taken place at all.

Secretary ABRAHAM. Well, if I could just sort of explain, the certification process is essentially an annual decision as to whether or not we have the ability to certify the reliability of the stockpile versus using tests as a way of doing that.

It is very important obviously that we do that annually. So this is not a case where we will wait until 2008 and then make a decision as to whether we need to engage in testing. We do that every year and we are making, I think, progress in terms of the development of the science that allows us to continue for the foreseeable future.

But, obviously, the stockpile will age and issues will come up. Every year through the program of surveillance we engage in, we do our best obviously to assess our ability to make that certification.

Senator INHOFE. Yes, and I know that very likely something could happen in the future where it would become necessary again, but this is something that has been a little distressing.

When we talk about the NPR, the Nuclear Posture Review, and the fact that we are going to be cutting our weapons down to about 2,000 from their current level and making changes insofar as the Peacekeeper missile is concerned, and our commitment is related to the withdrawal from the ABM Treaty, which some of us on this panel think is long overdue, but nonetheless, it is going to happen on June 13. Since we currently have no defense capability against ballistic missiles, our primary defense against a nuclear attack would continue to be a nuclear deterrent, between now and the time that we do have something and that would be sometime in the future, certainly a few years from now.

In the near term, is there a need to go beyond the modern facility that you have described to provide the Nation with the means to respond to new or unexpected threats in a timely manner?

Can you explain why it is acceptable that we do not have a nuclear weapons manufacturing capability and the Russians do? I recognize this is a policy that was in place before you got there. They

have that capability, and we do not. Do you have any thoughts about that?

Secretary ABRAHAM. Well, obviously, one of the programs in our stockpile system is designed to address exactly the issue of our capabilities at some future point to be able to manufacture certifiable plutonium pits.

We will, I think, in this budget invest somewhere in the vicinity of \$195 million in that program, which we right now are conducting at Los Alamos. The hope is to have a potentially certifiable pit in 2003 that will actually certify a pit for a particular weapon system by 2007.

The need for a facility for production based on the current age and condition of the stockpile is a little further into the distance. But certainly we are in the planning stages of looking at what those needs would be, and obviously, because we do not have that production capability right now, it does have, I think, and I am sure, bearing on the decisions that are made with respect to the size of the stockpile some of these issues as to what happens when we take weapons out of the operationally deployable system.

Senator INHOFE. Very good.

Thank you very much.

Chairman LEVIN. Thank you very much, Senator Inhofe.

Senator Bill Nelson.

Senator BILL NELSON. Thank you, Mr. Chairman.

Mr. Secretary, first of all, I want to compliment you on the attention that the Department of Energy is giving to this very serious problem of nuclear proliferation, and that is a compliment that comes after having had the Baker-Cutler report presented to the Foreign Relations Committee. Both of those distinguished gentlemen came and said that there is simply nothing more important than doing this. You seem to be implementing it.

The Baker-Cutler report was critical of the management of the Nuclear Cities Initiative (NCI). I noticed that you have combined that with the Initiatives for Proliferation Prevention (IPP). That is in a budgetary item that has a 31 percent reduction this year compared to last year. Do you want to comment on that?

Secretary ABRAHAM. Well, first of all, it is correct that the the programs are being merged. There is a fair amount of similarity in the way the programs were administered, and it was our conclusion that at the end of doing a fairly extensive interagency evaluation of non-proliferation programs, which the National Security Council conducted last year, that these programs would be more effectively managed if they were together.

What we then have done is to try to identify what is an appropriate budget level for this cycle. Now, the reduction you referred to, I think, is largely a function of the fact that we received a fairly significant, approximately \$15 million, boost for these programs in the supplemental.

It actually allowed us to conduct some work that would probably have been included, at least in terms of the feasibility of including it in the 2003 budget, which we are going to be able to conduct during the remainder of the 2002 budget year. So because of that, if you take the enacted level prior to the supplemental and what we

are requesting, they are fairly similar numbers, I think, a couple million dollars difference.

But what it reflects is, I think, the program's estimate of what can be done in the 2003 period, given the issues that relate to access and relate to effective use of the money.

Senator BILL NELSON. How do you plan to increase its effectiveness and the effectiveness of its management?

Secretary ABRAHAM. Well, first of all, we do have now sitting actually behind me, over my right shoulder, Ambassador Linton Brooks, who is the head of our non-proliferation programs. He has, I think, brought with his arrival a kind of leadership to the program and I do not know if you would like to comment at all on—

Senator BILL NELSON. Yes, I would like a comment, please.

Secretary ABRAHAM. Maybe he would like to just say some of the managerial changes that he is going to make.

Senator BILL NELSON. I would like to know, how do you plan to improve the management and the effectiveness of this program?

Ambassador BROOKS. Senator, we first have focused on eliminating duplication by common procedures, common administrative support, and a common superior.

Second, we have focused the Nuclear Cities Initiative more narrowly, concentrating on the City of Sarov, and concentrating on our core mission of taking technologists and putting them to work in technology. So we have dropped some of the work we did that was community development in the past.

Third, thanks to the Secretary's leadership, we have reached an agreement with the Russian Federation on access to the closed cities. The first test of that was this week, and it passed with a group going in for this kidney dialysis effort.

Finally, we are attempting to—we have had great success in the Initiatives for Proliferation Prevention with the United States' industry coalition, and we are bringing them more into the business of looking at the Nuclear Cities Initiative, since the whole idea of this program is not for the government to spend money for a long time, but for the government to provide seed money for genuinely commercial efforts.

Secretary ABRAHAM. If I could just add, I think we have also tried to do a couple—by bringing the programs together, obviously there is a certain amount of management overhead, because we have put a common manager in charge of both programs.

We have also—we very honestly are trying to do what I think Congress has asked us to do, and that is to maximize the fraction of the money we spend in Russia versus programs here in our laboratories.

That is one of the other changes where we are trying to get more of the resources to where I think Congress intends them to be spent, rather than here in the United States on studying and programs in our own facilities.

Senator BILL NELSON. Well, bottom line, is it working?

Secretary ABRAHAM. Well, we are literally in the first year of implementation. I feel at this point comfortable with this approach, and I think we are already seeing some success. Some of the issues that Linton mentioned have already taken, I think, a very positive turn.

Senator BILL NELSON. Not in the first year of us trying to stop proliferation in Russia, nor all of the activities of trying to keep the scientists from being spirited away to other activities outside of Russia. I mean, bottom line, what is your impression of the overall effort at trying to contain nuclear proliferation over there?

Secretary ABRAHAM. Well, in a broad sense, I would have to answer it this way: We had in November, and I alluded to it in my testimony, very successful meetings as a follow-on to Presidents Bush and Putin's meetings here.

Our counterparts at the Russian Ministry of Atomic Energy, and mine in particular, have, as a consequence of that, begun working very closely together with us. We have eliminated a number of access problems, which had made some of the accountability on programs more difficult as well as impeded our ability to secure facilities.

On that front, I think we are able literally at this point to project the completion of a number of the security and safeguard efforts at both Naval, as well as other facilities, completion dates 2 years or more earlier than had originally been planned as a result of the progress we are making, and, of course, as a consequence of more funding available for it.

We have, I think, the potential to even expand further. One of the interesting things that grew out of our meetings in November was a joint agreement between my counterpart and me to become personally engaged in clearing up issues that might slow down the process.

I think sometimes, I mean, we have bureaucracies working with bureaucracies and if there is an impasse, it sometimes takes a long time to resolve. We did not think this set of programs could afford to wait a long time to resolve. We made it very clear to our teams that if there were problems, we wanted them brought to our attention immediately, so we could solve those on a ministerial level, if necessary.

Interestingly enough, since we sent that signal, on each we have had enormous success in resolving impasses at the line level, and I think our willingness to become engaged is moving these programs ahead very vigorously.

We will be meeting again, it looks like in early May, and on this occasion it will be in the United States. I am optimistic that we may be able to further expand cooperative efforts across the board in these programs. But it is, as the budget request suggests, as high a priority right now I have at least in terms of the focus I have on these programs.

Senator BILL NELSON. Thank you, Mr. Chairman. You have been generous with your time. The thrust of my questions is, obviously, concern about a terrorist exploding a dirty bomb. Where do they get that material from? We will find out if this program is working or not on the basis of what we see.

Thank you.

Chairman LEVIN. Thank you very much, Senator Nelson.

Senator WARNER.

Senator WARNER. Mr. Chairman, I will take my question period following my colleagues. I apologize, Mr. Secretary, I had to attend

a meeting this morning on cyber-security, which is a matter of great importance to me.

I thank Senator Allard for giving our opening comments, so I shall wait. Thank you.

Chairman LEVIN. Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman.

Welcome, Secretary Abraham. It is always a pleasure to have you before the committee.

You testified that you inherited an EM program that would take 70 years to complete. I want to commend you for recognizing that communities across this Nation should not have to wait 70 years for completion of this program and for your commitments to expedite it, both in terms of the agreements you have reached and also additional funding.

Could you further comment on the likelihood that the program could be restructured in such a way as to substantially reduce the 70 years needed to complete the cleanup?

Secretary ABRAHAM. I would be glad to, and I appreciate having the chance to. We, as I said, encountered a plan that, to me, seemed unrealistic, because we all know how government budgeting processes work, at least at the Federal level. The idea of a 70-year-long program to us seemed not only unfair to the communities, but also unrealistic. So what we have done is conduct a top-to-bottom management review of every site to determine how we can significantly shorten the timeframe for dealing with ameliorating the most serious public health and safety risks.

What we are doing, now that we have completed that, is to sit down side-by-side with local community government officials, regulators, and so on, to propose our expedited cleanup plan, and we are listening to them now, in part as we did this study, we listened to them, as well, but to now try to come to an agreement on what ought to be the new set of priorities.

We have already had success in the State of Washington where a letter of intent between the Department and the Washington State regulators related to the Hanford site, probably the largest challenge we have in the complex right now, was just reached. The agreement there involves a variety of changes to the plan that had been in place before. Just to put it in a numerical sense, it means moving far more resources into Hanford in the immediate year and in the immediate period of years to begin quickly cleaning this up.

In the long-term sense, it means we now believe that we can finish the work at hand not in 2070 as had been planned, but somewhere in the timeframe of 2025 to 2035, or a 35- to 45-year shortening of the time frame. We believe that, percentage-wise, that kind of expedited cleanup can happen at virtually all of our sites.

What it means, though, is two things. We have to take more responsibility, and I have issued clear direction to our managers that we have a lot of responsibility to make this happen. It also means there will be more resources in the short run so that we can more quickly clean up the problems, because a lot of these long-term costs were just maintenance and security at the site, because it was going to take so long.

But, third, we also expect the sites to recognize that when the cleanup is done, they cannot expect as much budget as the previous

year, because the work is completed. That is going to require some changing and thinking as well.

When people look at our budget in the future, they are probably going to see, in the first few years, increases in environmental management costs. But then they are going to, and need to expect to, see these numbers come down. We cannot at the site level over here in Congress say, well, why are you not spending as much as last year? Well, the definition of what we are doing is to clean up a problem and end it, rather than to keep it going.

Senator COLLINS. Thank you. Switching to another issue, all of us are aware, as a result of the events of September 11 and the security lapses that our national security labs have had, of terrorists possibly having access to either nuclear technology or knowledge from our national laboratories.

Could you update us on the security improvements that have been made at our national labs since you took over the Department?

Secretary ABRAHAM. Well, one of our top priorities and in fairness, I think this was brought to light here in Congress before I got to the job, but it was immediately a top priority, was to try to increase our commitment, our investment in security. That is happening, as I mentioned.

We are making requests for total security throughout the complex of over \$1 billion in this budget. That, added to money we have gotten through the supplemental, will bring the amount we spend from this point forward through the end of the 2003 fiscal year to a number that will exceed—almost be \$1.3 billion.

Much of it is focused on cyber-security, a significant ramping up of expenditures there, because we see that as one of the challenges. We also are engaged in a very aggressive ongoing effort to continuously review the threats throughout our complex.

While I will not get into, at least in an open session, all of the kinds of things we test on and that we try to prepare for in terms of those threats, the one thing that I have insisted happen is that we not simply make one evaluation, one budget request, and leave it there but, rather than that, we have an ongoing and frequent review of an analysis of needs, because we recognize since September 11 that perhaps some of the challenges and threats people were prepared to deal with in the past were not properly defined.

That will change. It will change on an ongoing basis, so the request we are making is based on, at the time of the request, what we viewed as being the needs of the security efforts and it is entirely possible that I will update those as we move ahead here and continually reevaluate.

Senator COLLINS. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you very much, Senator Collins.

Senator Dayton.

Senator DAYTON. Thank you, Mr. Chairman.

Mr. Secretary, I want to begin by thanking you for your helpfulness to me and the people in northeastern Minnesota, which has been devastated by economic setbacks. Of all the high-level officials in the administration I have worked with in the last 15 months, you have been by far the most responsive and helpful, and I thank

you very much for that. On behalf of my State, I thank you as well, sir.

Regarding Yucca Mountain, which is a decision that all of us are going to face, I have read views from different people and even from the experts in this field, and some say that given the status of our technology relating to cask storage and to the need to cool these materials, the transportation concerns, that we ought to wait a couple of decades before we proceed on that measure.

What would be the consequence of that delay in your nuclear cleanup efforts?

Secretary ABRAHAM. Well, it has a profound impact on about four fronts. One of the fronts is what you just mentioned. Part of what we will be ameliorating as we clean up sites relates to the availability of a permanent repository for that cleanup. So it will have an impact for us on our environmental cleanup.

It also has an impact on our national security programs, because, in fact, our Naval reactors programs produce the waste that has to be stored. Right now, we have a temporary storage arrangement with the State of Idaho, but it is temporary, and while I am sure we could compel a State to continue to accept this waste, that is not an ideal way for us to proceed.

There is, in addition, for our Department, at least as we look at it, an energy security issue, because the failure to reach a decision with regard to waste disposal puts in jeopardy facilities, I think, including perhaps one in your state, that right now are major suppliers of energy that literally have no capacity at a certain point, probably in a few years, to store anymore waste. If there is no alternative for them, then they will have to cease operations.

It has a variety of implications, not just on our cleanup programs, but on national security and energy security, as well.

Senator DAYTON. Thank you. If Congress does approve the Yucca Mountain site, what in your estimation would be the timetable for when that site would be able to begin to receive shipments?

Secretary ABRAHAM. Well, one of the things that I think is perhaps not noted enough is exactly what the process would be after this year, assuming that Congress were to support the decision to move forward.

That decision only moves us to a license seeking procedure before the Nuclear Regulatory Commission (NRC), which means that another team of independent experts will objectively decide whether or not what we believe can be done, which is to safely store the waste at the site that it, in fact, does meet the highly stringent standards.

That process will take about 3 years to complete, if it does, and only then would we begin the construction of the facility, which would take about 3 years.

So those who add these numbers up realize that we are talking about 2010 probably before the construction would be completed and it would be possible for us to actually begin the process of storage.

Senator DAYTON. What is your Department's plan for that interim period with regard to the nuclear waste that you have responsibility for?

Secretary ABRAHAM. Well, much of that has to weigh—I mean, we do not have an alternative. I mean, it has to be stored, and in many cases already is stored in temporary facilities. That is where it has to remain.

But it is actually the problem we have across the country, which is that nuclear waste is being and obviously highly different site to site, but we have temporary storage facilities being used, in some cases, above ground, most cases, above ground; most cases—in some cases, not even in closed situations. That remains the only alternative at this point to the repository.

For us, as well as for the nuclear reactor sites around the country, it is a temporary situation and in some of these situations, not necessarily in our complex, but over time, the effectiveness of that storage will deteriorate as the facilities, these temporary facilities age.

Senator DAYTON. You mentioned in your testimony that you had instructed the EM program to do a top-to-bottom review, and I commend you for initiating that. Can we receive a copy of that review, please?

Secretary ABRAHAM. Yes. We would be happy to and Assistant Secretary Roberson who headed that up, along with our Under Secretary Bob Card, are available to brief members, because it is, I think, very—I think the course we are on, is a far more appropriate one for the communities involved, and we would love to provide you that information.

Senator DAYTON. Oh, please send me one.

Secretary ABRAHAM. Yes, sir.

Senator DAYTON. Do not put it in the mail. I am still getting Christmas cards in the mail. I got a thank you note from our governor that was dated December 21. I received it on Wednesday, yesterday. [Laughter.]

Shifting gears here, I want to follow up a bit on what Senator Nelson was going into with your counterpart, the Russian Minister of Atomic Energy, and again, I commend you for that initiative and I hope that you can make great strides ahead on both sides, because it seems to me that on the one hand we are justifiably concerned about these materials falling into the hands of other nations or terrorist organizations, and yet, it seems that you have inherited this, your administration.

We have not made as much progress as some believe we could have and should have, given either the priority or the financial resources necessary just to seize this opportunity to clear this nuclear flotsam off of our planet before it falls into somebody else's hands. So both in terms of the scientific expertise, but also the materials themselves, I just hope you can accelerate those efforts.

Secretary ABRAHAM. But, we have three different programs that are—well, actually more than that, but three large areas of work.

One is in the area of enriched uranium, where through the agreement with Russia, we are purchasing a substantial quantity of highly enriched uranium each year to be used in American nuclear reactors. That is taking dangerous material out of Russia and bringing it here for the purpose of fuel.

Our Plutonium Disposition program, we have worked very hard on trying to move that program ahead, and I believe we now have

a workable solution on our side and we are working with Russia, obviously, to make sure that it is possible to basically dispose of 34 metric tons of weapons grade plutonium on their side, as well as on our side.

Then there are the security programs I have mentioned, which we think we will be able to substantially reduce the timeframe to complete those material protection programs so we can secure sites at least 2 years quicker than we had anticipated.

Perhaps, as we have further meetings, we can even move ahead more quickly. We are clearly working on those which we believe to be our greatest problems first, and so there is a priority to how we do it.

Senator DAYTON. Well, by accelerating the time table, you are doing a great service to all of us. Thank you.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Dayton, very much.

Senator Allard.

Senator ALLARD. Mr. Chairman, thank you. I want to thank both you and Senator Warner for moving ahead on what I view as a very important hearing on our nuclear security programs. It is always good to see the Secretary of Energy here, my good friend, Spencer Abraham.

Senator WARNER. Senator, that was a request that you put to both Senator Levin and me to have this hearing.

Senator ALLARD. Yes. I appreciate it.

Senator WARNER. We have had it for many years. I do not think there was any question it eventually would happen, but I appreciate your efforts.

Senator ALLARD. Thank you. I would just state that through the Strategic Subcommittee on which I am the ranking Republican, which I view that as a privilege, I have an opportunity to work with the Chairman there, my good friend Jack Reed, and this is important to the committee and I think it is important to the country.

About two-thirds of the funding for the Department of Energy comes through this subcommittee and our committee as a whole.

One of the programs I am greatly interested in is EM. I appreciate the comments that my colleague from Maine made about that. I agree with her and I am glad to see that you are moving ahead to try and improve its programs so that we actually do reach goals and it is certainly, I think, important to the country that we do that.

We have 50 years worth of cleanup, and I think the new budget will begin to address some of the concerns that we have.

I think it is lucky for you and the Nation that we have good and dedicated people in these EM programs, particularly. But I think you are doing a good job in the Department of Energy. Certainly I do not have any criticism because of your effort to move forward in trying to improve what is happening in the Department.

I think the scientists at our national labs are the best in the world, all the engineers and the craftsmen, and our cleanup at Naval reactor sites, and they all continue to meet the ever-increasing demands we place on them.

Speaking of dedicated, I would like to take a moment to recognize Barbara Mazurowski at the Rocky Flats cleanup site that we have in Colorado.

Rocky Flats, as of today, is still under budget and ahead of schedule. I think this is a tremendous accomplishment. I just wanted to publicly acknowledge them for all that they have accomplished in the last year or so.

However, while Rocky Flats may be in my State, I think it is important to note how connected all these sites are within the DOE complex. Any major problem or hiccup at one site can send reverberations through the entire complex. No site is an island, and that is why it is so important for all States to work together with DOE, whether they are an ongoing mission or slated for closure. We must keep national objectives and needs at the forefront.

We all care deeply about our individual sites and situations, but we must work together to make the DOE complex work for all of us.

I just wanted to make a few brief comments from my opening statement. I would like to have the full statement be made a part of the record. Without any objection, I will assume it will become part of the record.

Chairman LEVIN. You have that out of the corner. [Laughter.]

Senator ALLARD. Thank you, Mr. Chairman.

There are a couple of questions that I do want to ask. One of them has to do with the cost of some of the issues that may be facing us.

From your perspective, do you believe that DOE is on track for a 2006 closure date at Rocky Flats? In relation to that, do you also have sufficient transportation resources to meet the critical path milestones leading to the 2006 closure date?

Secretary ABRAHAM. Yes, the answer to both questions is yes. I would just echo your point about the national significance of these programs. There is an interrelationship both between the sites, as you well know, but also a clear connection to national security objectives, which we have. I think you put it well in your comments.

We are committed to finishing the job at Rocky Flats, and the budget request is consistent with the 2006 closure target.

One point that you mentioned briefly but I just would briefly expand on is that when we began the expedited effort toward addressing Rocky Flats, which is what we are trying to do, as I have indicated today, in the rest of the complex, the plan for Rocky Flats was a 70-year plan, and the cost projection was \$37 billion.

It will be finished basically in about 10 years, not 70, and it will be completed in a timeframe—or at a cost of somewhere in the vicinity of \$7 billion from the point that we moved to the faster schedule.

It is a reflection of the commitment really of the people in the community, the leadership we had there, some of whom I have brought to Washington to help us make this work for the rest of the complex, but also the community's willingness to realize that the goal is cleaning things up and getting it done, and it has been the people in that broadly defined community there have been a key part of the asset base.

Senator ALLARD. I appreciate your comments, Mr. Secretary.

Now, last year, DOE undertook a review of the Plutonium Disposition program, and since then DOE has established a new program baseline. However, I understand that there are a few details to work out.

I support you and the State of South Carolina in trying to come up with a workable agreement and want to offer my assistance in any way that I can to move forward with that agreement.

I have a couple of questions in that regard. What is the status of your ongoing negotiation with the governor of South Carolina, and how long do you anticipate it might take to complete these negotiations?

Secretary ABRAHAM. I think just to back up one step and give a sense of perspective to this, I mean, we obviously view the Plutonium Disposition program as one of the most essential ingredients to our non-proliferation objectives that we have, because if we are not moving forward with our program, I think it undermines our ability to move the Russian program forward to reduce 34 metric tons of plutonium there.

So it is a national priority, and it is a matter of national security that this work. To that end, as a result, we are doing our best to come up with a program that is workable, and I think we have one.

At the same time, we appreciate South Carolina's concerns and I have expressed that to the governor on numerous occasions, which is how we have moved from a state of some impasse at one point to a very active, ongoing negotiations that I think is close to completion.

We are doing our best within the limits that we have in terms of the kinds of agreements and support we can provide South Carolina to address their concerns. We have done a lot. We have done a lot more than they had prior to this.

We have made it very clear what our budget projections will be. We have OMB concurrence with meeting those objectives, so that they know that the disposition of the plutonium, the construction of the facilities is going to be funded.

The point is we have made a lot of progress, and I expect that the effort will be completed very soon and we are, in fact, engaged in discussions even today.

Senator ALLARD. I appreciate your commitment to the whole complex and to the country in getting Environmental Management to work.

Mr. Chairman, thank you.

Chairman LEVIN. Senator Allard, your statement will be made part of the record.

Senator ALLARD. Thank you.

[The prepared statement of Senator Allard follows:]

PREPARED STATEMENT BY SENATOR WAYNE ALLARD

Mr. Chairman and Senator Warner, thank you very much for holding this very important hearing on the Department of Energy's national security programs. As always, it is good to see Secretary Abraham.

The Strategic Subcommittee, on which I have the privilege to be the ranking member and that my good friend Senator Reed chairs, is responsible for authorizing over two-thirds of the Department of Energy's budget. A large share of the programs we oversee are in the National Nuclear Security Administration (NNSA). These programs are vital to the our Nation and our allies.

These important missions include ensuring that the nuclear stockpile is safe and reliable in the absence of underground testing; ensuring that Navy warships have safe and militarily effective nuclear propulsion plants to meet today's and tomorrow's ever increasing deployment demands; and ensuring that the surplus fissile materials do not fall into the wrong hands.

A matter of tremendous importance and a priority for me and others with defense nuclear sites is our EM program. We all realize that it took us more than 50 years to create the environmental problems of the Department of Energy, and these problems will take a coherent policy of innovation, integration, and funding to overcome. I believe the new budget plan for accelerated cleanup is a great first step in ensuring that the facilities slated for cleanup and/or closure actually occur.

Luckily for you and the Nation, there are good and dedicated people in these programs. The scientists at our national labs are the best in the world and the engineers and craftsmen at our cleanup and Naval Reactors sites continue to meet the ever-increasing demands we place on them.

Speaking of a dedicated workforce, I would also like to take a moment to point out the tremendous job that Ms. Barbara Mazurowski, her DOE team, the contractor, and all the hard working and dedicated workers have done at the Rocky Flats site. Rocky Flats, as of today, is still under budget and ahead of schedule. This is a tremendous accomplishment and I just wanted to publicly acknowledge all that they have accomplished.

However, while Rocky Flats might be in my state, it is important to note just how connected every site within the DOE complex is. Any major problem or "hiccup" at one site can send reverberations throughout the entire complex. No site is an island. That is why it is so important for all states with DOE sites, whether they have an on-going mission or are slated for closure, to keep the national objectives and needs at the forefront. We all care deeply about our individual sites and situations but we must work together to make the DOE complex work for all of us.

Again, thank you for holding this hearing and I look forward to hearing Secretary Abraham's statement.

Chairman LEVIN. Senator Reed.

Senator REED. Thank you, Mr. Chairman.

Welcome, Mr. Secretary. As Senator Allard indicated, we serve together on the Strategic Subcommittee with responsibilities for oversight over the Department of Energy, and it is a very productive and cordial relationship, and we look forward to further hearings about the Department.

Mr. Secretary, the National Nuclear Security Administration organizing legislation directed the Department to submit to Congress a detailed 5-year budget plan similar to that provided by the Department of Defense. This plan was to be submitted with the annual budget request.

The DOE failed to submit a plan with the fiscal year 2002 budget request, and there was no plan with the fiscal year 2003 budget request. Could you give us an indication of where these plans are and when we might expect to get them?

Secretary ABRAHAM. Sure. Well, we are committed to fulfilling the request. We have been working with the Office of Management and Budget to finalize that effort. It is my understanding that the 5-year plan, as we call it, is at OMB now for final concurrence. Once it is finished, it would be made available obviously, as you have requested.

Senator REED. I think, again, Mr. Secretary, the direction in the legislation was that you would be looking ahead for 5 years, as DOD does, and you would be doing it, not simply in sort of a cookie cutter fashion, but that you would be making real programmatic projections. So I would hope when the plan comes to us it is not simply this year's budget times one and a half and the inflation rate.

Secretary ABRAHAM. Let me say that I am well aware of what the committee and other members of Congress intended and that is why we are working with OMB to get their concurrence, so that we can provide the document as requested.

Senator REED. Thank you, Mr. Secretary.

Mr. Secretary, the DOE is also required by statute to submit an annual Stockpile Stewardship Program that has been known as the Green Book. The Department failed to submit this plan in 2001. When can we expect a 2001 plan, and when can we expect a 2002 plan?

Secretary ABRAHAM. I am not sure, the term Green Book is not one that I am immediately familiar with, so let me consult with my experts here and see if we have a timeframe for you. [Pause.]

Senator WARNER. I have never heard of it either. Maybe take an extra minute to explain what it is.

Senator REED. I think I will, okay.

Senator WARNER. The Green Book is a social register in Washington. [Laughter.]

Senator REED. Yes. I am not referring to that. [Laughter.]

Chairman LEVIN. I have never heard of that, Senator. You have more experience in that regard than I do, I think. [Laughter.]

I am not going there either, I will tell you that. [Laughter.]

Senator WARNER. In the Army, there is a green book. But all I know about is the social register. [Laughter.]

Secretary ABRAHAM. My understanding, Senator, is that it is in the final stages and will be available to you soon.

Senator WARNER. What is it? I mean, take an extra minute to explain.

Secretary ABRAHAM. Why don't we let the Deputy Administrator.

Dr. BECKNER. Certainly. Yes, it is a planning document. It was originated well over 5 years ago. As you recall, it was one of the early documents developed to describe the Stockpile Stewardship Program, and it was specifically intended to show Congress the full range of work that was underway and planned and that is what you will get again this year.

Senator REED. Thank you very much. We will not get the social register. [Laughter.]

We are sending the social register to Senator Warner. It looks like he might want to see that. [Laughter.]

Mr. Secretary, we have talked about the reliability of the stockpile and we know how important that is, because if there are questions about that, then it raises to the forefront the issue of testing, which is a major issue.

The National Ignition Facility, the NIF, is currently being built at Lawrence Livermore National Laboratory. This is a very sophisticated laser facility, it will be the most powerful laser in the world when it is completed. It is an essential element of the Stockpile Stewardship Program. It is the only facility that will be able to fully address the issue of the secondary part of a nuclear weapon system.

Several years ago, the NIF was rightly criticized for technical and schedule delays, and now they are on schedule, moving forward. It is planned to begin operation in 2004 and become fully operational by 2008.

I would note that the Department's fiscal year 2003 budget request reduces the funding that had been planned for the NIF research program. These reductions have the potential to prevent the NIF from being fully operational for as many as 3 years. This delay would also increase the overall cost of the NIF.

Why are we reducing these funds now when we are all beginning to recognize, one, the challenge of stockpile certification and, two, the alternatives to an effectively certified stockpile?

Secretary ABRAHAM. My understanding is that the budget request for NIF, which I think, for construction purposes, is about \$214 million, will keep it on track for completion at the targeted dates.

We have had it on our watch list. It one of the five programs that have been monitored more closely than any others in terms of timetables and cost overruns. It is my understanding that the earlier problems which had placed it in that condition are now being ameliorated and that we will meet our completion deadline, and that the \$214.7 million or so that we have included in the budget is consistent with completion on the timetable that had been identified.

Senator REED. Again, it might be as much symbolic as substantive, but to the extent that we are not aggressively funding NIF, I would hate to see a situation develop in a few years where, because we do not have the NIF or we do not have the kind of associated research from it, we are in a whole series of decisions we do not want to be in.

Secretary ABRAHAM. Right. That is not our intention. I assure you, I mean, we are putting a huge investment into this program, and we intend to meet the timetable as we have established.

Senator REED. Thank you, Mr. Secretary. Mr. Secretary, the Department of Defense has transferred to DOE responsibility for eliminating the last three Russian plutonium production reactors; does DOE have a commitment from OMB to fund this program in the out-years?

I am concerned that this expensive project will be funded out of current DOE non-proliferation programs. Essentially, do you have an additional responsibility without the funding?

Secretary ABRAHAM. Right.

Senator REED. The question is: Do you have the additional resources, not just this year, but going forward?

Secretary ABRAHAM. At least in terms of the role that we have assumed here, just as a starting point, the shifting of this program, I think was done in no small measure because of the belief that we have greater expertise to conduct this program, not to move it off somebody's budget.

It will certainly be a funding priority for us. Our goal is not to hurt other programs, but this is a pretty key program. I mean whether it is in our Department or any others, it is going to be a funding priority that I would fight for, because we believe this is one of the two or three most, along with the Plutonium Disposition program on the Russian side, two or three most important priorities for funding.

We have a number of issues that we are looking at or ways to seek additional assistance to be able to conduct the entire transition there from the plutonium reactors to alternative energy supply

sources. We will keep the committee informed of progress on those fronts.

Senator REED. Thank you, Mr. Secretary.

Thank you very much, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Reed.

Senator Bunning.

Senator BUNNING. Yes, Mr. Chairman. I have an opening statement I would like to ask permission to be included in the record.

Chairman LEVIN. It will be made part of the record.

Senator BUNNING. Thank you.

[The prepared statement of Senator Bunning follows:]

PREPARED STATEMENT BY SENATOR JIM BUNNING

Mr. Secretary, I would like to join my colleagues in expressing my personal appreciation for your hard work and the hard work of the Department of Energy. I believe your vision of excellence for DOE is consistent with the need to transform and to bring into greater focus many of our Government agencies since the attacks of September 11.

I agree with your statement that key to achieving excellence is to understand our overarching mission, which is the national security of this great country. Let me just add that the greatest means of accomplishing this vision is not simply a larger budget and a good plan but the hard work and dedication of those individuals who will execute the plan and the budget. The people of this Nation are our most treasured resource.

Senator BUNNING. Hi, Spence. Good to see you, Mr. Secretary. I am going to get at some nasty things, but they are there, and I have to do it.

Congress passed Public Law 105-204 in 1998. The intent of the bill was to ensure that the construction of DUF6 conversion facilities would be built at two sites, one at Paducah, Kentucky, and the other at Portsmouth, Ohio, by 2004 to clean up DOE's depleted uranium hexofluoride.

The DOE has now decided not to select a contractor for this project and to delay the selection until October 2003 to study whether the two facilities are necessary. I know that OMB has refused to provide funding for this project.

I believe that the two facilities are necessary to eliminate the hazardous waste at the site. If you have been to Paducah, you have seen 45,000 canisters sitting out in the weather, in fact, just sitting there rusting.

The DOE's new tactic with the contractor selection process appears to make it impossible to finish construction of any kind on the DUF6 facility by 2004. Will the intent of Public Law 105-204 be followed by constructing two DUF6 facilities, or do you think construction of the DUF6 facilities will ever begin, and when do you think that might commence?

Secretary ABRAHAM. I will thank you for that question. I am happy to try to respond. You and I have talked about this.

Senator BUNNING. Yes, we have.

Secretary ABRAHAM. I think our general counsel has assessed that the language you refer to, which was report language, requires us only to prepare a plan for two facilities. That is the interpretation that we have made.

But let us talk about what we want to get done here. First of all, we obviously are committed to and will deal with the waste, both at the facility in Paducah as well as the facility in Ohio.

I have talked with virtually every member of the Kentucky delegation and every member of the Ohio delegation who has any connection to these communities, and the governors as well. Here is the message I have been given.

Senator BUNNING. OK.

Secretary ABRAHAM. We have two communities that believe they contributed mightily to this country's security with the work that was done when we engaged in gaseous diffusion uranium enrichment. Both communities want to have ongoing activities, even as the scaling back of and the ability for the technology of gaseous diffusion to be competitive has declined.

The people who operated those facilities have been closing down most of that activity. Both communities want to have ongoing operations, not simply worker training programs and then be left without a future, and we want the same.

The issue that has been raised, both by Kentucky's delegation and Ohio's, is can we not, in addition to cleaning up the problems, also have a new competitive technology-based uranium enrichment capacity in this country? Could it not be in our community, just as both communities would like to have a DUF6, as its called, facility?

We decided that we would like to—that we share that view as well. The administration believes that having a competitive, from a technological point of view, domestic enrichment capability is important, and our view is that if that happens, that it should happen, and it should happen in one or the other of the communities that previously had enrichment, where there is a workforce that needs these opportunities.

What we decided to do was to determine through the additional request for submission of plans here what the cost and implications would be, as opposed to having two DUF6 facilities, of having one larger DUF6 facility and both sites considering that as one possibility, where we and the other site have an enrichment facility.

We want to explore to determine what the costs are of going that route as opposed to simply building two of these cleanup facilities and never going forward with as—with an enrichment facility.

Senator BUNNING. Mr. Secretary, we have been studying this thing from time immemorial.

Secretary ABRAHAM. Right. Well—

Senator BUNNING. That is how we have built up the canisters for the last 45 years. So what you are telling me I have heard from the prior administration, and I thought we would hear a little more positive response from this administration.

So I am dissatisfied that your attorneys do not feel that we have a commitment. If it is necessary, I am sure that we can write it into statutory language and make sure that DOE is bound to do it.

Secretary ABRAHAM. It is possible.

Senator BUNNING. Yes. I would go back and check your voting record on this bill.

Secretary ABRAHAM. I am sure you will.

Senator BUNNING. I marveled at the response you gave to Senator Collins, and to Senator Nelson, on the President's fiscal year 2003 budget in speeding up the cleanup at certain facilities.

In so doing, you have slowed down the cleanup in other facilities by taking money away from Paducah, at least in the budget's \$20 million, and adding it to somewhere else to speed up cleanup. You have slowed ours down now 15 to 20 years. Is Paducah less important in the scheme of things?

Secretary ABRAHAM. No, not at all. As a matter of fact, every facility in the complex has received a baseline commitment for environmental cleanup that is lower than the amount they had last year. In every single facility in the complex, including Paducah, we are in the process of attempting to get a joint agreement for expediting cleanup.

If that joint agreement occurs, and my understanding is discussions are going on right now, then Paducah will, in fact, have a significant increase in the amount of money for environmental cleanup than it had in the 2002 budget.

Senator BUNNING. Well, members of the Senate are capable of helping themselves to increased funding, even though the administration might not be as willing to agree to that number. We have done this for the last 4 years, kept the funding level at a certain figure and with the full knowledge that maybe in 10 to 15 years, we can actually get Paducah cleaned up.

Secretary ABRAHAM. Well, I would just ask the Senator to work with us as we try to expedite the cleanup in Paducah.

Senator BUNNING. I am trying.

Secretary ABRAHAM. Work with us to get an agreement with the community to do it faster with more money in a shorter period of time, which is what we want to accomplish as well.

Now, what we decided to do with this budget was to make it very clear that if communities agree to a faster cleanup, that we are prepared to support that cleanup with even more money than I suspect the Senator would get through the normal appropriation process.

Senator BUNNING. Pardon me, Mr. Chairman. I just want to follow up on one question. Ben, would you give me some time?

Senator BEN NELSON. Sure, absolutely.

Senator BUNNING. If that is the case, and we are going to clean it up, how can you move back the hexafluoride cleanup that is sitting there contaminating the site or do something with that, because that is part of the overall cleanup?

Secretary ABRAHAM. Right. Our concern, as I have expressed to you, both personally and here, is whether or not it is in the interests of the way we would approach that to create two separate facilities to perform that function, or if we can do it more effectively with one, at the same time building a uranium enrichment facility so that both communities have both cleanup as well as the potential to be part of an enrichment.

Senator BUNNING. You are not going to be able to move that stuff unless you take it to a storage facility. I mean, there is nothing you can do with it except to deal with it at Paducah, or move it to Portsmouth and deal with it.

Secretary ABRAHAM. Right.

Senator BUNNING. Or to store it somewhere else? It is a phenomenal problem along with the normal cleanup of the facility.

Secretary ABRAHAM. Right. I realize that, and if we ended up with one DUF6 facility, a larger facility doing all of the cleanup, we are capable, I believe, of dealing with the transportation issue. The Department has been moving materials for 30 years successfully without any harmful effects in that period.

We will work with you, obviously, to keep you apprised of this effort. I mean, our goal is what I said, and I know we will be talking more about it.

Senator BUNNING. OK. I am going to save my other questions for our second round.

Chairman LEVIN. Thank you.

Senator Ben Nelson.

Senator BEN NELSON. Thank you, Mr. Chairman.

It is good to observe that my colleague from the other side has not lost any ability to throw a hard ball.

Senator BUNNING. Thank you. But it is a lot slower. [Laughter.]

Senator BEN NELSON. Mr. Secretary, I appreciate very much your being here today and want to thank you for your appearance and your support last Friday of the renewable fuel standard effort as part of the energy bill, and to thank you for being here to talk about the committee's jurisdiction and a lot of the issues that are raised.

Sometimes, the Department's role in our national defense is overlooked. But I can tell you that I know Admiral Ellis at Strategic Command does not overlook it and appreciates very much the cooperation and the good working relationship that he enjoys with you.

Also, I want to thank you on a personal note. Many in this room really owe a great deal to your agency for the support in cleaning up the Hart Building, having been out of it for 90-some days.

My question goes in a little different direction, and perhaps you can answer this or maybe it needs to be in classified form. But the national laboratories have developed significant technologies that detect chemical, biological, and nuclear agents.

Is there a system in place right now that can be deployed to major parts of the United States to assist in homeland security, where they might be able to detect WMDs at an early time? Because, clearly, that would be extremely beneficial to homeland defense.

Secretary ABRAHAM. One of the—probably the second action we took at the Department, I think in response on September 11, after immediately moving to a security condition throughout the complex to address any threats we might face at our various facilities, was to launch really a two-pronged initiative within the laboratories.

General Gordon and I asked the various labs to, both one, make available to us anything they thought was existing technology that could be applied to any of the issues we faced—that was one of the reasons that we were able to help with the Hart Building—and second, to give us a menu of potential research that might be conducted to assist in light of the new threats that were identified.

By that, what I tried to convey was that undoubtedly over the period of many years a lot of great ideas had been hatched in our laboratories for different kinds of equipment, different kinds of detection gear, et cetera, some of which we probably did not proceed

with, just because they may not have at the time appeared to be as relevant or needed as they might now. In response to that, we are considering and, in fact, enlarging some of our efforts.

We also have made Director Ridge, from literally his first week in office, aware of the tools that he has at his disposal in our laboratories. I would be happy, of course, in a private briefing to give you a more specific rundown of that capability.

He visited, in fact, the Department not too long ago, and we brought a number of these different types of equipment in for him to be able to personally observe, and ranging from the kinds of things you are referencing to a computer program we had developed prior to September 11 that allows us to monitor and be able to estimate what, if any, impact on our infrastructure in the country, what its resulting impacts would be on other infrastructure, so that we know what priorities to have and things of this sort. We are making that available to homeland security, and we will be glad to keep you apprised.

Senator BEN NELSON. I think I will follow up with you on that suggestion.

Secretary ABRAHAM. That would be great.

Senator BEN NELSON. In that regard, is there adequate funding in this budget to help pursue that kind of research and/or development of systems?

Secretary ABRAHAM. Right. Well, we believe there is. There is \$283 million, I think, in non-proliferation research and development (R&D) here, most of it focused on proliferation detection work and on other chemical, biological, and other categories of this. It is, I think, a very reasonable request.

As I said, we are sort of in a sense, challenging our facilities to identify new priorities that we might consider, if not in this budget, then in the future.

Senator BEN NELSON. It might be classified, but with all the discussion about regime change in Iraq, where Saddam Hussein has already gassed his people, would we have the capacity or could we work with the military to be certain that any of our military forces who would enter that country might be able to have similar kinds of systems in place to have early detection if they are going to be placed in that kind of harm's way?

Secretary ABRAHAM. Without going into the areas—

Senator BEN NELSON. Without going into detail.

Secretary ABRAHAM. —that I would be discomforted to discuss in a non-classified setting, I would just say that, obviously, we have a lot of tools available, which we work with the Department of Defense both to develop and to have in an operational state of readiness, and many of them are already finished and some are in the process of being planned for the future.

Senator BEN NELSON. Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Nelson.

Senator Warner.

Senator WARNER. Thank you, Mr. Chairman.

Mr. Secretary, excellent hearing, and we thank you for this presentation.

I will ask that my statement be incorporated in the record, Mr. Chairman.

Chairman LEVIN. It will, of course, be incorporated.
[The prepared statement of Senator Warner follows:]

PREPARED STATEMENT BY SENATOR JOHN WARNER

Thank you, Mr. Chairman. I, too, want to offer my welcome to our distinguished witness today.

This is a very important annual hearing for our committee. Fully two-thirds of the Department of Energy's budget is related to defense or former defense missions and is, accordingly, within the jurisdiction of this committee. Maintaining a safe, secure, and reliable nuclear stockpile is of the utmost importance to the national security of our Nation, and, in my view, is DOE's top priority. Additionally, this committee has important oversight responsibilities for DOE's Environmental Management program which is responsible for cleaning up our former defense nuclear facilities.

I want to begin my comments this morning by discussing the recent press stories on the Nuclear Posture Review (NPR), which was completed and delivered to Congress in January. In my view, the NPR represents a breakthrough in how we think about strategic forces and how we respond to strategic challenges. The new integrated triad—consisting of nuclear and precision conventional offensive forces, passive and active defenses, and a robust infrastructure—provides the flexibility needed to support President Bush's initiative to move to lower levels in our deployed nuclear weapons.

The NPR is "forward looking" in its approach to a world no longer dominated by the mutual hostility of two Cold War superpowers. The NPR examines a world in which a number of nations are developing, or seeking to develop, weapons of mass destruction, and discusses a range of options for how the United States should respond to the growing threats we face. But one thing is clear—the NPR is *not* a targeting document, as was inferred in recent press coverage. The previous hearing this committee conducted on the NPR clearly supports this interpretation of the NPR.

The NPR actually seeks to reduce our reliance on nuclear weapons by reducing the numbers of "operationally deployed strategic nuclear warheads" and increasing our conventional strike and missile defense capabilities. Those who seek to threaten the United States must receive the message loud and clear that we would use every weapon at our disposal to protect the American people.

I would now like to move on to the fiscal year 2003 budget request for the Department of Energy atomic energy programs. The fiscal year 2003 budget request provides \$15.4 billion for defense programs within the Department of Energy—a \$653 million or 4 percent increase over the amount appropriated in fiscal year 2002.

Let me turn first to the nuclear weapons programs. I am encouraged by the new facilities and infrastructure recapitalization program, which is designed to address some of the major maintenance and repair backlogs at DOE nuclear weapon plants and laboratories. But General John Gordon has an enormous task ahead, as do you Mr. Secretary, to maintain our nuclear weapons stockpile in a safe, secure, and reliable manner and to reinvigorate the nuclear weapons program.

I know we have made enormous strides in our efforts to ensure that our nuclear weapons are safe, secure, and reliable. However, I am concerned that we will not be able to provide these assurances to the American people indefinitely in the absence of underground nuclear testing. The Foster Panel report (February 1, 2001) pointed out that it would take 2 to 3 years—from the time the President makes the decision to resume nuclear testing—for DOE to be ready to conduct such a test. I repeat, 2 to 3 years. Is this simply too long a time to wait if we discover a problem that calls into question the safety and reliability of our nuclear stockpile?

Our Nation continues to place heavy reliance on the development of a science-based stockpile stewardship program. The completion date remains indefinite. Whether this program alone can provide the necessary tools to certify our aging nuclear stockpile into the future remains to be proven. General John Gordon recently told this committee that we could achieve a successful stockpile stewardship program but still need to consider conducting an underground nuclear test. In fact, it may be through our science-based programs that we discover a defect or design flaw that will lead to a requirement to resume testing.

We should continue to invest in the science-based program, but we should not neglect the rest of the nuclear weapons program. Our test readiness should remain in as near to standby readiness as reasonably possible. Our ability to manufacture certified "pits," including the preliminary design efforts on a modern pit facility,

should be a priority. General John Gordon recently testified that "we need to begin thinking seriously about a modern pit facility." We should make sure our nuclear weapon designers and technicians continue to be the best and the brightest.

Another Department of Energy program which requires and deserves our attention is the EM program, which is responsible for the decommissioning and cleanup of the former defense nuclear facilities. The fiscal year 2003 budget request includes a new initiative designed to continue an aggressive schedule at the closure sites and accelerate cleanup across the complex including the four remaining major EM sites.

I am encouraged by the bold initiative the DOE EM program is proposing and look forward to working with you and my colleagues to make sure this program to accelerate cleanup and reduce costs is successful.

We have a lot of issues to cover today. I look forward to hearing Secretary Abraham's testimony.

Thank you, Mr. Chairman.

Senator WARNER. The Chairman and I, we have been sitting here many years together, and every now and then we both flinch at the same moment. I think we had a little bit of a flinch when you said that you could force a State to take nuclear waste.

Could you ask your lawyers to give us a little Constitutional brief on that?

Secretary ABRAHAM. Well, the point I was alluding to was that we have a responsibility for the disposition of certain weapons grade materials that we must dispose of, and we will be happy to provide you what I think is the authority that would ultimately allow that to be disposed of somewhere.

Senator WARNER. I think we would be interested in that, because if that were the case, you could force Yucca Mountain, and that would resolve many issues.

Secretary ABRAHAM. Well, that is covered by a separate act of Congress obviously.

Senator WARNER. I would just be interested in the reasoning on that.

I want to go back to the question of our testing the safety and the effectiveness of the stockpile. That is a subject that has been of enormous interest to me.

Now, to put it in context, the facts are: we have this very significant inventory of weapons; we had to have them go through the Cold War. It was as simple as that.

Now, we have a worldwide situation where weapons of mass destruction of different types pose threats, not perhaps as great, but certainly in many ways comparable to those of the Cold War.

Now, every time I have had a hearing on this and been present, I have always reminded the American public that, yes, we have a dislike for the concept of nuclear response, but it is a fact that it is a threat, that nations other than ours are struggling to obtain the science, the people to manufacture their own nuclear weapons, and that is a fact in this very troubled world we have today.

Now, the inventory of our weaponry is distributed in various places across the United States. We ask the military and civilians to be in close proximity to these weapons. So equally important to maintaining a credible military effectiveness, if we ever had to use them, is the safety of these weapons and the communities which surround the military installations or bases where they are. So there is a broad range of people that justifiably should be very concerned about the safety of this stockpile.

Now, go back in history, because there may be some people following this proceeding or reading this record that might not have the background that those of us who have been here these years have. President George H.W. Bush, as we refer to him now, affectionately, 41, made the decision to discontinue testing. I am not disputing it as a policy.

President Clinton then decided in 1993 that he would continue the Bush policy. That is what we are operating under now, an executive order, not a law, but an executive order.

In that period of time, we decided to go onto this science-based Stockpile Stewardship Program.

As I just learned from our very able counsel here, Madelyn Creedon, the Green Book was first issued, was it 1990? When was it that the first one come out?

Ms. CREEDON. 1995.

Senator WARNER. 1995. It was wrapped in a green wrapper.

Secretary ABRAHAM. I see, of course.

Senator WARNER. Therefore internally, it was referred to as the Green Book.

But in other words, we are at that fork in the road now. A year or two ago, when I was privileged to be Chairman of the committee, we had a very serious question confronting this Senate of the Comprehensive Test Ban Treaty. It was the lab directors, in my opinion, who gave that evidence that contributed to the Senate, I think quite properly, rejecting that treaty.

Now, we have before us a budget request of \$2.1 billion for the continuation of this program that was initiated in approximately 1993. It was envisioned at that time, well intentioned—I am not in any way being critical—that perhaps in a decade we would be at that point where we could make a finding that this program will, in fact, substitute for the actual testing; and therefore meet our requirements, military, first, that we have a credible weapons system, if necessary, and two, that the people handling it in the communities can rest and sleep safely.

Well, we are now in 2002, and I would like to know where you believe we are in this program that was to have finished in a decade and reached that point at which the lab directors could certify this program as substitute for testing.

I might add, we learned this morning, from Senator Reed and others, that the report referred to now as the Green Book, is a year late, yet you are asking Congress to authorize \$2.1 billion.

What is the documentation that you predicate that request on, given that the Green Book, which states where we are in the program, is not available?

Secretary ABRAHAM. Well, first, as I said—or, I guess, actually as Dr. Beckner said, our intention is to have the Green Book available very soon.

Second, obviously the programs we are seeking support for are ones which we can provide information to the committee on as to their status individually, program by program. They are, by and large, a continuation of various projects that are part of that effort, including the one which Senator Reed referred to, the NIF program and others.

As to the timeframe in which—I do not think really there has been any change in status as to the projections. I think that the lab directors, as I recall their testimony, had indicated that they could not guarantee to us at that point that the program, once completed, that there would be a timeframe for its being able to predict with certainty the capabilities and reliability of the stockpile. That is why we are obviously trying to complete the work.

Senator WARNER. Well, let us be careful with that. It seems to me there are two phases, at least. One, the development of the program, so that someone can click a switch and it is now working to perform its mission.

Secretary ABRAHAM. Right.

Senator WARNER. Then once it begins to perform its mission, then we ascertain from whatever comes out the other end, that it is or is not a substitute, to some measure, for testing.

Now, my first question was: How soon do you flip the switch so that this massive system, many billions of dollars, is now beginning to crank out some information that helps our Nation determine the credibility and safety of the stockpile?

Secretary ABRAHAM. At the risk of giving an imprecise answer?

Senator WARNER. If you want to, call on your associates.

Secretary ABRAHAM. Let me ask Dr. Beckner, here, to join me.

Senator WARNER. Sure, because I can understand how this is very complicated.

Secretary ABRAHAM. Because there are different programs that are in different timeframes.

Dr. BECKNER. I think the way to view this is that this really is a continuation of activities which you should view as being on the table for support as long as we have a nuclear weapons stockpile, and as long as we choose not to return to testing.

It is not something that is just going to be in place one day and we can say, well, we now have a new process that clearly in any simple way gives us a substitute for testing. It is a combination of things. It is NIF. It is the hydro-dynamics facilities. It is the computing capability that we purchase with—in the ASCI program, and it is the people.

Senator WARNER. I recognize that. But at what point does the confluence of all these bits and pieces begin to provide data?

Dr. BECKNER. It is there now.

Senator WARNER. It is there now?

Dr. BECKNER. It is there now. Otherwise, you would not be getting this certification of the stockpile.

Senator WARNER. All right, I accept that. My time is running out.

Dr. BECKNER. It will be better next year, and it will be better the year after that. But it is what you are getting, it is what you are using today.

Senator WARNER. My recollection is that when the lab directors testified in connection with the Comprehensive Test Ban Treaty, it was not there then. Are you suggesting that what they said was not present 2 years ago is now in place?

Dr. BECKNER. No. I think what we are seeing is a continual improvement of our ability to deal with this problem. In particular, we do not have NIF operational. In particular, we do not have the

computing facilities that we wish to have in a few more years and continue to acquire. It is just something that we are going to have to continue to develop as time goes on.

Senator WARNER. I am not questioning that we are going to continue. I do not doubt that Congress is going to go ahead and authorize this. But I am just wondering: What are the facts before us that lead Congress to believe that, at some point in time, these various components will be in place and will indicate, hopefully, that it is a credible substitute for actual testing?

Dr. BECKNER. Your best measure of that is the ability to continue to state that the stockpile remains certified as safe and reliable. You are getting that on an annual basis.

Senator WARNER. My time is up. I will have to return to this when I get another round.

Chairman LEVIN. Well, as someone who supported the ratification of the Comprehensive Test Ban Treaty, first of all, I do agree with Senator Warner that the lab directors' testimony was partly responsible for the loss of that vote.

I did not think that their testimony was particularly comprehensive. I did not think it took into consideration one critical fact, which is that there is a supreme national interest clause in the Comprehensive Test Ban Treaty, which allows for withdrawal at any time we needed to return to testing.

Now what we are being told is we have certification under the Stockpile Stewardship Program that we can rely on, apparently even without a report. I am glad to hear it. I believe it. There is no reason to doubt it, in my judgment.

But it just reinforces my belief that we really lost an opportunity there to lead the world towards lesser reliance on nuclear weapons. We lost some credibility to make the argument to other countries that they should not rely on nuclear weapons when we defeated a treaty that had a provision in it that would have allowed us to test, should the national interest require it. That is what we are being told now.

The Stockpile Stewardship Program is working, or so we are told. I believe it. We are spending a lot of money on that program. If at any time that program does not lead to a certification as to the safety and reliability of our nuclear weapons, we can return to testing. It is exactly what we could have done had we ratified the Comprehensive Test Ban Treaty. But because of that testimony from the lab directors, it was used to defeat a treaty which had a withdrawal clause in it.

So we are, effectively, in exactly the same place where we would have been had we ratified the treaty. The only difference is we took a step backward in terms of reducing the reliance on nuclear weapons in this world, and our credibility to argue to other countries that they should rely less on nuclear weapons.

India and Pakistan test, and we just say, that is a terrible thing. Then we, ourselves, fail to ratify a treaty which would have given us some standing to make that argument.

Let me change the subject to the Price-Anderson Act. Mr. Secretary, the Price-Anderson provisions of the Atomic Energy Act provide indemnity and insurance coverage for contractor operators

of the DOE facilities as well as the Nuclear Regulatory Commission licensees. It does some other things as well.

But the Department of Energy's authority to extend Price-Anderson coverage to DOE contractors expires in August. Without Price-Anderson authority, will the Department of Energy be able to sign any new site operating agreements, including environmental clean-up agreements?

Secretary ABRAHAM. I would have to take that question for the record for our legal counsel.

Chairman LEVIN. Thank you.

Secretary ABRAHAM. But obviously it is one of the reasons why the administration and we have supported the extension of Price-Anderson and the energy legislation on the floor at this time.

Chairman LEVIN. Right. There is an additional question relative to Price-Anderson, which I wish you would answer for the record as well. That is, is the Department trying to renegotiate some of the existing operating contracts at environmental sites sooner than normal. As a matter of fact, I think that is part of your program to speed up the cleanup at a number of sites. You need to renegotiate contracts.

Without Price-Anderson authority, the DOE is, from what I can understand, not going to be able to pursue the very strategy which you have outlined here today. Is that correct, do you know, or would you rather answer that for the record?

Secretary ABRAHAM. Well, again, I do not want to prejudice our legal position by speculating on it. I would rather have legal counsel approve an answer for the record.

Chairman LEVIN. That would be fine. That is an additional question then for the record, if you would answer that as well.

Secretary ABRAHAM. Glad to do it.

[The information referred to follows:]

Probably not, because of a lack of a contracting partner. In the absence of Price-Anderson indemnity authority it is unlikely that any non-governmental entity (i.e., a contractor) would sign any new site operating contract under which the contractor would have responsibility for handling of nuclear materials.

If the Department's Price-Anderson authority is not renewed or extended before August 2002, the Department may have to re-evaluate some of its planned procurement actions and strategies. Termination of existing contracts in favor of a renegotiated or competed contract may have to be postponed pending renewal or extension of the Department's Price-Anderson indemnification authority.

Chairman LEVIN. Can you give us some idea as to how many Russian nuclear scientists and former weapons scientists and engineers have been provided employment by your programs? Are you able to give us any kind of estimate?

Secretary ABRAHAM. I think we can. I am not sure if I can directly here. Perhaps I think we would have to provide that for the record.

Chairman LEVIN. That would be fine.

[The information referred to follows:]

The Russia Transition Initiatives, which includes the Initiative for Proliferation Prevention and Nuclear Cities Initiative programs, have engaged over 11,000 former Soviet weapons scientists and engineers in commercially-focused projects. These weapons experts have been employed in applied research and development projects, as well as infrastructure development projects in the closed nuclear cities. In addition, the lab-to-lab cooperation under the Warhead Safety and Security Exchange Agreement has engaged a number of Russian scientists to complete technical

projects in the areas of warhead safety and security, transparency, and counter-terrorism.

Chairman LEVIN. I want to go back to a question which I had asked you before, relative to the law that prohibits the Secretary of Energy from conducting or providing for the conduct of research and development which could lead to the production of a low-yield nuclear weapon. That was a 1994 provision in law.

My question is this: How is the fiscal year 2003 budget request for a robust nuclear earth penetrator (RNEP) in compliance with that law, which you have indicated it is, since that law prohibits the Secretary of Energy from conducting the research that could lead to the production of a low-yield nuclear weapon?

Secretary ABRAHAM. Well, let me defer here, if I could, to Dr. Beckner, because we have talked about this, but he—

Dr. BECKNER. Yes. The present intent is to look at two existing weapons, the B61 and the B83 to be precise, as the device that would be incorporated into the RNEP, the so-called robust nuclear earth penetrator. Those are the only two that are presently going to be studied in conjunction with the Air Force, as directed by the Nuclear Weapons Council, and both of those weapons have yields substantially higher than 5 kilotons.

Chairman LEVIN. But neither one of those are low-yield nuclear weapons?

Dr. BECKNER. They are not.

Chairman LEVIN. Thank you.

Senator Bunning.

Senator BUNNING. Thank you.

I stayed because there are some things that I know that DOE is working on an agreement with U.S. Enrichment Corporation (USEC) to ensure the future production of domestic uranium. This agreement was supposed to coincide with the Russian uranium agreement that USEC struck with Tenex. Now that the USEC and Tenex deal has been signed, do you expect to come to an agreement with USEC any time soon?

Secretary ABRAHAM. We are, and have been, in fairly active negotiations for the last several months with USEC on discussions regarding their responsibilities or their continuing role, if one, as our executive agent.

We have made progress, but despite the progress, there remains some significant issues that have not yet been resolved, and perhaps as you may have read, there have been some allegations made very recently that place in question USEC's activities as the agent in recent years.

Senator BUNNING. Not by you, but by others?

Secretary ABRAHAM. Correct.

Senator BUNNING. Right.

Secretary ABRAHAM. Obviously our negotiations are continuing. I think before they are completed, we will seek to resolve any issues that are raised by these allegations as well. Since they are a new set of matters, we intend to pursue those as part of this discussion.

What I would note, though, also is that under the executive agency agreement that has existed and any that we would have, whether it was with USEC or anyone else, there remains, and we

reserved to the government of the United States, the power to change the executive agent at any time.

Senator BUNNING. Let me ask you some defense-related things. Do we know what the operational life of a plutonium pit is?

Secretary ABRAHAM. Well, we do have, obviously, that ability, but I mean within ranges. I am not sure I would want to have that discussion in an open hearing.

Senator BUNNING. Not in an open hearing? You would answer anything about the plutonium and plutonium pits in a closed hearing?

Secretary ABRAHAM. Well, not anything. But I am not sure I would want to discuss capabilities of weapons and their design.

Senator BUNNING. Is it safe to assume that we will eventually need to replace the pits in our aging nuclear arsenal?

Secretary ABRAHAM. We are in the process of working on, in fact, exactly that type of program with respect to a particular weapon type at Los Alamos. Our hope is within the next year to have development of a pit for that particular weapon that is certifiable and to certify a pit by 2007.

We obviously have, in our long-term plans, design work that we have already begun with respect to the need for a new pit production facility, but that—

Senator BUNNING. That was my next question.

Secretary ABRAHAM. But the need for that is not as immediate, but it is certainly part of our long-term planning to be—

Senator BUNNING. There is a plan?

Secretary ABRAHAM. Yes.

Senator BUNNING. For a modernized pit?

Secretary ABRAHAM. A modernized pit facility, yes. Well, we are in the process of putting that plan in—

Senator BUNNING. You are telling me it is about 2007, or is—

Secretary ABRAHAM. No. What I am telling you is that the project, which is already being undertaken—

Senator BUNNING. Underway.

Secretary ABRAHAM.—for one particular pit development program—

Senator BUNNING. OK.

Secretary ABRAHAM. —is aimed at being able to certify that pit in the year 2007.

Senator BUNNING. I did get the information you sought. You did not object to a unanimous consent—

Secretary ABRAHAM. I knew you would have it before—

Senator BUNNING.—on that public law that is now a problem.

Thank you very much, Mr. Chairman.

Chairman LEVIN. Thank you, Senator Bunning.

Senator WARNER.

Senator WARNER. Thank you, Mr. Chairman.

Mr. Secretary, given the time, I am going to ask that some of my questions be included for response in the record. I am going to continue to press on on this issue of the stockpile, but I want to go over another subject, and that is as our Nation is gearing up under the leadership of our President for homeland defense, and a part of that is our ability to counter a dirty bomb.

As you and I know, it is a hybrid of the technology that produced nuclear weapons years ago. Now, my understanding is that, quite properly, you together with your laboratory structure are examining and evaluating the threat to the United States of that—I will not call it a system—but that option if terrorists seized upon it.

What can you tell us here about what is being done, and explain your views, if you can, of the degree of risk that is faced not only by our Nation, but others? First, you might just explain how you describe what a dirty bomb is.

Secretary ABRAHAM. Well, I think the most typical definition that is—at least the public definition has been—the idea of mixing radioactive materials in some fashion with explosives and in some way spreading—

Senator WARNER. Spreading it?

Secretary ABRAHAM. Yes, and while some would argue that it does not have the capacity to have the impact of a weapon, a properly defined weapon of mass destruction, obviously its impact in terms of terror, in terms of what it might do in terms of people—

Senator WARNER. Well, it is serious radiation, correct?

Secretary ABRAHAM. Right. I would just say in terms of our efforts to counter that, that first of all, our homeland security office really has the lead in terms of the development of those strategies, and it really is not in my jurisdiction. We provide the resources to support that effort.

I personally have refrained from discussing some of the tactics we use or any of the tactics really that we use in terms of that support, in terms of public discussion for reasons that go to the heart of trying to maintain the ability to be successful in that, but I would be happy in a private setting to—

Senator WARNER. In other words, in a classified session. I think that is appropriate.

Secretary ABRAHAM. Right. Also to be joined by the homeland security—

Senator WARNER. I wanted to give the American public the reassurance that our government is doing everything it can to interdict that so it does not come to fruition. It seems to me it should be a worldwide problem. Would you share that view?

Secretary ABRAHAM. Well, it is. I think one of the reasons that not, not only are we pushing forward to expand and accelerate our non-proliferation programs with Russia, but also with other countries.

We recently entered into a new agreement with Kyrgyzstan to help them. We have just this week signed a new agreement with Uzbekistan at the State Department, this week, to assist them in returning certain materials to Russia that were still there and to assist them in reducing the fuel used in their reactor from highly-enriched uranium (HEU) to low-enriched uranium (LEU).

The challenge of this is one we are trying to deal with on a variety of fronts, and frankly, we are quite receptive to expanding the work that we do in this area. We have worked with—in fact, interestingly on the very Monday following September 11, I traveled to Geneva to address the International Atomic Energy Agency's meeting and to try to raise the issue of nuclear terrorism and to put it more prominently on the agenda of that organization.

I was back there again in November to meet with their executive committee to try to expand and perhaps more robustly address these issues. It is one of the issues that my Russian Atomic Energy Industry-Ministry counterpart and I have agreed to work on together on a broader international front.

Senator WARNER. Thank you, Mr. Secretary.

At the moment, Congress has passed laws which prohibit the construction of a new nuclear weapon. We may have to revisit that at some point in time.

But what can we do within the framework of existing law by way of putting in place an infrastructure that this President or a future president could utilize should a decision be made that we have to reenter production of a new design?

Should we have people coming in that are skilled? How do we utilize their time now within the framework of that law such that, if that decision is made, we reduce the startup time required to proceed to do the research, the development, and testing as necessary?

Secretary ABRAHAM. Well, all right. Let me begin by reiterating what I said earlier. We are not in the stage, nor do we have any plans to move ahead with designing any new weapons.

Senator WARNER. That is clear. That should be in the record.

Secretary ABRAHAM. The issue that I think you are raising is whether we have, if that ever were something we were called on to do, do we have—would we over time lose the capabilities, because of adequacy of skills or facilities?

We are trying to address the facilities issue obviously in this budget. It is one that I think every member of this committee has a lot of familiarity with, which is the deterioration of the actual physical plants across the complex where, while we have reduced the number of weapons manufacturing facilities, we have not done anything to make sure the ones that remain even are functional.

As I mentioned, as I have said in speeches, people are literally at risk of having the plaster fall on them. So this budget, in a very substantial \$243 million commitment, begins that infrastructure improvement.

On the skills issue, there are a lot of challenges. I think the retention and recruitment of people with skills in this area remains and will, I think you know, always be something that the agency has to address.

I do think, and I hate to act as though anything positive was wrought by the events of September 11, but I do think that the mission, the sense of mission in our Department now and the morale, the national security commitment has been, because of those events, as it has for Americans who are not even in government service, heightened tremendously. I think that will help us in terms of keeping talented people and recruiting them.

We do think that some of the work that they are doing today on sub-critical experiments, on designing and working on replacement components, things of that sort, the disassembling and evaluating the components of warheads as part of the Stockpile Stewardship Program allows skills to be honed. We try to monitor that and obviously look to the lab directors and their programs to make sure

that we are not losing the talent base that is needed. But it is something that is an ongoing challenge for the NNSA.

Senator WARNER. I thank you, Mr. Secretary. Part of that, of course, would be the Foster report. You are familiar with that, and what it says about the testing time frame. In other words, in your view, is the 2- to 3-year period the NNSA would need to prepare and conduct an underground nuclear test acceptable? Do you believe that we should follow the Foster Panel's recommendation to reduce the time to conduct a test to less than a year?

Secretary ABRAHAM. Well, I do not—we have not pinpointed an appropriate time frame. In fact, I have kind of resisted making—trying to be focused on time as much as on enhancing test readiness. That is the skill sets that are needed.

Obviously, I think that—and again, let me just reiterate, there is no intention either in our Department or in any other to resume testing or any plan to do so.

The question is, what would happen if we could not certify? I mean, obviously, the immediate issue is that we would then presumably need to make a decision on testing. But remember also that in the absence of the capability to certify, at least there also is brought into play the question of the effectiveness of our deterrent capabilities and the issue of duration between should we ever have such a point and the time duration between the recognition that we could not certify and the ability to test, is quite pivotal in my judgment to the question of whether or not there is credibility to our deterrent capabilities.

I think we have tried to focus on the sorts of things that could enhance test readiness, not necessarily only in terms of time sort of focus but in terms of a skills focus.

This is one area where we do have, I think, when we talk about the personnel side of the equation, where we have to make sure that people who are in the program—it has obviously been a fairly long period of time since any testing was conducted. We need to make sure the people, as they leave the program that we bring new people in. But are they properly capable and trained to conduct a test if that ever were called upon?

That is one of the things—which I think that component of the Foster Panel's focus is one that we are trying to address, and what is addressed in our budget as well.

Senator WARNER. I will ask another question, Mr. Chairman, while you are waiting. I am going to go back and perhaps your associate would wish to deal with this.

Some believe the science-based Stockpile Stewardship Program is an alternative to testing. In many ways, it has been portrayed that way before Congress. Is it simply a tool to assist the certification of the safety, security, and reliability of our nuclear stockpile? In fact, the program may provide information which would lead to testing. Do you agree with that?

Dr. BECKNER. Well, let us see.

Senator WARNER. Will that lead to a conclusion, I should say, that we need to resume testing?

Dr. BECKNER. That certainly could be the case. We use the program to evaluate all aspects of our understanding of nuclear weapons.

In some cases, it leads you towards a resolution of problems. In some cases, it leads you to new problems. I think, as we stand here today, it is impossible to know at any time which way these things will go.

What we are trying to do is to have a set of tools and a set of skilled people and a program structure which allows us to fully evaluate the situation at all times, so that we can assure the safety and reliability of the stockpile.

It could lead us to testing. In fact, I would say you would not return to testing without a lot of evidence.

Senator WARNER. Yes, I think you want to say can lead us to the resumption of live testing. Is that not what you meant?

Dr. BECKNER. Yes, it is.

Senator WARNER. Because when you say continued testing, we are testing in a whole lot of ways, but this is not a popular subject. It is not easy to pose the questions nor to answer them, but the fact of the matter is the world looks to this Nation to be a leader in this area. We cannot ever allow the misconception that we no longer put full faith and credit in first, the deterrent capability of our stockpile of weapons, and then second, if ever a President had to make the decision to use it, that it would be effective.

Dr. BECKNER. Certainly.

Secretary ABRAHAM. Certainly.

Senator WARNER. I will put further questions into the record, Mr. Chairman. We have had a good hearing.

Chairman LEVIN. I was just interested in your finishing that thought about how you would not recommend or be at a point where we would have to consider resumption of testing without evidence.

Dr. BECKNER. Let us see. We are responsible for making recommendations to the President, and to make such a recommendation, I would say we would require a very large amount of evidence. The details as to how you would arrive at that conclusion right now, I cannot walk those steps.

Chairman LEVIN. Thank you.

Dr. BECKNER. But I do know that it would be a very grave and serious matter, and certainly not one we presently are contemplating. We just have to have that as one of the contingencies against which we plan.

Chairman LEVIN. All set?

Senator WARNER. Yes. I think we have had a very good hearing, Mr. Chairman.

Chairman LEVIN. Yes. Secretary Abraham, it is always good to see you.

Secretary ABRAHAM. Thank you.

Chairman LEVIN. Thank you for very good, helpful testimony.

We stand in recess.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

PRICE-ANDERSON

1. Senator LEVIN. Secretary Abraham, without Price-Anderson authority will DOE be able to sign any new site operating contracts?

Secretary ABRAHAM. Probably not, because of a lack of a contracting partner. In the absence of Price-Anderson indemnity authority, it is unlikely that any non-governmental entity (i.e., a contractor) would sign any new site operating contracts under which the contractor would have responsibility for the handling of nuclear materials.

2. Senator LEVIN. Secretary Abraham, while existing contractors do not lose their Price-Anderson coverage when the authority expires, do these prime contractors lose the ability to provide Price-Anderson coverage to new subcontractors?

Secretary ABRAHAM. The Department's Price-Anderson authorization and implementing contract clause¹ contains no restrictions on the ability of a prime contractor to flow down indemnification to its subcontractors. Under the definitions provided at 42 U.S.C. §2014,

"The term 'person indemnified' means . . . the person with whom an indemnity agreement is executed or who is required to maintain financial protection, and any other person who may be liable for public liability, or . . . any other person who may be liable for public liability by reason of his activities under any contract with the Secretary of Energy or any project to which indemnification under the provisions of section 170 d., has been extended or under any subcontract, purchase order, or other agreement, of any tier, under any such contract or project."

A subcontractor has Price-Anderson indemnification if its subcontract is "under" a contract or project to which Price-Anderson indemnification has been extended. Once the prime contractor's contract and, consequently, indemnification expire, the subcontractor's indemnification also expires, even if its contract continues with a follow-on contractor. Alternatively, as long as the prime contractor has Price-Anderson indemnification, even after expiration of the statutory authority, new subcontractors under that indemnified contract would, in our view, also be indemnified until that contract ended.

3. Senator LEVIN. Secretary Abraham, what will the Department do if Price-Anderson authorities expire? Many contractors believe that the limited authority the DOE has under statutory authorities other than Price-Anderson does not provide adequate coverage. Will the Department be able to assure contractors bidding on new contracts that they will have Price-Anderson coverage?

Secretary ABRAHAM. The Department has used its authority under Public Law 85-804 to indemnify its contractors for claims arising from unusually hazardous or nuclear risks related to national defense activities in limited situations where Price-Anderson Act indemnification is unavailable or inapplicable.² If the Department's Price-Anderson authority were to expire without renewal or extension, the Department likely would use its more limited Public Law 85-804 authority where possible. That authority would not be adequate to cover all contractors and all circumstances covered by Price-Anderson, and it would not contain the assurances of prompt public protection that Price-Anderson affords. The Department could not assure bidders on new contracts that they would receive Price-Anderson coverage if Congress had not acted to extend the act at the time of the contract solicitation.

4. Senator LEVIN. Secretary Abraham, it appears that DOE is starting an effort to renegotiate or compete some of its existing operating contracts at environmental sites sooner than normal, and in some situations years before the contracts would otherwise expire. Without Price-Anderson authority will DOE be able to continue with this strategy?

Secretary ABRAHAM. If the Department's Price-Anderson authority is not renewed or extended before August 2002, the Department may have to re-evaluate some of its planned procurement actions and strategies. Termination of existing contracts in favor of a renegotiated or competed contract may have to be postponed pending renewal or extension of the Department's Price-Anderson indemnification authority.

5. Senator LEVIN. Secretary Abraham, if the DOE enters into new contracts before the old contracts expire, and, thus, has to terminate existing contracts early, will the cost of termination exceed or equal any costs savings achieved in the new contracts?

¹See 48 C.F.R. (DEAR) 952.250-1.

²National Defense Contracts Act, Public Law 85-804, 50 U.S.C. §§1431-1435, implemented by Executive Order 10789, 3 C.F.R. §426 (1954-1958), and Federal Acquisition Regulation (FAR), 48 C.F.R. Part 50 and §52.250-1.

Secretary ABRAHAM. The Department plans to use contracts that will afford powerful incentives for both cost savings and early completion of closure activities. Under the terms of the Federal Acquisition Regulation termination clause,³ the Government will incur the normal costs associated with termination for convenience.

6. Senator LEVIN. Secretary Abraham, will there be any increased costs without Price-Anderson authorities if contracts are terminated early?

Secretary ABRAHAM. It is unlikely that such costs would exceed the normal costs of performing the contract or otherwise affect the effectiveness or efficiency of the follow-on contracts. In the event the Price-Anderson indemnification authorization has not yet been renewed or extended, and alternative indemnification under Public Law 85-804 is not available or acceptable, it may be necessary for the Department to reconsider its approach to restructuring certain existing contracts.

PROHIBITION ON DEVELOPMENT OF LOW YIELD NUCLEAR WEAPONS

7. Senator LEVIN. Secretary Abraham, is the DOE complying with section 3136 of the National Defense Authorization Act for Fiscal Year 1994 that prohibits the Secretary of Energy from conducting or providing "for the conduct of, research and development which could lead to the production by the United States of a low yield nuclear weapon which, as of the date of enactment of this act, (October 1993) has not entered production?" (Low yield nuclear weapons are defined as having a yield of less than 5 kilotons.)

Secretary ABRAHAM. The Department is in full compliance with section 3136 of the Fiscal Year 1994 National Defense Authorization Act. The Robust Nuclear Earth Penetrator feasibility study that the NNSA plans to undertake involves the potential modification of either the B61 or B83, both of which are existing warheads.

The Nuclear Weapons Council voted in November 2001 to authorize the Air Force to lead a Phase 6.2/6.2A feasibility study, DOE participation was requested in January 2002.

ANNUAL CERTIFICATION

8. Senator LEVIN. Secretary Abraham, there is an annual process to certify that the nuclear weapons stockpile is safe and reliable. This process involves the Secretaries of Defense and Energy, the three DOE weapons laboratory directors, and the Commander in Chief of the Strategic Command. The 2001 annual certification is late. When will the certification be made?

Secretary ABRAHAM. The certification of the safety, security, and reliability of the nuclear weapons stockpile is my greatest responsibility. Prior to my signature on the memo to the President, I reviewed the state of the stockpile in detail with the NNSA Administrator and his staff as well as the three laboratory directors. I signed the memo to the President on March 20, 2002. The materials are now at the Department of Defense for the Secretary of Defense to sign and transmit the package to the President.

9. Senator LEVIN. Secretary Abraham, does the fact that the certification is late signify any problem with the stockpile?

Secretary ABRAHAM. No, the report being late is not indicative of any issues with the stockpile. Last year's report was not delivered to Congress until May 23, 2001.

SECURITY

10. Senator LEVIN. Secretary Abraham, are all the additional security costs identified following September 11 fully funded in the fiscal year 2003 budget request?

Secretary ABRAHAM. Since September 11, the Department has received \$122 million in emergency response funding to meet heightened security requirements, including \$117 million this fiscal year. Also, the administration has requested an additional \$26.4 million in fiscal year 2002 supplemental funding for Nuclear Weapons Incident Response and Energy Security and Assurance, and I fully support this level as adequate. Like other agencies, such as the Corps of Engineers, the Environmental Protection Agency, and the Department of the Interior, the DOE is assessing the long-term vulnerability of important public facilities. As completed, these assess-

³ See 40 C.F.R. (FAR) 52.249-6, Termination (Cost Reimbursement).

ments will be reviewed in the context of the Nation's overall vulnerabilities and appropriate resources will be requested at the appropriate time.

QUESTIONS SUBMITTED BY SENATOR JOHN WARNER

SCIENCE-BASED STOCKPILE STEWARDSHIP

11. Senator WARNER. Secretary Abraham, are we adequately funding the key weapons programs activities, namely the directed stockpile work and the science-based campaigns?

Secretary ABRAHAM. The President's fiscal year 2003 budget reflects a careful balance between our directed stockpile work and the science campaigns. The fiscal year 2003 request in directed stockpile work will allow the NNSA to maintain and refurbish the W80, W76, W87, and B61 weapon systems that will compose a significant portion of the enduring nuclear deterrent of the United States. The President's fiscal year 2003 budget request for our science campaigns will ensure that we have the necessary science and engineering tools needed to support the nuclear deterrent now and into the future without underground nuclear testing.

12. Senator WARNER. Secretary Abraham, has the Department of Energy properly allocated the funds to these programs, considering that the DOE spends almost twice as much on the science-based research as compared to the directed stockpile work?

Secretary ABRAHAM. The President's fiscal year 2003 budget reflects a careful balance between our directed stockpile work and the science campaigns. The President's budget for fiscal year 2003 requests an 18 percent increase for directed stockpile work. This increase in funding will allow the NNSA to proceed with the stockpile life extension work on the W80, W76, W87, and B61 as approved by the Nuclear Weapons Council and validated by the Nuclear Posture Review.

Campaigns support the development of the advanced experimental and computational tools needed to support the long term certification and life extension of the stockpile. The fiscal year 2003 budget requests for the science campaigns and the high energy density physics campaign are respectively 11.4 and 10.6 percent lower than their fiscal year 2002 appropriated levels. These reductions reflect reduced funding required for the construction of the National Ignition Facility and priority shifts we have made to ensure the appropriate level of support for the directed stockpile work.

Requests for the engineering and the readiness campaigns are increased by 7.9 and 13.8 percent respectively from their fiscal year 2002 appropriated levels. The increase in the readiness campaigns directly contribute to the directed stockpile work by providing all the up-to-date processing, machining, and inspection equipment needed at Y-12 for the stockpile life extension work. Some of the technologies developed as part of the engineering campaign will support neutron generator qualification and the W76 life extension program work.

QUESTIONS SUBMITTED BY SENATOR STROM THURMOND

INFRASTRUCTURE PLAN FOR THE NUCLEAR WEAPONS COMPLEX

13. Senator THURMOND. Secretary Abraham, Section 3008 of the National Defense Authorization Act for Fiscal Year 2002 requires the Secretary of Energy to prepare an infrastructure plan for the Nation's nuclear weapons complex. Although the report is not due for some time, what is your current assessment of the adequacy of the complex to support the current and future nuclear stockpile requirements?

Secretary ABRAHAM. Our nuclear weapons complex is very old, and in most cases, far below industry standards in areas of environment, safety, and health. The complex must be upgraded to ensure that the stockpile can be maintained in the out-years. Congress has provided \$200 million in fiscal year 2002 to start a multiyear, multi-billion dollar effort to begin a facilities and infrastructure recapitalization program. I believe with continued congressional support for this program and the other investments we have in the tools and facilities necessary for our Stockpile Stewardship Program, we should be able to recruit and retain the next generation of scientists and engineers who will be responsible for ensuring the safety, security, and reliability of our nuclear weapons without the need to return to underground nuclear testing.

INSTALLATION MEASUREMENT TOOLS

14. Senator THURMOND. Secretary Abraham, the Department of Defense uses the Installation Status Report to identify the condition of its facilities. What are the Department of Energy's installation measurement tools?

Secretary ABRAHAM. In 1998, DOE adopted the Facility Condition Index (FCI) as its tool for measuring the condition of its facilities. The FCI was first articulated in the 1991 publication "Managing the Facilities Portfolio—A Practical Approach to Institutional Facility Renewal and Deferred Maintenance," by the National Association of College and University Business Officers, and was developed by Coopers & Lybrand and Applied Management Engineering. It was considered in 1998, and still is considered by DOE Federal Maintenance Managers, to provide the best and most reliably applied metric for assessing facility condition.

The FCI is the ratio of the cost of deficiencies of a single facility or group of facilities to the facility's replacement plant value. The cost of deficiencies is the total dollar amount of existing maintenance and repair deficiencies obtained from a condition assessment inspection.

Additionally, the Department of Energy collects annual required, actual, and deferred maintenance costs on a facility-by-facility basis in its corporate database, the Facilities Information Management System. The annual required maintenance cost identifies maintenance needs based on engineering/maintenance analysis independent of budget considerations. The annual actual maintenance cost captures all maintenance activities occurring during the current fiscal year. Deferred maintenance data is required for all Federal agencies by the Statement of Federal Financial Accounting Standard No. 6, and is reported in DOE's Annual Financial Statement. All the data referenced above is readily available to managers and can be used to track and trend maintenance activities and drive maintenance/facilities budgets and priorities.

SERVICE CENTERS

15. Senator THURMOND. Secretary Abraham, the Department of Energy plans to eliminate a layer of management and oversight by establishing eight site offices collocated with the eight NNSA contractors. How will these eight offices differ from the field offices that the Department previously used to manage operations?

Secretary ABRAHAM. Each NNSA site office will have primary responsibility for day-to-day program and contract administration for its assigned facility. These duties include agreeing to the overall safety and security parameters within which the contractor is authorized to operate.

Site office managers for their respective laboratories, production plants, and test site will have the additional responsibility of integrating NNSA activities at these sites with customers from other elements of the Department of Energy such as the environmental management and science programs, from other Federal agencies such as DOD, and from the private sector.

The primary difference between the new NNSA site offices and the previous Federal offices located at these facilities is that the Federal manager in the new office will have full contracting authority for these facilities and will be expected to expeditiously resolve issues raised by the facilities manager or NNSA program officials. He or she will not be required to obtain concurrence from an intermediate "headquarters" organization such as an operations office.

RECRUITING AND RETAINING EMPLOYEES

16. Senator THURMOND. Secretary Abraham, you testified that the Department of Energy is aggressively implementing a program to retain highly-skilled employees, retain employees with skills mismatches, and recruit those with the right technical skills. What programs does the Department have to recruit graduate students who will be the seed corn for developing and maintaining the U.S. nuclear weapons technology?

Secretary ABRAHAM. All of the National Nuclear Security Administration weapons program contractors have programs to recruit critical skilled employees from undergraduate and graduate-level student populations at our major colleges and universities and regional schools. Several have developed strategic relationships with selected universities, and they sponsor student programs aimed at building critical skills to match their needs as defined through their workforce planning. Our three weapons laboratories employ large numbers of postdoctoral research appointees who support on going research and become excellent candidates for future employment.

17. Senator THURMOND. Secretary Abraham, in its recruiting efforts does the Department of Energy face the same anti-military sentiments on some university campuses as the Department of Defense?

Secretary ABRAHAM. Our contractors report that, with some limited exceptions, they have not been confronted with any expressed anti-military sentiments on any of the university campuses. Individual candidates have expressed negative views of the weapons program, or a preference for doing non-weapons work at a laboratory. One contractor reported that since the September 11, 2001, terrorist attacks, their recruiters have experienced an increased sense of patriotism and a desire by candidates to work on national security issues.

MODERN PIT FACILITY

18. Senator THURMOND. Secretary Abraham, last year this committee expressed great concern about the lack of progress being made with regard to a Modern Pit Facility (MPF). The Panel to Assess the Reliability, Safety, and Security of the United States Nuclear Stockpile, the Foster Panel, provided striking evidence that we must take aggressive action in this regard. In fact, in both the 1999 and 2000 reports of the Foster Panel, the most significant recommendation was that the United States must "immediately begin conceptual design of an adequate pit production facility." In response to this compelling evidence, the committee included in the report accompanying the Fiscal Year 2002 National Defense Authorization Act the following guidance:

"The committee notes the panel's estimate that it will take 10 or more years to build an adequate pit production facility." Furthermore, the committee recommended "an additional \$10 million be available to select an architect-engineering organization to begin the conceptual design and report process, in order to keep the new pit production facility on schedule." Unfortunately, your fiscal year 2003 budget calls for the design of this facility to be "deferred until fiscal year 2004 with the fiscal year 2003 funding used to continue manufacturing concepts." Do you disagree with the findings of the Foster Panel with regard to a MPF?

Secretary ABRAHAM. We believe the approach being taken on the MPF is a prudent one. The NNSA approach also has the endorsement of the Nuclear Weapons Council.

NNSA is currently taking steps to proceed with an MPF including formal approval of mission need, Critical Decision-0 (CD-0), which is required to start conceptual design of an MPF. Following CD-0 approval by the Department in the spring of 2002, the NNSA will initiate a National Environmental Policy Act (NEPA) process to obtain a formal Record of Decision that is required to both select a site for an MPF and to proceed with a detailed facility design after completing conceptual design. The NNSA will expedite the NEPA process while simultaneously developing technology required to evaluate alternative conceptual designs for an MPF.

19. Senator THURMOND. Secretary Abraham, 2 years ago, the Senate Armed Services Committee included \$11 million for the conceptual design of the Modern Pit Facility. The DOE responded by including \$4 million for "pre-conceptual" design work. The committee obviously felt that this was insufficient and included the additional language mentioned previously, as well as \$10 million to select an architect-engineering organization to begin conceptual design and the report process for an MPF. This year DOE has "deferred" the design of the MPF. Do you believe the Senate Armed Services Committee is misguided in funding the immediate conceptual design of an MPF?

Secretary ABRAHAM. Although the Senate Armed Services Committee recommended an additional \$10 million in fiscal year 2002 for the MPF, only \$4 million was provided through appropriations. Based on this \$4 million funding level and consistent with direction provided by the Senate Armed Services Committee, the NNSA has completed pre-conceptual planning activities and is prepared to start conceptual design of an MPF following approval (spring 2002) of Critical Decision-0 mission need.

20. Senator THURMOND. Secretary Abraham, last year, Mr. Stephen Guidice, of the Panel to Assess the Reliability, Safety, and Security of the United States Nuclear Stockpile, testified before the Strategic Subcommittee of the Senate Armed Services Committee on March 19, 2001. In that testimony, Dr. Guidice stated that:

"It will take 10 to 15 years to build a Modern Pit Facility to do this on whatever scale you choose. So our feeling was you need to get on with the conceptual design of what this plant is going to look like, and a lot of good work could be done at

fairly low expense prior to final design of that plant before you get to high recourse levels of investment.”

Do you disagree with this statement?

Secretary ABRAHAM. Pre-conceptual planning for a MPF was started in fiscal year 2001, consistent with the statement by Mr. Guidice. NNSA is currently taking steps to proceed with MPF conceptual design after formal approval of mission need, CD-0 in the spring of 2002. Following CD-0, the NNSA will initiate a NEPA process required to obtain a formal record of decision to both select a site for an MPF and proceed with more detailed facility design. To accelerate design, the NNSA will expedite the NEPA process while simultaneously developing technology to assure the robustness of a future facility designs and evaluating conceptual design alternatives for the facility.

21. Senator THURMOND. Secretary Abraham, General Gordon highlighted the concerns of the committee with regard to an MPF in his recent testimony before the committee, stating:

“The Los Alamos production capacity will be insufficient to meet future requirements for pits. As a result of the NPR, we seek to accelerate planning and initial design work to establish an MPF. Relevant activities about to begin include the preliminary MPF design, associated technology development, and the initiation of the National Environmental Policy Act process.”

How do you propose to accelerate the design of the MPF when the DOE has again deferred the conceptual design?

Secretary ABRAHAM. NNSA is currently taking steps to complete formal approval of mission need, CD-0, which is required to start conceptual design. Following CD-0 approval in the spring of 2002, the NNSA will initiate a NEPA process required to obtain a formal Record of Decision to both select a site for a Modern Pit Facility and to proceed with a detailed facility design. To accelerate design, the NNSA will expedite the NEPA process while simultaneously developing technology to evaluate conceptual design alternatives for the facility.

22. Senator THURMOND. Secretary Abraham, in 1996 the DOE called for developing a contingency plan to establish a large scale pit manufacturing facility within 5 years. Does your research on the deterioration of nuclear components support your decision to delay the 1996 plan?

Secretary ABRAHAM. Research to date on plutonium aging and pit lifetimes do not show significant deterioration that raises concern about the safety, security and reliability of the Nation’s nuclear deterrent. The weapons laboratories are continuing to conduct experiments at the laboratories and the Nevada Test Site to further improve our understanding of the lifetime of nuclear components such as pits. At the same time the NNSA is proceeding, on a prudent pace, supported by the Nuclear Weapons Council, with plans to develop a MPF that will meet the needs of the nuclear weapons stockpile.

WEAPONS COMPONENT DETERIORATION

23. Senator THURMOND. Secretary Abraham, do you have new evidence contradicting the concerns of the Foster Panel with regard to the “worrisome signs of deterioration in some nuclear components?”

Secretary ABRAHAM. NNSA is aggressively monitoring the aging phenomenon through the core surveillance program and enhanced surveillance campaign. Plans are in place to closely monitor component performance and to increase the use of new diagnostic tools to aid in the understanding of the aging phenomenon. Under the core surveillance program, multiple weapons each year are disassembled, inspected, and subjected to multiple-test activities, including both laboratory and flight testing in order to verify safety and reliability. Component Evaluation Program Plan Committees have been formed for some of the critical components to optimize the surveillance testing of these components. The Enhanced Surveillance Program performs lifetime assessments on the components and develops diagnostic tools for better detection of degradation due to aging.

A refurbishment program to replace some of the components of the weapons systems that have higher risk to safety or reliability has been instituted. These life extension programs (LEPs) have extremely high priority and management attention at NNSA, the design laboratories, and the production plants. As a direct result of input from the Surveillance Program and the Enhanced Surveillance Campaign, the strategy and tactics for the LEP implementation have been focused to address the concerns of an aging stockpile.

MIXED-OXIDE FUEL FABRICATION FACILITY

24. Senator THURMOND. Secretary Abraham, last year you assured me that the Mixed-Oxide (MOX) plant was your top nonproliferation priority. Thank you for all you have with regard to moving this program forward. However, there are still a few matters that need to be resolved in order to guarantee the success of the program. Specifically, I have been informed that you are currently negotiating with the Governor of South Carolina to achieve a mutually satisfactory agreement for the DOE and South Carolina. While a number of my colleagues addressed this matter at today's hearing, it is my understanding that this agreement may require legislation. Would you please provide suggested legislative language, and could you accommodate this request immediately?

Secretary ABRAHAM. I believe the legislation you have introduced is more than adequate to address all of the concerns the State of South Carolina has raised regarding the Plutonium Disposition program and is acceptable to the administration. We hope that the Governor would join his own delegation in Congress and work to pass this legislation and withdraw his unnecessary lawsuit.

NUCLEAR REGULATORY COMMISSION APPROVAL OF THE LEAD TEST ASSEMBLY

25. Senator THURMOND. Secretary Abraham, you are no doubt aware that a MOX lead test assembly (LTA) program is needed before the NRC will approve the use of significant quantities of MOX fuel. The initial plan for the fabrication of these units—fabrication at LANL—was terminated by the DOE in May 2000, reportedly due to cost and schedule concerns. I have been informed that there is a possibility that there may be a lag between the MOX fabrication facility startup and large scale use of MOX. The potential startup delays would mean that large scale use of MOX fuel would not begin until 2012, 2013, or later. Consequently, the lag between MOX Fuel Fabrication Facility and full production requires maintaining the facility with no production for a number of years, a cost impact to the taxpayer of potentially \$200 million. Can you detail the current plan as well as the schedule of that plan?

Secretary ABRAHAM. The options for fabrication of MOX lead assemblies are still under consideration. One option the Department is currently examining is the early fabrication of MOX lead assemblies in Europe. The Department is meeting with European government officials to determine the necessary measures to pursue this option. Detailed plans will be developed if an agreement can be reached by all parties.

If successful, lead assemblies will be fabricated and irradiated before the completion of the MOX Fuel Fabrication Facility, and the Department's contractor, DCS, should be able to obtain Nuclear Regulatory Commission approval for large-scale use of MOX fuel in the Duke energy reactors on the desired schedule.

26. Senator THURMOND. Secretary Abraham, can you assure me that there will be no delay due to LTA approval delays?

Secretary ABRAHAM. I am optimistic that there will be no significant delays in Nuclear Regulatory Commission approval of the lead assemblies. However, it is simply not possible to guarantee that there will be no delays as the Nuclear Regulatory Commission exercises its statutory responsibilities to confirm the safety of the use of lead assemblies in licensed reactors.

DOE MANAGER FOR MOX FUEL LTA

27. Senator THURMOND. Secretary Abraham, I believe it would be helpful and assuring to have a DOE manager to take charge of the MOX fuel LTA project on a full time basis to perform DOE activities, coordinate interagency activities, such as Department of State, Department of Defense, etc., as well as oversee contractor activities. I also believe a full-time manager could open and maintain dialog between the United States, France, and Belgium, initiate National Environmental Policy Act activities, and prepare an export license application to the Nuclear Regulatory Commission. Do you believe these activities could be better managed by a full time manager, and would you support creating such a position?

Secretary ABRAHAM. The Department has assigned a full-time engineering manager at headquarters with the primary responsibility for lead assembly activities. One of the priorities for this position involves coordinating lead assembly activities and maintaining communication between the various agencies and contractors involved in this effort.

QUESTIONS SUBMITTED BY SENATOR WAYNE ALLARD

SHIPPING OF PLUTONIUM AND OTHER SPECIAL NUCLEAR MATERIALS

28. Senator ALLARD. Secretary Abraham, the National Nuclear Security Administration has responsibility for shipping many of the Environmental Management (EM) waste types including surplus plutonium. With the closure of sites like Rocky Flats and the proposed acceleration of cleanup at the four major EM sites, it is very important that the shipping of these wastes occurs on schedule. Delays in shipments may delay the closure of some of the EM sites creating increased costs and possible fines to the DOE for missing milestones. On the other hand, we don't want to delay shipments within the weapons program either, especially as the stockpile life extension program gets into full swing over the next several years. Can we be assured that the NNSA will keep the shipping of plutonium and other special nuclear materials from EM sites on schedule?

Secretary ABRAHAM. The NNSA and the Department's Office of Environmental Management are working together to develop shipping schedules that meet the requirements of both organizations. NNSA stands ready to support removal of materials from EM sites when the sites are prepared to ship and the receiver sites are available to accept the materials. The NNSA is conducting an in-depth review of the forecast and potential future requirements of the Secure Transportation Asset, developing strategies, and identifying resources required to meet both the short- and long-term mission requirements.

29. Senator ALLARD. Secretary Abraham, has the NNSA prepared a realistic plan to keep up with the anticipated schedule of shipments within both Defense Programs and Environmental Management during the next several years?

Secretary ABRAHAM. The NNSA is updating its shipping requirements and capacity model for the Secure Transportation Asset with the latest planned and potential requirements through fiscal year 2008. The NNSA is utilizing this model as the basis for developing strategies and resource requirements to make the necessary adjustments to meet all mission requirements.

NEED FOR SIGNIFICANT FINDING INVESTIGATION TRACKING SYSTEM

30. Senator ALLARD. Secretary Abraham, in a December 2001 report, the DOE Inspector General expresses his concern that the DOE has frequently failed to meet their internally established time frame for initiating and conducting investigations of nuclear weapon defects and malfunctions. One problem explained by the Inspector General was that there was no central manager or tracking system of the investigative process. If a notification of a weapon defect or malfunction was sent (often by e-mail), there was no disciplined plan for how the message recipient should respond or what happens to the request if it is forwarded on to others. At any point in the investigation, there is no central person who knows where or by whom in the process the defect or malfunction is being examined. This lack of discipline leads to lack of accountability and delays. In response to concerns raised by the Inspector General about the delays in the Significant Finding Investigation process, should the NNSA incorporate a central tracking system to make sure a weapon defect or malfunction is forwarded with adequate notification and, if necessary, conduct an investigation of the weapons surveillance program?

Secretary ABRAHAM. In line with the Inspector General recommendations, NNSA has directed the Sandia National Laboratories (SNL) to modify the Significant Finding Investigation (SFI) database to include: defect and malfunction discovery date, Significant Finding Notification (SFN) and SFI determination dates, expected closure date (when known), report date, expected impact, and any other information deemed necessary to manage the process. Also, direction has been given to all testing agencies to provide all pertinent SFN information to SNL for inclusion in the database. NNSA has directed SNL to be the agent for NNSA for SFI data. These modifications will allow NNSA to better track SFIs.

In addition, all SFIs are reported on a monthly basis via the monthly SFI report. Again, in line with the Inspector General recommendations, we are actively reformatting the monthly report to include “stoplight” tables, 6-month action plans, explanations of unexpected delays, steps planned to resolve those delays, and expected closure dates, when known, for all SFIs over 1 year old. Implementation of these changes is expected in the July 2002 monthly report.

[Whereupon, at 11:45 a.m., the committee adjourned.]

