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S. HRG. 109–827, PT. 1

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2007

HEARINGS

BEFORE THE

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

ON

S. 2766

TO AUTHORIZE APPROPRIATIONS FOR FISCAL YEAR 2007 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CONSTRUCTION, 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
ARMY POSTURE
ATOMIC ENERGY DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY
AIR FORCE POSTURE
COMBATANT COMMANDERS
NAVY POSTURE
JOINT STRIKE FIGHTER F136 ALTERNATE ENGINE PROGRAM

FEBRUARY 7, 14, 16; MARCH 2, 7, 9, 14, 15, 16, 2006



Printed for the use of the Committee on Armed Services

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2007—Part 1

MILITARY POSTURE ● ARMY POSTURE ● ATOMIC ENERGY DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY ● AIR FORCE POSTURE ● COMBATANT COMMANDERS ● NAVY POSTURE ● JOINT STRIKE FIGHTER F136 ALTERNATE ENGINE PROGRAM

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DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2007

TUESDAY, FEBRUARY 7, 2006

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

MILITARY POSTURE

The committee met, pursuant to notice, at 9:30 a.m. in room SD–106, Dirksen Senate Office Building, Senator John Warner (chairman) presiding.

Committee members present: Senators Warner, McCain, Inhofe, Sessions, Collins, Ensign, Talent, Graham, Dole, Cornyn, Thune, Levin, Byrd, Lieberman, Reed, Akaka, Bill Nelson, E. Benjamin Nelson, and Dayton.

Committee staff members present: Charles S. Abell, staff director; Leah C. Brewer, nominations and hearings clerk; and John H. Quirk V, security clerk.

Majority staff members present: William M. Caniano, professional staff member; Regina A. Dubey, research assistant; Ambrose R. Hock, professional staff member; Gregory T. Kiley, professional staff member; Sandra E. Luff, professional staff member; Derek J. Maurer, professional staff member; Elaine A. McCusker, professional staff member; David M. Morriss, counsel; Lucian L. Niemeyer, professional staff member; Stanley R. O'Connor, Jr., professional staff member; Lynn F. Rusten, professional staff member; Robert M. Soofer, professional staff member; Sean G. Stackley, professional staff member; Scott W. Stucky, general counsel; Kristine L. Svinicki, professional staff member; and Diana G. Tabler, professional staff member.

Minority staff members present: Richard D. DeBobes, Democratic staff director; Jonathan D. Clark, minority counsel; Daniel J. Cox, Jr., professional staff member; Madelyn R. Creedon, minority counsel; Gabriella Eisen, research assistant; Richard W. Fieldhouse, professional staff member; Creighton Greene, professional staff member; Bridget W. Higgins, research assistant; Michael J. Kuiken, professional staff member; Gerald J. Leeling, minority counsel; Peter K. Levine, minority counsel; Michael J. McCord, professional staff member; William G.P. Monahan, minority counsel; and Arun A. Seraphin, professional staff member.

Staff assistants present: Micah H. Harris, Jill L. Simodejka, and Pendred K. Wilson.

Committee members' assistants present: Cord Sterling, assistant to Senator Warner; Christopher J. Paul, assistant to Senator McCain; John A. Bonsell, assistant to Senator Inhofe; Arch Galloway II, assistant to Senator Sessions; Mackenzie M. Eaglen, assistant to Senator Collins; D'Arcy Grisier, assistant to Senator Ensign; Lindsey R. Neas, assistant to Senator Talent; Clyde A. Taylor IV, assistant to Senator Chambliss; Meredith Beck, assistant to Senator Graham; Russell J. Thomasson, assistant to Senator Cornyn; Stuart C. Mallory, assistant to Senator Thune; Christine Evans and Erik Raven, assistants to Senator Byrd; Frederick M. Downey, assistant to Senator Lieberman; Elizabeth King, assistant to Senator Reed; Darcie Tokioka, assistant to Senator Akaka; William K. Sutey, assistant to Senator Bill Nelson; Eric Pierce, assistant to Senator Ben Nelson; Kimberly Jackson, assistant to Senator Dayton; and Andrew Shapiro, assistant to Senator Clinton.

OPENING STATEMENT OF SENATOR JOHN WARNER, CHAIRMAN

Chairman WARNER. Good morning, everyone. Before we begin our hearing today, all members wish to acknowledge that not only the United States, but the world notes with sadness the passing of one of our most courageous and distinguished citizens, Coretta Scott King. Two of our colleagues, Senator Kennedy and Senator Clinton, are joining with four Presidents to acknowledge the courage of this great lady. We open our hearing today in recognition of her contributions to freedom and justice, not unlike the goals that our men and women of the Armed Forces are fighting for all over the world.

The committee meets today to receive the annual testimony of the Secretary of Defense and the Chairman of the Joint Chiefs of Staff on the posture of the U.S. Armed Forces and President Bush's defense budget for the fiscal year 2007 and future years. We also recognize our distinguished Chief of Staff of the Army. We are delighted that you joined us this morning, given that it is your leadership, together with that of the Secretary and the Chairman, that will forge the effort to get the major part of this budget, namely the Army, through and accepted by Congress. I wish you well, chief.

We meet today as the Iraqi people are working to form a permanent democratic government in the aftermath of yet another round of historically successful elections. Iraqis have spoken for freedom and democracy, but their voice would not have been heard without the service and sacrifice of the men and women of the Armed Forces of the United States and their coalition partners and the Iraqi security forces (ISF). We extend our profound respect to those who serve and our thoughts and prayers are with their families and particularly those families who are experiencing the loss or the wounding of one of their beloved members.

As we were finishing work on last year's Defense Authorization Bill—it seems like just 6 weeks ago, Senator Levin, is my recollection—I stated that the next 6 months would be the most critical period of the conflict in Iraq. The key to success in Iraq and the eventual phaseout in an orderly way, depending on the ground situation and that of our commanders, of the United States troops

and those of the coalition forces, that is dependent upon the training and equipping and the advising of ISF to a level of military proficiency and courage and dependability such that they can continue assuming a greater and greater responsibility for defending their nation's sovereignty and freedom.

I commend you, Mr. Secretary and your associates, for the success that we have made here of recent in that restructuring of those forces and the training and equipping. Substantial progress is being made and will continue to be made, I am confident.

We need, however, Mr. Secretary, as a part of your presentation this morning your assessment of the operations in Iraq and Afghanistan and an update about our continuing efforts to forge and secure a democratic future for those nations.

This is a time for hope for Iraq and Afghanistan, but difficult work lies ahead in these lands and others in the long war on terror. I noted in this very room just a few days ago, Mr. Secretary, my concern, and it is shared by others, of the increasing level of corruption and criminality in Iraq and the difficulty that our coalition forces are finding in performing military missions in the face of this very significant corruption and criminality that is obscuring so much of the really success that has been made in Iraq. I hope that you will address that issue.

The manpower demands of ongoing stabilization operations along with the requirements to build more agile, deployable forces for the United States is an extreme challenge. You have to do both at the same time. The President's budget request arrives this year at a critical time of change, not just in the global war on terrorism, but here at home as well. The first Quadrennial Defense Review (QDR) fully focused on post-September 11 threats has just been delivered to Congress. I have been reviewing it together with my colleagues, and it seems to me to be a very constructive contribution towards the structuring of our future forces and a guidepost for us to follow.

I commend the President of the United States for his continuing commitment to strengthening our defenses, capabilities, and providing our forces with the resources they need to successfully fulfill their missions. The budget priorities of supporting the global war on terror, restructuring our forces, and our global posture, building joint capabilities for future threats, all this at the same time, and taking care of our troops and their families, are clearly the right emphasis in this budget.

One of the committee's most important duties is to provide oversight over the management of hundreds of billions of dollars the Department spends each year on the acquisition of supplies, services, and equipment. This committee will focus on that under the leadership of Senators McCain, Ensign, Lieberman, and Akaka, who have taken on that, in a bipartisan way to strengthen the situation so as to make certain that our taxpayers' dollars are wisely expended.

The committee is committed to doing all we can to ensure the safety of our soldiers. Taking lessons from recent operations in the war on terrorism, two specific areas. I wish to again commend the Department of Defense (DOD) under your leadership for upgrading a structure under a four-star officer to deal with the improvised explosive devices (IEDs) and to increase substantially that budget.

This committee has communicated our thoughts on that some weeks ago to you, and we see that it has come into fruition now.

Likewise, the unmanned aerial vehicles (UAVs) have made the warfighter a much stronger and agile individual and better informed in the intelligence world. So, this technology is important for our future. Years ago, our committee tried to emphasize the need for the unmanned vehicles, both air and ground and sea, that can be employed in our defense structure.

The shipbuilding budget is of particular concern to the committee. In a hearing before this committee on February 10, 2005, the Chief of Naval Operations (CNO) stated that, given the current rate of ship purchases and production, the Navy could be faced with a decreasing fleet of ships, eventually dropping below 250 major combatants. A fleet of this small size may well jeopardize the Navy's ability to meet its mission requirements and the financial viability of the vital shipbuilding industrial base. I think this budget makes the best move forward in the number of new acquisition of ships available under this budget.

I shall put the balance of my statement in the record because we have a strong attendance here this morning. We are anxious to hear from our distinguished witnesses. I thank you, Mr. Secretary, Mr. Chairman, and General Schoomaker.

[The prepared statement of Senator Warner follows:]

PREPARED STATEMENT BY SENATOR JOHN WARNER

Before we begin, I note that several of our members are not here today. This morning in Georgia, those members—and indeed our entire Nation—are paying their last respects to Corretta Scott King. To quote our President on her passing, "Our Nation lost a beloved, graceful, courageous woman who called America to its founding ideals and carried on a noble dream."

Dr. and Mrs. King were seen not only as leaders of the American civil rights movement, but as symbols of an international struggle against racism, colonialism, and all forms of oppression and discrimination. It is only fitting that we take a moment to remember this great woman here today as our military forces are engaged around the world, similarly dedicated to ending the oppression of peoples.

The committee meets today to receive the annual testimony of the Secretary of Defense and the Chairman of the Joint Chiefs of Staff on the posture of the U.S. Armed Forces and President Bush's defense budget request for fiscal year 2007 and the Future Years Defense Program (FYDP).

Secretary Rumsfeld and Chairman Pace, I welcome you back before the committee and commend you for the outstanding leadership, as a team you both provide our Nation, and our men and women serving in the Department of Defense (DOD) and their families.

We meet today as the Iraqi people are working to form a permanent, democratic government in the aftermath of yet another round of very successful elections—again, in defiance of terrorists and of dire predictions of failure. Iraqis have spoken for freedom and democracy, but their voice would not have been heard without the service and sacrifice of the United States Armed Forces, our coalition partners, and the Iraqi security forces (ISF). We extend our thanks to those who serve, and our thoughts and prayers are with the families and friends of those who have been lost or wounded, defending liberty around the world.

As we were finishing work on last year's Defense Authorization Bill a mere 6 weeks ago, I stated that the next 6 months would be the most critical period of the conflict in Iraq. The key to success in Iraq—and the withdrawal of U.S. troops—is the training and equipping, and advising of ISF to a level of proficiency and dependability that they can begin assuming principal responsibility for defending their sovereignty and freedom. We look forward to your assessment of our operations in Iraq, and also your insights about forging a secure, democratic future for Iraq and Afghanistan.

This is a time of hope for Iraq and Afghanistan, but difficult work lies ahead in these lands and others in this long war on terror. The manpower demands of ongo-

ing stabilization operations, along with the requirements to build more agile, deployable forces for the future, will continue to place considerable stress on the men and women of our Armed Forces and their families. With these competing demands in mind, we consider this year's budget request.

The President's budget request arrives this year at a critical time of change—not just in the global war on terrorism, but here at home, as well. The first Quadrennial Defense Review fully focused on post-September 11 threats has just been delivered to Congress. We will need to carefully analyze and evaluate this document. For the first time in a decade, a Base Realignment and Closure round has been completed. These results now need to be implemented. We must take into consideration these "moving parts," as we review this year's budget request in the coming weeks and months. It is important to ensure that we not only enhance our capability to win today's wars, but that we will retain the strength to deter, and if necessary win, conflicts of the future as well.

The budget request delivered to Congress on February 6 for the DOD is for $439.3 billion, an increase of $19.8 billion over the authorized fiscal year 2006 base budget, and represents the sixth consecutive year of growth in the defense budget. I commend the President for his continuing commitment to improving our defense capabilities and providing our forces with the resources and capabilities they need to successfully fulfill their missions. The budget priorities of supporting the global war on terror, restructuring our forces and our global posture, building joint capabilities for future threats, and taking care of our troops and their families are clearly the right emphasis.

While supportive of the overall request, I have some concerns on which I look forward to working with you and the Department over the coming months.

One of the committee's most important duties is to provide oversight over the management of the hundreds of billions of dollars that the Department spends each year on the acquisition of supplies, services, and equipment—everything from office supplies to weapon systems. We have become aware over the last several years of emerging problems in the acquisition arena and have initiated numerous legislative provisions in an effort to direct the Department towards more sound acquisition practices. We will continue to work with you to explore ways to ensure the Department acts as a good steward of taxpayer dollars.

This committee is committed to doing all we can to ensure the safety of our soldiers. Taking lessons from recent operations in the war on terrorism, two specific areas bear mentioning. The area of counter improvised explosive devices has and will continue to command our attention. Second, recognizing the invaluable contributions unmanned aerial vehicles have made to the warfighter, we need to explore a greater use of this technology—including ground vehicles, ships, and high performance aircraft.

The shipbuilding budget is of particular concern. In a hearing before this committee on February 10, 2005, the Chief of Naval Operations (CNO) stated that given the current rate of ship purchases and production, the Navy could be faced with a decreasing fleet of ships, eventually dropping below 250 major combatant ships. A fleet of this small size may well jeopardize the Navy's ability to meet its mission requirements, and the financial viability of the vital shipbuilding industrial base could easily be threatened. More encouraging was the CNO's recent brief to the committee on December 16, 2005, outlining a naval force structure of 313 ships. I look forward to examining the shipbuilding budget in the fiscal year 2007 budget request and working with the Secretary of the Navy and the CNO to ensure we have a plan that will maintain the United States Navy as the premier naval force.

Finally, Congress has not received the administration's supplemental funding request for fiscal year 2006. Congress included a "bridge" fund of $50.0 billion in the fiscal year 2006 Defense Authorization and Appropriation Acts, but that amount most likely will not be enough to cover the full costs of the war on terror through the fiscal year. It is also clear that many of the costs for the ongoing global war on terrorism are not included as part of the President's fiscal year 2007 budget request. This committee is interested in hearing your views on the need and timing of a fiscal year 2006 supplemental, and how funding for the global war on terrorism fits into the fiscal year 2007 budget request.

I thank you all for your distinguished service and look forward to your testimony.

Chairman WARNER. Senator Levin.

STATEMENT OF SENATOR CARL LEVIN

Senator LEVIN. Mr. Chairman, first let me join you in welcoming our distinguished witnesses this morning. I also join you in prais-

ing the life of Coretta Scott King and in expressing our condolences to the King family. Coretta Scott King helped lead us to a more just Nation and world. We are with our colleagues at that funeral in spirit, although we are here in Washington carrying out our responsibilities this morning.

Today and every day our men and women in uniform are risking their lives representing our Nation around the world. We join together in recognizing and commending them for their work and for what they are doing with such extraordinary bravery and dedication. They have our full support, and we will continue to attempt to provide them with everything that they need to succeed.

The situation in Iraq has reached a pivotal point. The next several months are likely to determine whether Iraq will be engulfed in all-out civil war or move towards nationhood. Negotiations are ongoing for the formation of a new Iraq government, and as soon as the new Iraq parliament is seated it is to appoint a panel to review and recommend changes to the Iraqi constitution, a job to which 4 months have been allotted by that same constitution.

In testimony before this committee on September 29 last year, General George Casey, Commanding General Multinational Force-Iraq, stated that, "We have looked for the constitution to be a national compact and the perception now is that it is not, particularly among the Sunni." Now, most other observers have agreed that the new constitution as it stands is a divisive document. The International Crisis Group, a highly respected, independent, nonprofit, nongovernmental organization, in a report released last September, wrote as follows: "Without a strong U.S.-led initiative to assuage Sunni Arab concerns, the constitution is likely to fuel rather than dampen the insurgency, encourage ethnic and sectarian violence, and hasten the country's violent breakup."

But the message that President Bush has sent is inconsistent with the vital effort to get Iraqis to agree on amendments to their constitution. Instead of urging Iraqis to make modifications in the constitution so as to produce a document which unifies them, the President on December 12 called the Iraqi constitution "a bold constitution that guarantees the rule of law and freedom of assembly and property rights and freedom of speech and the press and women's rights and the right to vote." The President's effusive praise is the wrong message because it lessens the likelihood that the compromises necessary to change the constitution will be made.

The future of Iraq depends on Iraqis making changes in their constitution to assure fair sharing of power and oil resources and adequate protection of minorities.

It is surely true that the United States cannot amend the Iraqi constitution. Only the Iraqis can do that. But, it is also surely true that we have the standing, given the sacrifices our men and women in uniform have made and given the other costs of this war to our Nation, to tell the Iraqis that they need to make that essential step. If they do not, the level of our troop strength will not make much difference; Iraqis will continue to descend into sectarian strife and into civil war.

We need to clearly tell the Iraqi factions: Our willingness to commit further lives and resources to your future depends on your will-

ingness to amend your constitution so that there is a future as an Iraqi nation.

I have no doubt that there will be significant reduction in the number of U.S. forces in Iraq this year. The question is whether the significant reduction will be in the context of the Iraqis having made the political compromises necessary to move forward towards nationhood and the defeat of the insurgency or in the context of the Iraqis having failed to do so, with the insurgency continuing and all-out civil war waiting to break out. The need to address the political situation in Iraq is just one of the many issues that require this committee's attention and oversight, but there are other obviously important issues as well.

Responsible budgeting means making choices and setting priorities. This budget request fails that test. It understates the true cost of our defense program because it does not fully recognize or pay for the cost of ongoing operations of Iraq and Afghanistan in 2007. Funds for those will apparently be requested later this year on an emergency, non-paid-for basis. That is not responsible budgeting. Those costs should be planned on and paid for now. Honest budgeting requires no less.

I am also concerned that maintaining our current troop levels in Iraq is not sustainable over the long term. The grueling operational tempo is wearing down people and wearing out equipment. While reenlistment rates in the Army and Marine Corps are strong and are a credit to the dedication and devotion to duty of our soldiers and marines, some indicators, such as increasing strains on military families, are indicative of a force under stress and give rise to concerns that those reenlistment rates cannot be maintained. There is also clear evidence that the Services are having difficulty in recruiting new first-term soldiers and marines who are critical to a balanced force across all ranks and grades.

There are numerous other issues that require our attention. For instance, in the area of national missile defense, although we have already deployed 10 ground-based midcourse defense interceptors, this operationally configured missile defense system has never had a single successful intercept test. The simple truth is we do not know if the system will work.

Despite this glaring problem and despite the facts that the Department has already obtained funds from Congress for building and deploying 30 interceptors and that the next planned intercept flight test will not occur until the end of this year, the Department is seeking additional funds in this budget request to build and deploy more of these untested and unproven interceptors.

Finally, we have received interim reports from the Under Secretary of Defense for Intelligence regarding the so-called "TALON" reporting system, which is supposed to collect information relating to possible foreign terrorist threats to defense personnel and facilities, and the review underway to ensure that the rules governing the retention of data are followed. The Department has sent us an interim letter informing us that a small percent of reports were submitted that inappropriately dealt with demonstrations and anti-war activity rather than foreign terrorist threats and that the Department of Defense will soon conclude its review of the program to determine precisely what needs to be done to correct its flaws.

It will then issue detailed guidance outlining the proper procedures. The usefulness of congressional oversight has been demonstrated in this matter. I thank our chairman in joining that initiative to make that happen. I would hope that we would have a briefing for members once the review is complete and I would ask, Mr. Chairman, that the interim letter from the Department be made part of the record.

Chairman WARNER. Without objection.

[The information referred to follows:]



OFFICE OF THE UNDER SECRETARY OF DEFENSE
5000 DEFENSE PENTAGON
WASHINGTON, DC 20301-5000

JAN 27 2006

The Honorable Carl Levin
Ranking Member
Committee on Armed Services
United States Senate
Washington, DC 20510-6050

Dear Senator Levin:

In the Under Secretary of Defense for Intelligence letter of December 19, 2005, Dr. Stephen Cambone provided you some context not otherwise reported in an NBC News segment on the Department of Defense (DoD) TALON system. Dr. Cambone also advised that we would thoroughly review the TALON system. That review is nearly completed. I would like to update you on our results:

- DoD field commanders highly value the TALON reporting program as a source of timely information about possible foreign terrorist threats to their personnel and facilities.

The TALON reporting system is much like a capability to document information from a "neighborhood watch" program in which concerned citizens or DoD personnel report suspicious activities they believe may be linked to possible foreign terrorist activities to DoD counterintelligence, law enforcement or intelligence organizations. The focus of the effort was on possible foreign terrorist threats to the DoD and not on U.S. persons in the United States. The information that was reported to DoD security, law enforcement, counterintelligence or intelligence personnel was then briefed to local military command officials and law enforcement as appropriate prior to being sent to the TALON reporting database at the Counterintelligence Field Activity (CIFA) for analysis. CIFA's role in the process is to maintain the database and conduct analysis.

- TALON reporting has led to a number of investigations. Those include terrorism investigations, most often conducted under the purview of the Joint Terrorism Task Forces headed by FBI, and the reporting has identified other criminal activities. The reporting has also disclosed

some patterns that have allowed the Department to focus or change security procedures in order to deter potential terrorist activities.

- Although the TALON reporting system was intended to document suspicious incidents possibly linked to foreign terrorist threats to DoD resources, some came to view the system as a means to report information about demonstrations and anti-base activity that would be of interest to field commanders from a force protection perspective. A very small percentage of these reports were submitted to the TALON/CORNERSTONE database.

- CIFA has removed the TALON reports on demonstrations and anti-base activity from the database. The process to remove other reports that are no longer analytically significant is ongoing. All TALON reports are now reviewed at CIFA upon receipt to ensure compliance with the TALON reporting criteria.

- The DoD organizations involved in the TALON reporting system were following multiple rule sets regarding the collection and retention of this information. The Department will soon issue detailed guidance that clarifies the purpose of the database, the rules governing the collection and retention of the data and more detailed procedures to be followed. The database will then be reviewed again to ensure compliance.

Dr. Cambone also directed that all Department counterintelligence and intelligence personnel receive immediate refresher training concerning the laws, policies and procedures that govern the responsibilities for handling information, especially information related to U.S. persons. The refresher training is underway and should be completed by January 31, 2006.

This review clearly indicates that TALON is an important and valuable tool, and that we have room for improvement. We will continue our analysis of findings from this review to determine precisely what we need to do to improve and will provide you with additional information.

There is nothing more important to the U.S. military than the trust and good will of the American people. The DoD values that trust and good will and consequently views with the greatest concern any potential violation of the strict DoD policy governing the protection of civil liberties. Our new guidance will reflect that concern and protect that trust.

My office continues to be engaged in formal and informal dialogue with members of your staff on this subject. These discussions have been positive and productive. I look forward to an opportunity to brief your committee on these complex and overlapping issues. I have sent a similar letter to the Committee's Chairman, the Honorable John W. Warner.

Sincerely,

Robert W. Rogalski
Deputy Under Secretary of Defense
(Counterintelligence and Security)

cc:
The Honorable Ted Stevens
The Honorable Daniel K. Inouye
The Honorable C.W. "Bill" Young
The Honorable John P. Murtha
The Honorable Duncan Hunter
The Honorable Ike Skelton
The Honorable Pat Roberts
The Honorable John D. Rockefeller IV
The Honorable Peter Hoekstra
The Honorable Jane Harman

Senator LEVIN. Mr. Chairman, we have, as you say, much work to do in our review of the defense program for fiscal year 2007 and in carrying out our oversight responsibilities. Through no fault of yours surely, we barely got our bill passed last year. In fact, I might say, despite your herculean efforts, we barely got our bill passed last year. You deserve, our troops deserve, even more importantly, the total cooperation of everybody involved to avoid a repeat of the unfortunate series of events which so delayed our 2006 Defense Authorization Bill.

I look forward to the testimony of our witnesses this morning and I would ask that my full statement be inserted in the record.

Chairman WARNER. Without objection. Thank you. Thank you very much, Senator Levin.

[The prepared statement of Senator Levin follows:]

PREPARED STATEMENT BY SENATOR CARL LEVIN

Mr. Chairman, I join you in welcoming our witnesses this morning. I also join you in praising the life of Coretta Scott King and expressing our condolences to the King family. I know Senator Kennedy and Senator Clinton and perhaps others are not here today because they are attending Mrs. King's funeral.

Today and every day our men and women in uniform are risking their lives representing our Nation around the world. We join together in recognizing and commending them for the work that they are doing with such extraordinary bravery and dedication. They have our full support, and we will continue to attempt to provide them with everything they need to succeed.

The situation in Iraq has reached a pivotal point—the next several months are likely to determine whether Iraq will be engulfed in all-out civil war or move towards nationhood. Negotiations are ongoing for the formation of a new Iraqi government, and as soon as the new Iraqi Parliament is seated, it is to appoint a panel to review and recommend changes to the Iraqi constitution—a job to which 4 months have been allotted by that same constitution.

In testimony before this committee on September 29 of last year, General George Casey, the Commanding General Multinational Force-Iraq, stated that "We've looked for the constitution to be a national compact, and the perception now is that it's not, particularly among the Sunni." Most other observers have agreed that the new constitution as it stands is a divisive document. The International Crisis Group, a highly respected independent, non-profit, non-governmental organization, in a report released last September wrote: "Without a strong U.S.-led initiative to assuage Sunni Arab concerns, the Constitution is likely to fuel rather than dampen the insurgency, encourage ethnic and sectarian violence, and hasten the country's violent breakup."

But the message President Bush has sent undermines the vital effort to get Iraqis to agree on amendments to their constitution. Instead of urging Iraqis to make modifications in the constitution so as to produce a document which unifies them, the President on December 12 called the Iraq constitution a "bold constitution that guarantees the rule of law and freedom of assembly, and property rights, and freedom of speech and the press, and women's rights, and the right to vote." The President's effusive praise is the wrong message because it lessens the likelihood that the compromises necessary to change the constitution will be made.

The future of Iraq depends on Iraqis making changes in their constitution to assure fair sharing of power and oil resources and adequate protection of minorities. Yet when the President was asked at a recent press conference, "How hard will you push Iraq's competing political parties to get a government and a constitutional compromise?" he responded, "There is an opportunity to amend the constitution." He did not say that he will push them hard. He didn't even say he would urge them to do so. He would only say what is obvious—they have an "opportunity" to do so.

It is surely true that the U.S. can't amend the Iraqi constitution. Only the Iraqis can do that. But it is also surely true that we have the standing, given the sacrifices our men and women in uniform have made and given the other costs of this war to our Nation, to tell the Iraqis that they need to take that essential step. If they don't, the level of our troop strength won't make a difference—Iraqis will continue to descend into civil war. Having a unifying constitution is critical because, as our military leaders have repeatedly told us, there won't be a military success over the insurgency without a political coming together of the major Iraqi groups.

In a resolution with bipartisan support in November, 79 U.S. Senators agreed that: "The administration should tell the leaders of all groups and political parties in Iraq that they need to make the compromises necessary to achieve the broadbased and sustainable political settlement that is essential for defeating the insurgency in Iraq, within the schedule they set for themselves." That language is now incorporated in the National Defense Authorization Act for Fiscal Year 2006.

Failure to heed that congressional advice could contribute to a stalemated negotiation among Iraqi leaders. When the administration repeats the mantra "we'll stay in Iraq as long as we are needed," that open-ended commitment removes pressure on the Iraqis to get their political house in order.

We need to clearly tell the Iraqis factions: "our willingness to commit further lives and resources to your future depends on your willingness to amend your constitution so that there is a future as an Iraqi nation."

I have no doubt that there will be a significant reduction in the number of U.S. forces in Iraq this year. The question is whether the significant reduction will be in the context of the Iraqis having made the political compromises necessary to move forward toward nationhood and the defeat of the insurgency, or in the context of the Iraqis having failed to do so with the insurgency continuing and all-out civil war waiting to break out.

The need to address the political situation in Iraq is just one of the many issues that require this committee's attention and oversight, but there are other important issues as well.

Responsible budgeting means making choices and setting priorities. This budget request fails that test. It understates the true cost of our defense program because it does not fully recognize or pay for the cost of ongoing operations in Iraq and Afghanistan in 2007. Funds for those will apparently be requested later this year on an emergency, non-paid for, basis. That is not responsible budgeting. Those costs should be planned on and paid for now. Honest budgeting requires no less.

I am also very concerned that maintaining our current troop levels in Iraq is not sustainable over the long term. The grueling operational tempo is wearing down people and wearing out equipment. While re-enlistment rates in the Army and Marine Corps are strong—and are a credit to the dedication and devotion to duty of our soldiers and marines—some indicators, such as increasing strains on military families, are indicative of a force under stress and give rise to concerns that those re-enlistment rates cannot be maintained. There is also clear evidence that the Services are having difficulty in recruiting new first-term soldiers and marines who are critical to a balanced force across all ranks and grades.

There are numerous other issues that require our attention. For instance, in the area of national missile defense, although we have already deployed 10 Ground-based Midcourse Defense interceptors, this operationally configured missile defense system has never had a single successful intercept test. The simple truth is that we do not know if the system will work.

Despite this glaring problem, and despite the facts that the Department has already obtained funds from Congress for building and deploying 30 interceptors, and that the next planned intercept flight test will not occur until the end of this year, the Department is seeking additional funds in this budget request to build and deploy more of these untested and unproven interceptors.

Finally, we have received interim reports from the Under Secretary of Defense for Intelligence regarding the so-called TALON reporting system, which is supposed to collect information relating to possible foreign terrorist threats to defense personnel and facilities, and the review underway to ensure that the rules governing the collection and retention of data are followed. The Department has sent us an interim letter informing us that a small percent of reports were submitted that inappropriately dealt with demonstrations and anti-war activity rather than foreign terrorist threats, and that DOD will soon conclude its review of the program to determine precisely what needs to be done to correct its flaws. It will then issue detailed guidance outlining the proper procedures. I would hope we would have a briefing for members once the review is complete. I ask that the interim letter from the Department be made part of the record.

I would also hope, as I previously requested, that the committee will hold a hearing to inquire into Department of Defense's (DOD) and National Security Agency's (NSA) program relating to the surveillance of communications involving U.S. persons. NSA oversight is clearly a responsibility of ours along with the Intelligence and Judiciary Committees. I would also note that while we are spending a huge amount of manpower to subject the communications of apparently thousands of Americans to surveillance, known al Qaeda leaders, including one convicted of helping plan and organize the attack on the destroyer U.S.S. *Cole* in 2000, escaped last Friday for the second time from custody in a Yemen prison. I hope the administration will investigate this fiasco that resulted in the loss of known al Qaeda operatives from custody with the same vigor that it is surveilling Americans.

Mr. Chairman, we have much work to do in our review of the defense program for fiscal year 2007, and in carrying out our oversight responsibilities.

Through no fault of yours surely, we barely got our bill passed last year. You deserve, our troops deserve, the total cooperation of everybody involved to avoid a repeat of the unfortunate series of events, delays which plagued our 2006 bill.

I look forward to the testimony of our witnesses.

Chairman WARNER. Secretary Rumsfeld, delighted to have you.

STATEMENT OF HON. DONALD RUMSFELD, SECRETARY OF DEFENSE; ACCOMPANIED BY GEN. PETER PACE, USMC, CHAIRMAN, JOINT CHIEFS OF STAFF; AND GEN PETE SCHOOMAKER, USA, CHIEF OF STAFF, U.S. ARMY

Secretary RUMSFELD. Thank you. Mr. Chairman, Senator Levin, members of the committee: I would plan to make an abbreviated statement and then ask that my entire statement be placed in the record.

Chairman WARNER. Without objection, the full statement of all witnesses will be included in the record.

Secretary RUMSFELD. Mr. Chairman, this is the first appearance before your committee of General Pace in his new role as Chairman of the Joint Chiefs of Staff. Many of you have come to know Gen-

eral Pace in his earlier roles as the combatant commander for the Southern Command (SOUTHCOM) and then the Vice Chairman of the Joint Chiefs. General Pace understands well the decisions he helps to make will have a profound impact on the men and women in uniform, on the security of our country.

Chairman WARNER. He is a superb choice by the President and yourself, Mr. Secretary.

Secretary RUMSFELD. I thank you, sir. He is doing an outstanding job for our country.

Also with us today is not the comptroller of the Department, who is normally here for this hearing. Instead, because a number of the issues involve the Army, it struck me that it would be appropriate to have the Chief of Staff of the Army, General Pete Schoomaker, join us so that the members of the committee will have an opportunity to talk to him about the issues involving the National Guard, for example, the issues involving stress on the force, and the modernization of the force, the modularization process that is taking place, and the equipping of the force.

This is the sixth consecutive year I have appeared before your committee to discuss the Department's budget. We have met during times of war and at a time when war seemed unlikely. We have met during periods of national unity and in the midst of great controversy and debate over the course that our country has taken. In every instance, the American people expected us to put the defense of this Nation before political or parochial views and concerns. We have tried to do just that in making tough decisions in the Department, the kinds of decisions that we believe our troops merit.

We meet today again as the Nation is engaged in what will be a long struggle, a long war, a conflict that has put our military on a path of continuous change for the past 5 years, a conflict which also is having the effect of transforming the way our forces fight and defend our country.

Not long before Pearl Harbor was attacked on December 7, 1941, the United States had a standing army of some 200,000, putting it somewhere below Romania among the world's militaries. Just a few years earlier, American soldiers had been training with wooden rifles. Almost starting from scratch, America began to field huge armies and stand up armament industries and turned out massive fleets of ships, aircraft, tanks, and equipment of every kind.

When our country was attacked on September 11, we found ourselves in another global conflict, though one that had been started years earlier by our enemies. Fortunately, the process of rethinking and reconfiguring our military for such an eventuality was already somewhat underway. Within 3 months, the Taliban regime and its Al Qaeda guests were routed in a landlocked country several thousand miles away. Within 3 years, the military had removed a dangerous and brutal regime from Iraq and helped to stand up a new democratically elected government that is now fighting terrorists instead of harboring them. This would not have been possible without an historic change in the way the military is arranged and operates.

The urgency of these changes were made all too plain some 53 months ago on that mid-September morning by 19 men carrying tourist visas, boarding passes, and box cutters. Today the enemy,

though under constant pressure and on the defensive, still intends to bring its cult of murder and suicide to our shores and our cities and to those of our closest allies as well.

Last month, bin Laden warned of yet more attacks on America. He has said, "Let every person come forward to fight those Jews and Americans. Their killing is the most important duties and most pressing things."

His top lieutenant Zawahiri warned us last year. He said: "Oh Americans in New York and Washington, the losses you are having in Afghanistan and Iraq are only the losses of the initial clashes."

The enemy cannot win any conventional battles, so they challenge us through nontraditional, asymmetric means, using terror as their weapon of choice. Their goal is to break America's resolve through the deft use of propaganda and carefully plotted attacks to garner headlines. They are willing to employ every means, every lie, every atrocity, every available technology and means of communication, to achieve their ends.

In a few short years they have become experts at manipulating the global media to both inspire and intimidate. They have media committees and handbooks that advise operatives when and how to lie to generate coverage and commentary that damages antiterrorism efforts. They have multiple Web sites that display videos of bombings and beheadings that are shown around the world.

Their priority is to force us to abandon Iraq before the country is ready to defend itself, so they can turn it into a base of operation, as was Afghanistan before September 11. In a letter written by Zawahiri, he spelled out their strategy: "The first stage: expel the Americans from Iraq; the second stage: establish an Islamic authority; the third stage: extend the jihad." Have no doubt, should these fanatics obtain the weapons of mass destruction (WMD) they seek, the survival of our way of life would be at risk.

The enemy would like to define this war as a conflict between Islam and the West, but it is not. It is in fact a war within the Muslim world, between the overwhelming majority of moderates and a much smaller number of violent extremists. The vast majority of Muslims do not share the violent ideology of al Qaeda. They have children and families they care about. They hope for a better future for themselves and their children. They do not want the extremists to win and many are opposing them at every opportunity.

In Iraq, the marginalization of the terrorists on election day last December was due in large part to the growth in the size and the confidence and capability of the ISFs that the chairman mentioned, increasing from 120,000 to 220,000 over the course of last year. Already some 30 U.S. military bases have been returned to Iraqi control or closed altogether.

The 8th Army Iraqi Division recently took over a battle space about the size of Kentucky, the largest such area transferred to date. So far this division has seized nearly 5,000 weapons, confiscated more than 1,000 pounds of explosives, and detained more than 1,000 suspects.

Consider the progress from the enemy's perspective. The terrorists tried to stop the Afghan presidential and parliamentary elections and they failed. They tried to stop the elections for a provisional Iraqi government a year ago and they failed. They tried to

stop the drafting and approval of the new constitution and they failed. They tried to stop the elections last December for a permanent democratic government and they failed again.

Senator Levin mentioned the constitution of the Iraqis. It is not perfect, as he suggested. Nor was ours. Our Constitution still permitted slavery and women could not vote. So it strikes me that they have some work to do, just as we do, and I am encouraged that they will accomplish that work.

It is true that violence, corruption, and criminality continue to pose challenges in Iraq. The chairman mentioned corruption, suggesting it is on the increase. I do not know that it is on the increase. What is on the increase is our awareness of corruption because there are a number of inspectors general out there looking for corruption and finding it and reporting it and there is press of it. There has been historically corruption in that country and it is something that is so corrosive of democracy that I quite agree with you that it is critically important that it be attacked and that the new leadership in that country be measured against their commitment to attacking corruption.

The people of the United States have contributed and sacrificed a great deal helping to set Iraq on the path to democracy. Our finest young men and women in uniform launched a mission of liberation and our outstanding civilian and military leaders represent our Nation there today. In my view, it is clearly up to the Iraqis to seize hold of their country, to seize the opportunity, take responsibility for their own security and for their own affairs. This means assembling a government that respects the interests of all of the ethnic and religious groups in the country and, importantly, a government that is competent and a government that is not simply inclusive of all of those groups, but a government where the people involved, inclusive to be sure, commit to governing from the center and have a program that they agree to and then will go about implementing, that will move the country forward.

If America has the patience and the will to see this noble and necessary mission to completion—and we must—Iraq can emerge as a nation with a representative government, at peace with its neighbors, and one that can become an ally in the global war on terror.

In this long war, the task ahead, to continue to pursue the enemy, bolster our defenses, and enable our friends and allies to manage their own defense, requires us not only to meet today's threats, but to plan for tomorrow's uncertainties. At this time, for example, we are fighting a war against terrorist cells dispersed throughout the world, but we might one day find ourselves facing any number of other challenges as well: a chemical or biological attack in a major American city, a rogue missile launched by a hostile regime, a friendly government overthrown by Islamic radicals, loose nuclear weapons falling into unknown hands.

No nation, no matter how powerful, has the resources and capability to defend everywhere at every moment of the day or night against every conceivable type of technique. The only way to protect the American people, therefore, is to provide our military with as wide a range of options as possible, to focus on developing a range of capabilities, rather than preparing to any one threat.

The major initiatives that have been underway in the Department over the past 5 years have been undertaken with this in mind and they have been informed by operations in Afghanistan, Iraq, and other locations in the global war on terror. This approach, providing more options and developing a wider range of capability, has governed decisions made in developing both the President's budget and the QDR.

The word "transformation" has attracted a good deal of attention, but in many ways it is more accurate to see this process of continuous change as a shift in emphasis or a shift in weight from the practices and the assumptions of the past to the kinds of arrangements necessary for the 21st century. We have shifted, for example, from preparing to fight conventional wars, which we are still prepared to do, to a greater emphasis on fighting unconventional or irregular or asymmetric wars against terrorist cells or enemy guerrillas. To that end, we are more than doubling the budget since fiscal year 2001 for Special Operations Forces, expanding the size and scope, to include a new Marine component. The Special Operations Forces will be the largest they have been in many decades, representing roughly a 50 percent increase in personnel between 2001 and 2011. Increasing skill sets across the force in foreign language and cultural awareness and information technology; and assigning priority to post-conflict and stability operations in the military's overall training and doctrine.

One of the most important shifts underway is the role and importance of intelligence. The U.S. military has long excelled at engaging targets once they have been identified. In the future, we must be better in ascertaining where the enemy is going next, rather than simply where the enemy was. We have to be able to find the enemy and to fix the enemy, as well as to be able to finish. The United States military has enormous capacity to finish and insufficient capacity to find and fix. This means upgrading U.S. intelligence capabilities, both human and technological, and more effectively linking technology to operations in real time in the field.

We are also shifting from the typically American impulse to try to do everything ourselves to helping partners and allies develop their own capacity to better govern and defend themselves. This is particularly important in the global war on terror, where many of our Nation's most dangerous enemies exist within the borders of countries that we are not at war with. The shift is at the heart of the effort in Iraq and Afghanistan, as well as smaller scale train and equip missions in places like the Republic of Georgia and the Philippines.

There are many other important shifts in our posture and thinking: from a peacetime tempo to a wartime sense of urgency, from operating in an era of certainty to one of surprise, from avoiding risk to managing and balancing risks, from confronting other nation states to confronting decentralized terrorist networks, from garrison force defending fixed frontiers to expeditionary forces that can be deployed rapidly anywhere in the world, from having the bulk of personnel in the institutional military, the so-called "tail" to moving troops to the operational side that deploys and fights, the "teeth."

Our Nation's oldest military service is undergoing a remarkable transformation, from being a peacetime Army prepared for a major conventional war against another large military to a consistently more agile and deployable force capable of taking on and sustaining a full range of missions around the globe. General Schoomaker will be commenting in greater detail on the significant changes that are taking place.

I want to comment on several issues that have been raised about the health of the United States Army, however. Some ask, what is the current state of the Army? I would say that we have the most agile, most skilled, most expeditionary Army in history, and that any who use the word "broken" with respect to the Army are incorrect. I hope that the Chief of Staff of the Army will comment on that.

Today's Army has demonstrated its capability, not in garrisons or in training exercises or through statistical readiness formulas, but in the crucible of combat. Think about the many rapid, complex, and dangerous operations the Army now undertakes on a regular basis in Iraq, Afghanistan, and around the globe. They have made the extraordinary so routine that it is sometimes hard for people to notice just how much has changed and how good they have become at what they do.

I will leave the question of the Guard and the Reserve to the chief. The new concept of fully-funded, fully-manned, and fully-equipped Guard brigades, which is what he will explain, particularly the support units, is a development that State and local officials should welcome. By any measure, they will be a vast improvement over the undermanned and underequipped Guard and Reserve units of the past decade.

Mr. Chairman, senior leadership of the Department will be describing a process of continuous change in everything from the way we fight wars to the way we manage personnel, and one may well ask, where is this heading? Imagine a colonel proficient in Arabic, whose knowledge of city management equals his skill in marksmanship, a commander with the flexibility in tactics and options that President Roosevelt entrusted to General Eisenhower, a self-sustaining brigade that surges rapidly from the U.S. to a forward operating facility elsewhere in the world to work with newly-trained allies against terrorist cells that threaten a new democracy. As we imagine that soldier, the commander, the brigade, that facility, we have a notion of what America's transformed Armed Forces might well look like in the years ahead. Changes that will be essential to defeating a range of enemies, changes essential to keeping our Nation safe.

In discussing the budget and the QDR, the tendency will be to talk about numbers, numbers of troops, numbers of weapons, platforms, and the like. But I want to conclude by talking about a different metric that crossed my desk a few months ago. The number is 371. That is the total number of Silver Stars and Service Crosses that have been awarded since September 11 to our Nation's soldiers, sailors, airmen, and marines. Were it not for the exacting standards the military has for these awards, I suspect the numbers would be much higher, given the superb performance of our troops

in places like Fallujah, Ramadi, Kandahar, and other grueling battlefields in this global war on terror.

In a conversation about the war a few weeks ago, I was asked, where are the heroes? In prior wars everyone knew the heroes. Well, there are a great many and they are doing exactly what needs to be done to keep our country safe and to preserve freedom for our children and theirs. I think we could probably all do a better job, the media and the military alike, in telling their stories.

They are volunteers, every one of them, who could be doing something else, certainly something much easier, much safer, better compensated very likely. But they step forward each year to raise their hands and say: Send me. They do so fully aware of the risks and justifiably proud of the noble history they are making.

Mr. Chairman, members of the committee, I thank you for your support of the men and women who wear our country's uniform. I look forward to working with the committee. I am reminded of what President Eisenhower said once about another long struggle, the Cold War, comments that I believe have resonance today. President Eisenhower said, "We face a hostile ideology, global in scope, ruthless in purpose, and insidious in method. To meet it successfully, we must carry forward steadily, surely, and without complaint the burdens of a long and complex struggle, with liberty the stake."

Mr. Chairman, just as we did during the Cold War, what President Kennedy called "a long twilight struggle," we will persevere in the long war we face today and, with the help of Congress and the American people, provide our country with the security it needs and deserves in this new century.

Thank you.

[The prepared statement of Secretary Rumsfeld follows:]

PREPARED STATEMENT BY HON. DONALD H. RUMSFELD

Mr. Chairman, members of the committee: It is appropriate to note that this is my first appearance before this committee with General Pete Pace in his new role as Chairman of the Joint Chiefs of Staff (JCS). Many of you have come to know General Pace and to appreciate his abilities. He understands that the decisions he helps to make have a profound impact on our men and women in uniform and their families. He is doing a fine job for our country.

Also with us is the Chief of Staff of the Army, General Pete Schoomaker. Because so many of the key issues involve the Army, we thought it would be useful to have General Schoomaker here to join in responding to your questions.

This is the sixth consecutive year I've appeared before you to discuss the Department's budget. We've met during times of war, and at a time when war seemed unlikely. We've met during periods of national unity, and in the midst of great controversy and debate over the course recent wars have taken. In every instance, the American people expected us to put the defense of this nation before political or parochial concerns. We have tried to do just that in making the tough decisions that our troops merit and that history will remember.

We meet today—again—as a Nation engaged in what will be a "long war"—a conflict that has put our military on a path of near continuous change for the past 5 years. A conflict which also is having the effect of transforming the way our forces fight and defend the Nation.

Not long before Pearl Harbor was attacked on December 7, 1941, the United States had a standing army of about 200,000, putting us somewhere below Romania among the world's militaries. Just a few years earlier, American soldiers had been training with wooden rifles. Almost starting from scratch, America began to field huge armies and stand up an armaments industry that turned out massive fleets of ships, aircraft, tanks and equipment of every kind.

After Pearl Harbor, there were many setbacks and false starts—think of the losses at Kasserine Pass, the bloody landings at Tarawa and Anzio, and the frus-

trating inability of American tanks to be able to go one on one against German Panzers. Over the following several years, our Nation would learn some tough lessons and marshal the forces necessary to eventually triumph over two fascist empires.

When our country was attacked again on September 11, we found ourselves in another global conflict, though one that had been started years earlier by our enemies. Fortunately, the process of rethinking and reconfiguring our military for such an eventuality was already well underway. Within 3 months, the Taliban regime and its al Qaeda "guests" were routed in a landlocked country several thousand miles away. Within 3 years, our military had removed a dangerous and brutal regime from Iraq and helped to stand up a new democratically elected government that is now fighting terrorists instead of harboring them.

This would not have been possible without an historic change in the way our military is arranged and operates.

Consider that when I first assumed this post more than 30 years ago, America's military establishment was understandably organized, trained and equipped to deter the Soviet Union and to do battle against large armies, navies, and air forces.

When I returned to the Department in 2001, the Armed Forces—though smaller—were in many respects still pretty much organized the same way they were during the Cold War.

The President recognized this and charged the Department with making the changes necessary to adapt to the new circumstances and threats of an uncertain era—an environment where the greatest threats were less likely to come from large armies, navies and air forces, but instead from the evil designs of terrorists and rogue nations.

The urgency of these changes were made all too plain 53 months ago on that mid-September morning, by 19 men carrying visas, boarding passes, and box cutters.

Today, this enemy, though under constant pressure and on the defensive, still intends to bring its cult of murder and suicide to our shores, and our cities—and to those of our closest allies as well.

This "long war" is the central security issue of our time. The ensuing campaigns in Iraq, Afghanistan, and other theaters in the global war on terror have added new impetus and urgency to transformation efforts that were already underway in this Department.

This process of continuous change and adaptation is so critical because of the nature of the enemy we face, one that has left little doubt about its intentions.

Last month, Osama bin Laden warned of yet more attacks on America. He has said:

> "Let every person . . . come forward to fight those Jews and Americans . . . their killing is from the most important duties and most pressing things."

His top lieutenant, Zawahiri, warned us last year:

> "Oh, Americans, in New York and Washington and the losses you are having in Afghanistan and Iraq . . . are only the losses of the initial clashes."

The enemy cannot win any conventional battle, so they challenge us through non-traditional, or asymmetric means, using terror as their weapon of choice. Their goal is to break America's resolve through the deft use of propaganda and carefully plotted attacks that garner headlines.

They are willing to employ every means—every lie, every atrocity, and every available technology and means of communication—to achieve their aims. In a few short years they have become experts at manipulating the global media to both inspire and intimidate. They have media committees and handbooks that advise their operatives when and how to lie—in particular to claim torture when captured—in order to generate coverage and commentary that damages vigorous anti-terrorism efforts. They have multiple Web sites that display videos of bombings and beheadings that are shown around the world.

Their priority is to force us to abandon Iraq before that country is ready to defend itself so they can turn it into a base of operation—as was Afghanistan before September 11.

In a letter written by Zawahiri, he spelled out their strategy:

> "The first stage: expel the Americans from Iraq. The second stage: establish an Islamic authority. The third stage: extend the jihad."

Have no doubt: should these fanatics obtain the weapons of mass destruction they actively seek, the survival of our free way of life would be at risk.

The enemy would like to define this war as a conflict between Islam and the west, but it is not. It is, in fact, a war within the Muslim world between the overwhelming majority of moderates and a much smaller number of violent extremists. The vast

majority of Muslims do not share the violent ideology of al Qaeda. They have children and families they care about. They hope for a better future for themselves and their countries. They do not want the extremists to win. And many are opposing them at every opportunity.

IRAQ

We see this dynamic at work in Iraq. On December 15, it was the brave and decent people of Iraq—Shia, Kurds, Sunnis, and others—who seized the headlines and captured the attention and admiration of the world. Some 12 million Iraqis—about 70 percent of eligible voters—and thousands of candidates came together in a remarkably peaceful and orderly election. The jihadists, Baathist holdouts and criminals who dominate the daily news from Iraq were unable to halt yet another important milestone in that country's remarkable transformation.

Consider that compared to the successful provisional elections held last January, nearly 4 million more Iraqis voted and there were about 80 percent fewer violent attacks. And Sunnis, who had previously boycotted the political process, participated in large numbers, encouraged by their leaders not to make the same mistake again. In the Sunni majority Anbar province, turnout rose from 2 percent in January to 86 percent of registered voters in December.

The marginalization of the terrorists on election day last December was due in large part to the growth in the size, confidence and capability of the Iraqi security forces—increasing from some 120,000 to 220,000 over the course of the year. Already, some 30 U.S. military bases have either been returned to Iraqi control or closed altogether. The 8th Iraqi Army Division recently assumed the operational lead in battle space the size of Kentucky, the largest such area transferred to date. So far, this division has seized nearly 5,000 weapons, confiscated more than 1,000 pounds of explosives and detained more than 1,000 suspects.

Consider the progress from the enemy's perspective:

- They tried to stop the elections for a provisional Iraqi government a year ago—and they failed;
- They tried to stop the drafting and approval of a new Constitution—and they failed; and
- They tried to stop elections last December for a permanent democratic government—and they failed again.

Because of the progress on the security, political, and economic fronts, U.S. military commanders recommended, and the President has directed, that the United States reduce its combat strength in Iraq by about two brigades, from 17 to 15. At the same time, the U.S military will be shifting more to a supporting role, as Iraqi forces take even more of a leading role in securing their own country.

However, as the President has stated, force level decisions will be condition based. They have been and will continue to be determined by an assessment of Iraq's progress on the political, economic, and security fronts.

They will include such factors as:

- The capability and effectiveness of the Iraqi security forces;
- The quality and competence of Iraqi leadership and its organization, particularly in the various ministries; and
- The threat level, which can be affected by the behavior of neighbors like Syria and Iran, who have been notably unhelpful.

Shortly, the Department will provide to Congress a report, Measuring Stability and Security in Iraq, that will describe the progress being made in these areas in more detail.

It is true that violence, corruption, and criminality continue to pose challenges in Iraq. Each has been a part of the fabric of that country for decades and they are unlikely to disappear overnight. But Iraq's liberation and the subsequent political progress have ignited what may turn out to be a momentous shift in the region. One prominent Lebanese politician—and a periodic critic of the U.S.—has called Iraq possibly the "start of a new Arab world" and has compared the progress there to the fall of the Berlin Wall.

The people of the United States have contributed and sacrificed a great deal helping to set Iraq on the path to democracy. Our finest young men and women in uniform launched on a mission of liberation and our most outstanding civilian and military leaders represent our Nation there today.

It is now up to the Iraqis to seize the opportunity and take more responsibility for their own security and their own affairs. This means assembling a government that respects the interests of all the ethnic and religious groups in the country and,

importantly, a competent team with a program to govern from the center, not from the edges.

A word on what has often been referred to as "nation building." The fact of the matter is that only the Iraqi people can build their nation. All that outsiders can do is help to set the conditions that will give them the opportunity to do so. That has been our goal over the past 3 years. But it cannot be an effort without end.

Our objective from the start has been not to create a dependency, but rather to encourage Iraqi independence and capacity by transitioning increasing responsibility to Iraqis—over time—to have them take charge of their security and governance of their country.

If America has the patience and the will to see this noble and necessary mission to completion—and we must—Iraq can emerge as a nation with a representative government, at peace with its neighbors, and one that can become an ally in the global war on terror.

This would be a truly amazing achievement—one that members of our Armed Forces, their families, and future generations of Americans will be able to look back on, decades from now, with great pride.

PREPARING FOR THE UNEXPECTED

In this "long war," the task ahead—to continue to pursue the enemy, bolster our defenses, and enable our friends and allies to manage their own defense—requires us to not only meet today's threats, but to plan for tomorrow's uncertainties.

At this time, for example, we are fighting a war against terrorist cells dispersed throughout the world. But we might one day find ourselves facing any of a number of other scenarios as well:

- An anthrax attack in a major American city;
- A rogue missile launched by a hostile regime;
- A friendly government overthrown by Islamic radicals; or
- Loose nuclear weapons falling into unknown hands.

No nation, no matter how powerful, has the resources or capability to defend everywhere, at every time, against every conceivable type of attack. The only way to protect the American people, therefore, is to provide our military with as wide a range of options as possible—to focus on developing a range of capabilities, rather than preparing to confront any one particular threat.

The way to keep one's balance in a time of war is to consider worst-case scenarios, develop a wide range of tactics, and then plan on being surprised.

The major initiatives that have been underway in the Department over the past 5 years have been undertaken with this in mind. They have been informed by operations in Afghanistan, Iraq, and other locations in the global war on terror.

In Iraq, the lessons learned process began on day one. An embedded team of observers at Central Command, along with strategists in the United States, analyzed successes and setbacks each day, with an eye toward the way we train troops, equip forces, and fight wars in the future—everything from body armor to business practices. Consider one example in an area that has been of concern: up-armored High Utility Mobile Mechanized Vehicles (HMMWVs). In 2001, the entire U.S. Army had 450 up-armored HMMWVs. Today, it has over 11,000.

The concept of adapting to confront a wider range of threats also informed recent changes to U.S. global posture. We surveyed where U.S. forces were stationed abroad and noted that they were more or less where they had been at the height of the Cold War. So we resolved to re-position them for diffuse global threats. Instead of keeping armored divisions garrisoned in Germany to protect against a Soviet invasion, for example, we are moving many troops to bases in the U.S. and establishing more flexible—and less intrusive—forward operating sites that can assist in moving our forces closer to potential future trouble spots.

The latest Base Realignment and Closure round—the largest in the Department's history—is another example. As with the global posture decisions, military and civilian experts made a thorough assessment of DOD's domestic base structure to determine how the Department might eliminate unnecessary duplication and bring the various Services closer together. This in turn should save the taxpayers tens of billions of dollars in future decades—money that can be directed to fighting the war and taking care of the troops and their families.

This approach—providing more options and developing a wider range of capabilities—has governed decisions made in developing both the President's budget and the Quadrennial Defense Review (QDR).

The QDR is a broad assessment of what the Department is doing to confront a wide range of threats and offers guideposts for the changes necessary in the decades ahead.

Military and civilian strategists have devoted thousands of hours to:

- War gaming worst-case scenarios;
- Examining new technologies;
- Consulting with military commanders in the field; and
- Applying the lessons learned from operations in Afghanistan and Iraq, disaster relief after Hurricanes Rita and Katrina, and the rescue and humanitarian efforts in the Southeast Asia tsunami and the Pakistan earthquake.

The QDR is not a budget document, but it has benefited from a change in legislation that required this report and the budget to be submitted at the same time. This permitted some "leading edge" investments suggested in the QDR to be included in the fiscal year 2007 budget, with additional changes to be reflected in next year's budget request.

At $439.3 billion, the President's Department of Defense budget for fiscal year 2007 represents a 7-percent increase from what was enacted last year, and continues the necessary growth begun in 2001. This is a great deal of money, though at about 3.7 percent of gross domestic product (GDP), it represents a much smaller fraction of America's gross domestic product then when I entered Congress during the Kennedy administration. As important as the numbers, are the choices we make and the priorities the President has set to fulfill his oath to protect this and future generations of Americans.

SHIFTING OUR WEIGHT

The word "transformation" has attracted a lot of attention, but in many ways it is more accurate to see this process of continuous analysis and change as a shift of emphasis, or weight, from the practices and assumptions of the past.

We have shifted, for example, from preparing to fight conventional wars—which we are still prepared to do—to a greater emphasis on fighting unconventional, or irregular, or asymmetric, wars against terrorist cells or enemy guerrillas. To that end, we are:

- More than doubling the budget since fiscal year 2001 for Special Operations Forces and expanding its size and scope to include a new Marine Corps component. The Special Operations Forces will be the largest they have been in over 30 years, representing a 50-percent increase in personnel from 2001 to 2011;
- Increasing skill sets across the force in foreign languages, cultural awareness and information technology; and
- Assigning priority to post-conflict and stability operations in the military's overall training and doctrine.

We have also shifted from simply de-conflicting the branches of the Armed Services—essentially keeping them out of each others way on the battlefield—to more fully integrating the Services in ways that complement and leverage each Service's strengths.

Consider the opening phase of Operation Enduring Freedom (OEF)—where Special Forces linked up with CIA operatives and local fighters, called in air strikes from Navy jets and supply drops from Air Force cargo planes. This jointness continued and increased not just in Iraq, but in virtually everything the Department does—whether training, logistics, and administration—at home and abroad.

Not just our military, but our government, is shifting from reacting to crises—as has been the case for much of our country's history—to preventive action to keep problems from becoming crises, and crises from becoming conflicts. For example, the military has undertaken security and development missions in places such as the Horn of Africa to try to keep them from becoming a new haven for terrorist activity—such as Afghanistan became during the 1990s.

One of the most important shifts underway is the role and importance of intelligence. The U.S. military has long excelled at engaging targets once they have been identified. In the future we must better ascertain where the enemy is going next, rather than where the enemy was—to be able to "find" and "fix," as well as be able to "finish." This means upgrading U.S. intelligence capabilities—both human and technological—and more effectively linking intelligence to operations in real time in the field. We are working closely with the Director of the Office of National Intelligence to ensure that we get the maximum integration from our National and military intelligence capabilities.

We are also shifting from the typically American impulse to try to do everything ourselves to helping partners and allies develop their own capacity to better govern and defend themselves. This is particularly important in a global war on terror

where many of our Nation's most dangerous enemies exist within the borders of countries with whom we are not at war. This shift is at the heart of the effort in Iraq and Afghanistan, as well as smaller-scale train and equip missions in places like the Republic of Georgia and The Philippines.

It is abundantly clear that these kinds of complex and unconventional conflicts cannot be the task of any one country, or any one department. Within the executive branch, we are seeking ways to work more closely and seamlessly with partners in the Departments of State, Justice, Treasury, Homeland Security (DHS), and the Central Intelligence Agency (CIA). This means overcoming the legacy of industrial age practices and habits inherited from the Cold War. The Department will seek new, and more flexible authorities in budget, finance, acquisition, and personnel.

There are many other important shifts in our posture and thinking:

- From a peacetime tempo to a wartime sense of urgency;
- From operating in an era of certainty to one of surprise;
- From avoiding risk to managing and balancing risk;
- From confronting other nation states to confronting decentralized terrorists networks;
- From garrison forces defending fixed frontiers to expeditionary forces that can be deployed anywhere;
- From having the bulk of personnel in the institutional military—the so-called "tail"—to moving troops to the operational side that deploys and fights—the "teeth"; and
- From separating people and information in vertical "stove pipes" to sharing data and coordinating operations across organizations, military services, and agencies.

Another thing that has become clear in recent years is that raw numbers and mass do not necessarily equate with capability. Technological advances, including dramatic improvements in satellite communications, information technology, and precision weaponry have allowed our military to generate considerably more combat capability with the same or, in some cases, fewer numbers of people and weapons systems. These advances in the ability to deliver precision firepower quickly and over great distances, have major implications for the way we think about deterrence and defense.

NAVY

Consider that until recently three out of every four ships in the U.S. Navy were not deployable at any given moment because of long maintenance and training cycles—the product of a peacetime culture and mindset.

Today, the percentage of the fleet routinely at sea has increased by more than 50 percent. The Navy can rapidly deploy six Carrier Strike Groups within 30 days and surge up to two additional Groups within 90 days.

By applying advanced research and development, innovative maintenance and training, and a variety of cost savings initiatives, Navy leaders have changed the way our fleet operates and deploys.

The Navy has increased its capacity and readiness in a variety of ways, including:

- Swapping crews by flying them to ships, rather than bringing ships all the way back home and then all the way back to the theater;
- Investing in more spare parts to significantly reduce maintenance down time; and
- Keeping manning at high readiness levels throughout the fleet at all times.

As a result, our ships and Sailors are better-equipped, better trained and more capable—and are able to strike more targets with precision in far less time. As late as 1997, the airplanes aboard a single carrier could engage about 200 targets per day. In the opening phase of Operation Iraqi Freedom (OIF), this capability rose to more than 600 targets per day.

AIR FORCE

We see a similar dynamic at work in the Air Force. Today, one B–2 bomber on one sortie can drop 80 different satellite guided bombs on 80 different target points. During Operation Desert Storm this would have required multiple aircraft on multiple missions. Despite the fact that the first Gulf War was widely associated with the video footage of "smart bombs" hitting their targets, over 90 percent of the munitions dropped in that war were conventional "dumb" bombs.

It is important to note, however, that the Air Force fleet is aging. It is not uncommon for pilots today to find themselves flying planes that are older then they are.

An aging fleet means increased maintenance costs and flight restrictions. It is important that we recapitalize the fleet to retain America's air dominance and strategic flexibility.

ARMY

Our Nation's oldest military service is undergoing a remarkable transformation—from being a peacetime Army preparing for a major conventional war against another large military, to a consistently more agile and deployable force capable of taking on—and sustaining—a full range of missions around the globe.

These operations have placed demands on men and women wearing the Army uniform and their families. Despite having over 1 million soldiers in the Army's active and Reserve components—and over 2.4 million in the military overall—the deployments to Afghanistan and Iraq of a relatively small portion of that total—currently less than 14 percent of the Army and less than 8 percent of the total military—have produced stress on selected parts of the force.

The Army leadership under Secretary Francis Harvey and Army Chief of Staff General Pete Schoomaker took a hard look at this and identified that the real issue was not the total number of people in uniform, but rather the outdated way the force was organized. In particular, there needed to be an increase in the size of what's called "Operational Army"—the available pool of soldiers and deployable units with the skills and capabilities required for today's missions.

The centerpiece of the Army reorganization plan is a shift away from a structure based on large divisions—the "building block" of the Army since World War I—into an Active and Reserve Force configured into 70 more capable combat brigades and more than 200 support brigades—all fully manned and fully equipped. The "modular" brigade combat teams can deploy quickly with enough firepower, logistics, and administrative support to operate on their own. They will be modernized with the Future Combat Systems (FCS)—a network of weapons and sensors. The result of these changes is that a relatively small increase in the size of the Army is producing a dramatic increase—about 30 percent—in the amount of its deployable combat power.

With this restructuring, the Army should be able to maintain, when necessary, a force generation cycle of 2 years at home station for every year an active duty combat brigade is available to deploy abroad. For the Reserve component, the deployment ratio should be 5 years at home to one year deployed if needed.

The Army is also in the process of realigning some 44,000 personnel spaces across the active, Guard, and Reserve elements to have more troops with the skill sets in highest demand. For example, Reserve and National Guard soldiers who are infantry, military police, civil affairs, and engineers have been in high demand during the global war on terror—while those in field artillery, air defense and armor units less so. In addition, 12,000 soldiers formerly assigned to jobs—mostly administrative and facilities support—that could be performed by civilians—are being brought into the operational part of the force.

These "rebalancing" steps will produce a 50-percent increase in infantry capabilities, with similar increases in military police, civil affairs, intelligence, and other critical skills. By enlarging the pool of available people with the needed skills and training, individual soldiers can expect to deploy and mobilize less often, for shorter periods of time, and with more notice and predictability.

Changes to the U.S. global force posture will also bring home 170,000 active duty troops and families home to bases in the United States. Therefore, instead of being rotated every 2 to 3 years to new postings, soldiers will be able to remain with units for up to 7 years. In addition to building greater unit cohesion, this system should greatly reduce the strain on families from moving households and changing schools.

These changes are already resulting in a larger "Operational Army"—by some 40,000 soldiers by the end of the next fiscal year —with more cohesive and combat-ready formations, a more predictable career path for soldiers and their families, and more troops available with the skills needed to fight the challenges we can expect to face.

I want to comment on several issues that have been raised about the health of the United States Army.

First, some ask, what is the current state of the U.S. Army? We have the most agile, most skilled, and most expeditionary Army in history. Those who use words like "broken army" are wrong.

Consider:

- A "broken Army" would not be exceeding, by large margins, the highest re-enlistment goals they've had for 5 years. The 3rd Infantry Division, for

example, which recently returned from its second Iraq deployment in 3 years, met over 130 percent of its retention target;

• A "broken" Army would not have met its recruiting goals the last 8 months despite the strong U.S. job market and the known—and well publicized—dangers and sacrifices of military life. In fact, the number of recruits who signed an enlistment contract almost 25 percent higher than it was at the same point last year.

General Schoomaker points out that he remembers what a "broken" Army looks like when he was a young officer. The Vietnam War had just ended, the All-Volunteer Force was in its infancy, and though we had many fine soldiers and officers, the force was also troubled by multiple problems. The difference between that Army and the professional and motivated force we have today could not be more dramatic.

Many of the criticisms and dire predictions about the Army have come from people who may be well-intentioned, but who nonetheless are proceeding from outdated and inaccurate information.

Today's Army has demonstrated its capability not in garrisons, or in training exercises, or through statistical readiness formulas, but in the crucible of combat.

Think about the many rapid, complex, and dangerous operations that the Army now undertakes on a regular basis in Iraq, Afghanistan and around the globe. They have made the extraordinary so routine that it is sometimes hard for people to notice just how much has changed, and just how good they have become.

A second question that is being asked is: Is the Army "cutting" the size of the Army Guard and Reserve?

The answer is no. The Army is not cutting the Army National Guard or Reserves. That rumor is false.

At the present time the Army National Guard is authorized by law to reach 350,000 soldiers. It is currently manned at approximately 333,000. The Army Reserve is authorized to reach 205,000 troops. It currently has 188,000.

The Army's plan is to fund the Guard and Reserve at their actual current troop strength. In addition, the Department is prepared to increase funding should the Army National Guard or the Army Reserves actually grow past their current levels. Each component will retain the same number of total brigades—106 for the Guard, 58 for the Reserves—as they have today. The reorganization underway will ultimately result in a force that is more agile, fully manned, fully equipped, and with capabilities that will greatly aid its homeland security missions.

A little background on what exactly is underway. In the past, the Army Reserve and National Guard served as a strategic Reserve, to be called on once in a generation or a lifetime for a major war. As a result, they received relatively low priority for funding. Many units may have existed "on paper" but they were not fully manned and lacked sufficient training and equipment.

Today, the Army National Guard and the Army Reserve are shifting to an operational Reserve, to be able to play a key role in homeland security, as required, as well as in support of the global war on terror.

America has come to rely much more on the Army's Reserve components than before. In keeping with these new requirements, the Army, over the past 2 years, has initiated a series of changes—and made additional proposals in this budget—to the way its Reserve components are arranged, manned, and operated—changes that arguably should have started a decade ago.

This shift has also been reflected in the Department's budget priorities. This administration has increased spending on the Guard and Reserves by over 50 percent since 2001, and the Army proposes spending $21 billion on new equipment and modernization for the Guard through fiscal year 2011.

Some changes have had a positive impact already, as demands put on the Guard and Reserve have actually decreased in recent months. Some 160,000 Reserve component soldiers were mobilized and deployed this time last year versus roughly 110,000 today.

Some ask why these changes are being made now, at a time of war?

Well, change is hard at any time, but the changes are essential because we are at war. Indeed, I would suggest that the recent demands on the force—and the threats our country faces in the global war on terror—have made these long overdue changes even more urgently needed. This is a historic opportunity to get it right.

But how, some are asking, will this affect the Guard's ability to respond to an emergency or natural disaster at home?

The Army's proposal does not change the total number of brigades in the Guard, but it does adjust the mix of units in a way that better suits the Guard's unique roles and responsibilities. Specifically, six combat brigades are being converted to six support brigades. These support units include assets such as military police, en-

gineers, and civil affairs—specialties that are increasingly necessary for homeland defense or to respond to natural disasters.

The new concept of fully funded, fully manned, and fully equipped Guard brigades—particularly support units—is a development that state and local officials should welcome. By any measure, they will be a vast improvement over the undermanned, and under-equipped Guard and Reserve units of the past decade.

Guard Equipment and Readiness

Some also ask, if there will be a cut in support for equipment for the National Guard and why the Guard is leaving some of the equipment in Iraq, rather than returning it immediately to units here at home.

First, it is important to remember that the challenge of properly equipping the Army did not start with this war. The Army leadership estimates that they began the global war on terror in 2001 with a $56 billion shortfall across all components of the Army—shortages were particularly acute in the Reserves components.

In years past, there was uneven quality and readiness between different states and different units across the Guard. This was particularly the case with combat brigades. Of the 34 combat brigades, only 15—less than half—were labeled "enhanced," meaning that they were supposed to receive the highest priority for training and resources.

But because of these inherited deficiencies, the Army had to "cross level" people and equipment across the Guard to make deploying units whole—including the so-called "enhanced" brigades.

Once a deployment is completed, it makes little sense to expend enormous resources to move repeatedly heavy equipment back and forth from the Middle East. This is particularly the case for items like up-armored HMMWVs, tanks, or Bradley Fighting Vehicles that have relatively little use at home, but are needed in theater.

Significantly, these deployments and redeployments offer a needed opportunity to reset the Guard units with the skills and equipment the Army will need in the future, instead of simply resetting them with what they had had in the past.

Under the Army's proposal, instead of having 15 Guard combat brigades considered, but not really "enhanced," there will be 28 brigade combat teams that will, in fact, for the first time, be fully manned, trained, and equipped—just like their active duty counterparts.

The process of fully transforming the Army—active and Reserve component alike—will not be all fixed or finished in this or the next fiscal year. It is a process that involves resetting dozens of units and adjusting the specialties and assignments of tens of thousands of soldiers. It is an enormous task and a tough challenge, one that General Schoomaker has compared to tuning an engine while the car is moving.

At any given time a close observer could drop a plumb line in the process and identify any number of deficiencies. That is to be expected.

But as one considers the changes taking place in the Army, it is important to view what is happening not in terms of the immediate moment, but where things are heading—and the U.S. Army is heading toward a properly funded Guard and Reserve fully capable of protecting America at home and abroad.

That is something every American concerned about our Nation's security, as well as the well being of our "citizen soldiers," should welcome and support.

Army End Strength

Nonetheless, many continue to ask, given the pace of deployments and the stress of the force, shouldn't the size of the active Army be increased?

The answer is that we have already increased the size of the active Army by some 12,000, under the emergency authorities granted by Congress, with plans to go up by a total of 30,000 if required. More important, we have increased the size of the warfighting Army—the teeth—and reduced the size of the institutional Army—the tail—in ways that do not require an increase in statutory end strength.

At issue is whether there should be a permanent increase in the statutory end strength—meaning that the U.S. Army would be required by law to maintain tens of thousands of additional troops on the payrolls—regardless of whether the Army leadership thinks that is necessary or desirable—and in the face of the enormous cost that that would build into future budgets at the expense of needed procurement and quality of life for the troops. We do not think that necessary or wise at this time.

PROTECTING THE FORCE

Protecting our troops in combat theaters continues to be the top priority of this Department. We face a thinking and adaptive enemy. The military is aggressively

developing new equipment, technologies and procedures to counter the threats from Improved Explosive Devices and other methods employed by the terrorists to attack coalition troops.

Last year, over 4,400 new, Level 1, factory-built, up-armored HMMWVs, and more than 16,000 add-on armor kits were fielded by the Army in Iraq and Afghanistan.

Almost 700,000 sets of interceptor body armor have been fielded since the beginning of the war, and over 170,000 sets of additional protection for shoulder and upper-arm areas have also been sent to the combat theaters in Iraq and Afghanistan. This protection is the best available in the world, and has saved a great many lives. The Army's goal is 201,000—one for every servicemember and civilian in the U.S Central Command (CENTCOM) area of operations.

HEALTH COSTS

The pattern of imposing new programs and costs on the military—without considering the unintended consequences—is most evident in the area of health care. We all are on notice of this growing problem that threatens the Department's ability to fund its other priorities, and therefore future U.S. military capabilities.

As with the changes underway in the Army, there has been a good deal of confusion and misstatement about what the Department is proposing in regard to health care.

Let me be clear: the United States military provides—and will continue to provide—the best possible care for those who have served our country. But the reality is that the way the current health care system is funded is not sustainable. Mainly as a result of benefits added by Congress, often without hearings, the Department's health care costs have almost doubled over the past 5 years—from $19 billion in 2001 to over $37 billion in fiscal year 2006 ($39 billion in fiscal year 2007). This year's proposed shipbuilding budget, by comparison, is $11 billion.

Using a conservative projection, these health care costs will likely reach $64 billion in fiscal year 2015, an estimated 12 percent of the total Department budget projected for that year. By comparison, health costs were 4.5 percent of the Department's budget back in 1990.

Because the health coverage offered by the Department is so comprehensive, many private employers are dropping their employer coverage for military retirees and directing their employees to rely on TRICARE instead. In fact, several State governments have passed rules that encourage their employees who are military retirees to use TRICARE and not their state health care systems. In effect, the military is increasingly subsidizing the health care costs of private corporations, organizations, and State and local governments. This is a classic example of good intentions leading to unintended, unwelcome, and expensive consequences. Today nearly 60 percent of the Department's inpatient and outpatient expenditures are for retirees and their families, and this percentage is projected to keep rising.

To place the health benefit program on a sound fiscal basis for the long term, the Department is proposing to rebalance the share of costs between retired individuals and the government to approach the levels TRICARE had when the program was initiated by Congress in 1995. Further, we propose that cost shares be indexed so they will be adjusted annually for inflation.

To provide context, in 1995, beneficiaries paid 27 percent of their total health care costs. Today, because there has been no change in TRICARE annual premiums for 11 years, beneficiaries currently pay not 27 percent, but just 12 percent of costs. The proposed plan would ask retirees to pay somewhat more in premiums and for certain co-payments. However, even after adjustments, TRICARE would still be more generous than the best private employer plans. For a single retired junior enlisted servicemember, the average price increase for TRICARE Prime enrollment fees would equate to 26 cents per day by fiscal year 2008, according to one study. For a retired officer's family the change would amount to $2.58 per day.

We also want to explore for new, innovative benefit alternatives such as health savings accounts, which are currently available to other government employees.

A few points should be underscored. Active duty troops and their families—people who rely on military hospitals as their sole provider of health care—will not be affected, except for minimal changes to pharmacy co-payments for family members. Those retirees over age 65 in TRICARE for life are not affected, except for minimal changes to pharmacy co-payments. No one will be forced to leave TRICARE.

The plan being proposed, though undeniably necessary and offered with the best interests of the men and women in uniform in mind, has led to predictable concern. But it is worth repeating: the way the current system is funded is simply not sustainable. Indeed, if current trends continue, health funding pressures will soon cut into budgets for training, equipment, and a range of other investments vital to win-

ning the war on terror and maintaining the quality of life for our troops and their families.

The Chairman, and the Joint Chiefs of Staff and I, unanimously urge Congress to join in taking the necessary steps to ensure that we sustain a superior health benefit for the Armed Forces, their families, and all retirees, and to ensure needed future U.S. military capability and a strong national defense.

HELP FOR WOUNDED TROOPS

One program underway is the newly created support center for severely injured troops and their families. This center augments efforts already underway in the service branches, and has helped thousands of people during a difficult period in their lives.

The Department remains committed to helping those who have risked their lives for their country in every way possible. I never fail to come away enormously impressed and inspired when I meet with the wounded and their courageous families. They are truly remarkable examples of American patriotism and resilience.

IMAGINING THE FUTURE

Mr. Chairman, the leadership of the Department will be describing a process of continuous change in everything from the way we fight wars to the way we manage personnel. Where, one might ask, is this heading?

Imagine:

- A colonel proficient in Arabic whose knowledge of city management equals his skills in marksmanship;
- A commander with the flexibility in tactics and options that President Roosevelt entrusted to General Eisenhower;
- A self-sustaining brigade that surges rapidly from the U.S. to a forward operating facility in Central Asia to work with newly trained allies against terrorist cells that threaten a new democracy;
- A sea-based combat ship with the ability to insert and change its combat payload depending on its mission.

As we imagine that soldier, that commander, that brigade, that facility, and that ship—we have a notion of what America's transformed Armed forces might well look like in the years ahead. Changes that will be essential to defeating a range of enemies—changes essential to keeping our Nation safe.

In discussing the budget and the QDR, the tendency will be to talk about a lot of numbers—numbers of troops, numbers of weapons platforms, and the like.

But I want to conclude by talking about a different metric that crossed my desk in December. That number is 371—the total number of Silver Stars and Service Crosses that had been awarded since September 11 to our Nation's soldiers, sailors, airmen, and marines.

Were it not for the exacting standards the military has for these awards, I suspect the numbers would be much higher, given the superb performance of our troops in places like Fallujah, Ramadi, Kandahar, and other grueling battlefields in the global war on terror.

In a conversation about the war a few weeks ago, I was asked "Where are the heroes?" There are a great many heroes. They are doing exactly what needs to be done to keep our country safe and to preserve freedom for our children and their children. We all could do a better job—media and military alike—in telling their stories.

Let me briefly highlight just one. Suran Sar was born in Cambodia and came to this country at the age of 15, after most of his family was killed by the Khmer Rouge. He became an American citizen and later volunteered to become an American soldier. He fought in the first Gulf War, rose to the rank of Master Sergeant in the Special Forces, and was deployed to Afghanistan after September 11.

On March 2, 2005, his team of 12 landed in their Black Hawk helicopters to inspect some suspicious-looking buildings on a snow capped mountain. They immediately came under fire, and Sergeant Sar chased after one of the gunman. He was hit in the head by an enemy bullet, but kept fighting to help the rest of his team that was still pinned down. They ultimately routed the terrorists, seized several weapons, and secured the site.

For his actions on that day he received the Silver Star, the Army's third highest medal for bravery. He would later tell a reporter:

> "I kind of feel ashamed to accept such a prestigious award because I feel all I'm doing is something that I love to do . . . fighting to serve my country and protecting my guys."

Sergeant Sar is but one of thousands of remarkable people who make up our country's Armed Forces. Some of their accomplishments are known beyond the immediate circle of family and comrades, but most are not.

They are volunteers who could be doing something much easier, safer, and better compensated, but they step forward each year to raise their hand and say, "Send me." They do so fully aware of the risks and are justifiably proud of the noble history they are making.

They have done everything asked of them—and have done it with resilience and courage. We owe it to them—and the country they have sworn to protect—to provide the resources, the capabilities and the innovative institutional culture that will not only win today's wars, but also best position them to win America's wars in the decades ahead.

Thank you for your support of the men and women who wear our Nation's uniform. I look forward to working with this committee as our Nation engages in a "long war." I am reminded of what President Eisenhower once said about another long struggle—the Cold War—comments that seem to have resonance today.

> "We face a hostile ideology—global in scope . . . ruthless in purpose, and insidious in method . . . to meet it successfully we must carry forward steadily, surely, and without complaint the burdens of a prolonged and complex struggle—with liberty the stake."

Mr. Chairman, just as we did during the Cold War—what President Kennedy called a "long twilight struggle"—we will persevere in this "long war" we face today. With the help of Congress, we will provide our country with the security it needs and deserves in this new century.

Chairman WARNER. Thank you, Mr. Secretary, and I join you in saying the quotes of both of those two distinguished Presidents describe the situation that our President is facing up to in every way.

Chairman Pace, we welcome you.

General PACE. Thank you, Mr. Chairman, Senator Levin, members of the committee. It is my great honor and privilege to sit before you today representing the men and women of your Armed Forces and on their behalf to thank you for your strong bipartisan support of all of us who have the honor and privilege to defend this Nation, also to thank them, the men and women who serve in our Armed Forces, for all that they are doing every day to protect us, and especially to thank their families, who serve this country as well as anyone who has ever served in uniform. They wait at home patiently saying their prayers, hoping that their loved one is not injured, and we owe our families a great debt of gratitude.

Over the past year we have participated, the senior military leadership and senior civilian leadership of the Department, in what I think is an unprecedented number of meetings, hours and hours, hundreds and thousands of hours of meeting together, to produce the budget, to produce the QDR, to look at the national military strategy. Based on all those hours of deliberation and analysis, I am very proud and confident to tell you that your military is fully prepared to execute all of the missions in the national military strategy.

I would also tell you that I believe that the budget as presented allows us to prosecute the war on terror, to accelerate transformation, to enhance our joint warfighting, and to increase the quality of life of our servicemembers and their families.

We are involved in a long war, against an enemy that is ruthless, adaptive, and patient, and they are trying to destroy the resolve of the American people through gradual attrition. Iraq is certainly the central battle, the center of gravity, in this war on terrorism, and we have had great progress there and some challenges, as the Secretary has already outlined.

We are fighting this long war for the first time with an All-Volunteer Force—2.4 million Americans, Active, Guard, and Reserve, protecting 300 million Americans. It is important, as you do frequently, not only through the way that you support us in legislation, but in your visits to the field, in your visits to the hospitals, we thank you for the way that you tell your Armed Forces how important their service is to this country.

Sustaining our All-Volunteer Force will be critical in the years ahead. One of the key elements of sustaining that force will be to sustain the health care system. We have a superb health care system that you have provided for us. Over the past 5 years, the cost of that health care system to the Nation has doubled. In 2001 it was $19 billion. In 2006 it will be just over $37 billion, and on its current trend, within the time frame between now and 2015 it will be about $64 billion per year.

There are multiple reasons for this. First, is the simple fact of the increase in the cost of health care. Second, is that private employers are telling their retired military employees to use the military health care system, allowing those private employers to not have to pay the premiums that they would otherwise have to pay for that insurance. We also have some State and local governments doing the same thing, encouraging their military retirees to use the TRICARE system as opposed to the system provided by State and local government.

Another factor is the fact that since 1995 the premiums have not changed for our military forces. The legislation that you all passed in 1995 provided and has continued to provide superior health care at, in 1995, very reasonable cost to the individual member. As part of our deliberations this year at every level in the Department, to include multiple times in discussions with the Joint Chiefs, the Joint Chiefs have unanimously recommended that we re-norm the cost of health care to what you established in your 1995 legislation. Some very important points.

First, Active-Duty troops and their families would not be impacted by this renorming.

Second, retirees over age 65 would not be impacted by this renorming.

Third, the catastrophic cap would not change from its current $3,000 for a family.

We believe that this health care benefit is unique and superb. We want it to continue for all of our members of the Active, retired community, and we believe that re-norming to what you established in 1995 is one way to assist in helping us achieve the goal of long-term sustained health care.

To conclude, I would like to just mention a thought about the way ahead for our country. The war on terrorism will present to your Armed Forces tremendous responsibilities and opportunities. But, as many have said before and I will say today, we cannot and will not win this war on terror alone. This will very much need the collective capacities of all elements of national power that we derive through our interagency coordination and cooperation.

Twenty years ago your Armed Forces faced significant obstacles in being joint and working together. In no small part because you passed the Goldwater-Nichols Act, we are now a truly joint force,

becoming an interdependent force. I believe we need to find ways inside of our government to encourage and reward interagency collaboration, interagency experiences, interagency education, interagency planning. We need the ability to deploy our key interagency experts along side of our military, so that we can do the kinds of work that we need to do overseas quickly and efficiently.

It is my great privilege, as I said, to sit before you today, to be able to thank you for your support, to be able to thank our Armed Forces for what they are doing. I look forward to answering your questions. Thank you, sir.

[The prepared statement of General Pace follows:]

PREPARED STATEMENT BY GEN. PETER PACE, USMC

Chairman Warner, Senator Levin, distinguished members of the committee, it is my pleasure to report to you on the posture of the U.S. Armed Forces. On behalf of all soldiers, sailors, airmen, marines, Department of Defense (DOD) civilians, and our families, thank you for your continued bipartisan support. That support has been exemplified this past year by congressional visits to our troops in Iraq, Afghanistan, and elsewhere around the world; visits to those hospitalized; your funding for operations; your support of transformation and recapitalization initiatives; and the improved pay and benefits you have provided to our servicemembers and their families.

Our successes in the war on terrorism are due in large measure to the dedicated and patriotic sacrifice of our Nation's servicemembers. I want to thank them and their families for all they have done and continue to do to maintain our freedom.

We are in a long war. Our enemy intends to destroy our way of life. They seek to expel American influence from the Middle East, overthrow the existing secular governments of the region, and establish a fundamentalist religious empire on which to base eventual global domination. To accomplish this they intend to defeat the United States and our allies—not militarily, but by targeting our unity and our will. They aim to undermine our resolve by attacking civilians; taking hostages; inflicting casualties on coalition forces; and using propaganda. They believe they can win against the world's most powerful nation because they see us as lacking the moral stamina to persevere in defense of our beliefs.

This is not a struggle between America and Islam. Rather it is a conflict between those who love freedom and a terrorist minority attempting to take power from the majority. Our opponents are loosely networked and transnational. They are ruthless, adaptive, and convinced that they will win. They intend to do so by destroying the resolve of the America people by gradual attrition. They are a patient foe.

For the first time, America's All-Volunteer Force is fighting a long war. Our troops and their families know their Nation truly appreciates their service and values their sacrifice. Sustaining our troops and upholding the resolve of our Nation requires our collective leadership. We must underscore for the American public both the nature and importance of the conflict we are fighting.

We traditionally think of war in conventional terms such as the Second World War during which the average American had a family member serving in combat, and shared their sacrifice on the home front through the rationing of goods. This is not the conflict in which we find ourselves today. Thankfully, the daily life of the average American citizen reflects none of the hardships or shortages we associate with a nation at war.

Unlike past wars, territory conquered and enemy armies destroyed are not apt measures of success. The true metrics are public perception and the resolve of free peoples to determine their own future. Our national commitment to a long-term effort is key in this fight, because the enemy neither expects nor intends to defeat us in the short term.

It is also important to acknowledge that the U.S. military has a significant role to play, but that it will not win this war operating alone. Our interagency partners play vital roles in bringing to bear all the elements of national power to ensure long term success.

To defeat our enemies and protect our Nation, we must simultaneously prevail in the war on terrorism and prepare for the future. The proposed fiscal year 2007 budget ensures we have the ability to conduct a broad spectrum of operations. Major conventional conflict, counterinsurgency, counterterrorism, antiterrorism, stability operations, humanitarian assistance at home and abroad, disaster relief, forward

presence, global deterrence, support to civil authorities, and homeland defense each require the application of tailored forces. The proposed budget funds this wide range of military capabilities, and provides our forces with the superbly trained and equipped men and women we need to defend America and its interests.

As stated in our recently completed biennial review of the National Military Strategy, we are well positioned to accomplish our missions. Our Armed Forces stand ready to defend the homeland, deter conflict, and defeat adversaries. Allies and coalition partners play important roles in meeting these challenges. If an unanticipated contingency should occur, our formidable capabilities and those of our many partners around the world will ensure we prevail.

The Quadrennial Defense Review (QDR) underscores the need to address today's operational requirements and those of tomorrow. It emphasizes the importance of winning the war on terrorism, accelerating transformation, strengthening joint warfighting, and taking care of our most precious resource—our people. The QDR represents a significant effort to understand what capabilities are needed over the next two decades and is part of an ongoing continuum of change for the Nation's Armed forces. In particular, it underscores the value of speed and precision as force multipliers. The QDR reflects an unprecedented level of collaboration and teamwork amongst the senior civilian and military leaders of the Department. Our senior defense leaders will continue this dialogue, and we will develop roadmaps this year to achieve the review's goals for the future.

WIN THE WAR ON TERRORISM

Iraq remains the central front in the war on terrorism. Our mission there is clear. We are fighting to defeat terrorists and to help the Iraqis build a democratic, secure, and economically sound nation—an ally in the war on terrorism. Our ultimate victory in Iraq will profoundly affect the security of the United States, our allies, and the entire globe.

The past year in Iraq has seen significant challenges, but also remarkable successes. This month's Defense Department Report to Congress on "Measuring Stability and Security in Iraq" describes the situation in detail. The steadily growing participation in three national elections in 2005 vividly illustrated the determination of the Iraqi people—Shia, Sunni, and Kurd—to embrace democracy. Entrepreneurial activity has significantly increased. Most importantly, the Iraqi people are increasingly taking greater responsibility for their own security. These successes demonstrate genuine progress and flow directly from the hard work of our troops and interagency partners.

Effective governance, the rule of law, economic growth, and social well-being can only flourish on a strong foundation of security. Over the course of the next year, we will continue to aggressively assist Iraqi security forces to assume greater responsibility for a stable and secure Iraq. Commanders on the ground will continue to make force level recommendations based on conditions not timetables.

The war on terrorism is not restricted to the boundaries of Iraq. We are combating terrorism in Afghanistan, where our forces continue to root out al Qaeda and Taliban in partnership with the Afghan National Army. Likewise, our Provincial Reconstruction Teams, consisting of civilian and military professionals from the U.S. and our Coalition partners, assist Afghans at the local level in building a stable and free society. An indicator of our accomplishments in Afghanistan, as well as a catalyst for continued success, is the North Atlantic Treaty Organization's (NATO) initiative to take on more responsibility for security and development. These international efforts reach beyond Afghan borders and help the region choose stability over conflict.

We are combating terrorism in Southeast Asia. The Abu Sayaf Group in the southern Philippines and al Qaeda's partner Jemaah Islamiyah in Indonesia present these friendly nations unique challenges. We are forging relationships, building capacity, sharing information, and conducting focused training with these valued allies. We are also working with other nations to strengthen maritime security in the Strait of Malacca and other strategic waterways. Our efforts contribute substantively to regional security and freedom of the seas.

In Africa, we continue to partner with regional organizations and individual nations to improve their capacity to combat terrorism, secure borders and coastlines, and reduce ungoverned space. The Combined Joint Task Force-Horn of Africa and the Trans-Sahara Counter-Terrorism Initiative—developed in coordination with the Department of State—improve the ability of countries to foster security and stability within their own borders.

In addition to regional initiatives, an array of coalition and interagency partners continue to work with us globally against the proliferation of Weapons of Mass De-

struction (WMD). Legislation authored over a decade ago for cooperative threat reduction and counterproliferation of WMD anticipated one of today's most serious challenges. We continue that effort. The Proliferation Security Initiative expands international intelligence sharing, coordinated planning, and capabilities integration. Similarly, our ability to execute counterproliferation operations is enhanced by the Weapons of Mass Destruction Maritime Interdiction initiative.

Defense of the homeland itself remains a key mission in the war on terror. Our efforts to defeat employment of WMD by terror groups, as well as a strong response capability should those efforts fail, are critical. Terrorist attacks here at home against the Nation's citizens, its infrastructure, and its leadership must be prevented. Our efforts to date have been successful but constant vigilance is necessary.

We are also confronting the threat of narco-terrorism. Ongoing multilateral operations promote security, improve effective border control, deny safe havens, and impede the ability of narcoterrorists to destabilize societies. Combating drug trafficking has particular importance for strengthening security and democracy in our hemisphere. Engagement with our Latin American neighbors to shape events and forestall crises is vital to protecting democracy for us all.

Strategic communication is a significant component of the war on terror. Terrorists rely upon propaganda to deliver their message and justify their actions and are not constrained by truth. We must counter those efforts. Our actions, policies, and words must reflect and reinforce our strategic goals and national ideals. What we communicate to our friends and foes is at least as important, if not more so, as what we do on the battlefield. We need a more cohesive U.S. Government effort in this area.

In the war on terror, our allies and coalition partners execute key roles in defeating terrorists on and off the battlefield. Their capabilities and regional expertise are complementary to our own. As we move ahead in combating terror, we do so increasingly in combination with other nations who understand the danger terrorism poses to their citizens.

ACCELERATE TRANSFORMATION

As the threats to our Nation evolve, so must the capabilities of our Armed Forces. Transformation today remains vital to the defense of the United States tomorrow. It is a process, not an end state.

Transformation is more than harnessing advanced technology. Transformation includes rethinking our doctrine and operational concepts; adapting professional education and training to meet new challenges; restructuring our organizations and business practices to be more agile and responsive; improving our personnel policies; and reforming our acquisition and budget processes. Nowhere is this more evident than in our effort to increase interagency collaboration. Defeating terrorists requires more than the use of military force. We must harness and synchronize all the instruments of national power to win the war on terrorism.

Advancing a transformational mindset and culture that readily embraces interagency integration begins with our Nation's strategic guidance documents. Interagency collaboration is a theme throughout our National Security Strategy, QDR, National Defense Strategy, National Military Strategy, Joint Strategic Capabilities Plan, Security Cooperation Guidance, and Unified Command Plan.

Nonetheless, we can still do more to enhance interagency effectiveness. Twenty years ago, there were serious institutional obstacles to our armed services operating as a joint team. Today, in no small part due to the 1986 Goldwater-Nichols legislation, the U.S. military is increasingly a true joint force, interoperable and moving towards interdependence.

The Goldwater-Nichols legislation established a system of incentives and requirements to foster Jointness among military officers. We need to find similar ways to encourage interagency expertise. Rewarding interagency work experience, education, and training will facilitate better synergy between departments. Likewise, we need and should reward individuals and agencies that rapidly deploy and sustain civilian expertise in tandem with our military. Shared deliberate and crisis planning capacity among our interagency partners will also improve our Nation's readiness for contingencies.

We are working to better integrate our Nation's diplomatic, military, intelligence, information, and economic instruments to forestall and address crises overseas, and to be ready to deal with catastrophic terrorism, natural disasters, and pandemic disease at home. Defense support to civil authorities is an essential component of protecting the Nation. Hurricanes Katrina and Rita brought this home. The American people expect their Armed Forces to respond in times of crisis. Teamwork among our Armed Forces and Federal, State, and local government agencies—as well as

private and volunteer organizations—is vital to the security of our Nation's citizens. Accordingly, we are preparing now to deal with circumstances that have the potential to overwhelm local government and private institutions. U.S. Northern Command (USNORTHCOM) is expanding its ability to take action swiftly in a variety of incidents, including providing military support to large-scale disaster relief operations and responding to the outbreak of pandemic disease.

While transformation will allow us to better deal with contingencies at home, it will also improve our ability to boost the capacity of other nations to defeat terrorism and stop its spread while contributing to the security and stability of nations. The Army's Joint Center for International Security Force Assistance at Fort Leavenworth and the Marine Corps' Foreign Military Training Units are breaking new ground in this endeavor. Likewise, International Military Education and Training is a proven means of creating friendships that pay long term dividends when international classmates later work alongside U.S. forces in overseas operations. Constraints on our ability to implement this important program warrant review. These and other initiatives are examples of the value of developing capabilities and relationships to help promote security and stability worldwide, potentially precluding a need to commit significant amounts of U.S. resources to stabilize troubled nations abroad.

Our foreign assistance framework was designed to influence and reward behavior during the Cold War. We need a new foreign assistance framework for the war on terrorism to develop the security capabilities of fledging democracies and advance regional stability. The support we provide other countries is essential to helping them police their own land and eradicate terrorist safe havens. Continual assessment of the countries that we assist, and the aid we allot, ensures that we are helping appropriate nations in the right way.

It is not enough for us to be successful in responding to today's challenges. We need to shape the future with like-minded allies and partners. An essential element of this process is the transformation of our Global Posture. We are implementing a new Global Posture for defeating terrorism, deterring conflict, and bolstering the security of both established and nascent democratic states. This realignment will better position us to shape the future. This is well illustrated in U.S. European Command's (USEUCOM) reorientation of its forces from Cold War-era basing to an expeditionary forward presence that supports our friends and helps deny havens for our foes.

In addition to transforming our conventional force posture, while maintaining a reliable nuclear force, we are shifting from our Cold War strategic deterrence to a New Triad with broadened focus on conventional long range strike. Prompt global conventional strike capabilities are required in the war on terror as well as in future contingencies. In parallel with our efforts to develop a conventional long range strike capability, we are improving our missile defenses and national command capability. Your support for these efforts will turn our traditional triad into a strategic deterrence capability relevant to tomorrow's challenges.

Finally, as we transform our warfighting forces, the Department will do the same for the acquisition and budget processes that provide material resources for our troops. Transforming the way capabilities are developed, fielded, and integrated enhances our capacity to execute a wide range of missions.

STRENGTHEN JOINT WARFIGHTING

The U.S. Armed Forces' capacity to operate as an integrated joint team is one of America's chief advantages on the battlefield. By jointly employing our armed services we leverage their complementary capabilities as a team.

We can and should go beyond our current level of jointness. Strengthening our joint warfighting ability enables us to make strides forward in the war on terrorism. It also accelerates transformation. To maximize our operational performance, we will transition from an interoperable force into an interdependent force. While doing this, we must maintain the expertise, culture, and traditions of the Services from which our military competence flows.

Joint Professional Military Education (JPME) of our military and civilian professionals provides the foundation of our force. We intend to better integrate our interagency and international partners in these successful education programs. In addition, our Joint Exercise Program provides valuable training for the Combatant Commanders' Joint and multi-national forces. At home, we are working with the Homeland Security Council and the Department of Homeland Security (DHS) to establish a national security exercise program to help prepare senior leaders across the Federal Government to confront crises more effectively.

In strengthening joint warfighting, we continue to review, develop, and disseminate doctrine and operating concepts. The Joint Chiefs in consultation with the combatant commanders ensure that our doctrine and concepts provide a solid foundation for warfighting. Those same concepts and doctrine also help shape the strategic guidance which drives operational execution.

Our education and training, as well as our doctrine and operational concepts, are kept relevant by capturing lessons gained from experience. Our professional development and organizational agility is significantly enhanced by lessons learned from the war on terrorism, and other operations, including disaster relief at home and abroad.

As seen in deployments to the Asian Tsunami, Hurricane Katrina, and the Pakistan earthquake, our standing, rapidly deployable Joint Task Force (JTF) headquarters dramatically improve our operational responsiveness. To enhance this capability, we will organize, man, train, and equip selected three-star and two-star Service headquarters to rapidly deploy as JTF headquarters.

We are adapting our organizational structure to better exploit the intelligence we collect. The creation of Joint Intelligence Operations Centers at our combatant commands increases support to units in the field. In addition, the Joint Functional Component Command—Intelligence, Surveillance and Reconnaissance, set up this year under the leadership of U.S. Strategic Command, deconflicts competing demands by coordinating the allocation of intelligence collection assets. These initiatives bring the analytical firepower of the Intelligence Community to bear for our troops on the ground, in the air, and on the sea.

We are also harnessing technological developments to enable faster sharing of data among agencies, but we cannot rely solely upon technology. Intelligence collection, analysis, fusion, and dissemination depend upon our intelligence professionals. Human intelligence is a vital enabler for collecting, understanding, and communicating information on threats and contingencies. Service programs for recruiting, training, and retaining key intelligence specialties have been refined to ensure we meet the increasing demand for intelligence personnel.

We continue to examine how best to recapitalize and invest in our Intelligence, Surveillance, and Reconnaissance capabilities. Sensor platforms that collect across multiple mediums are one approach. High altitude, long loiter unmanned aerial vehicles are another. Space based platforms should focus on surveillance capabilities that we cannot readily replicate elsewhere.

In addition to benefiting our surveillance, space based platforms also play a central role in communications. Our deployed forces' strategic, operational, and tactical connectivity depends on the use of global, high bandwidth communications currently only available via satellites. As the gap between operational demands and military satellite communications capacity grows, we will continue to rely upon commercial vendors for the foreseeable future. We are also exploring alternatives to space-based communications.

Networked ground, air, and maritime communications systems are the means with which the U.S. Armed Forces share information and work together as a team. New joint acquisition strategies to replace Service-unique communications systems will advance our communications capacity across the electromagnetic spectrum. Common secure networks with allies will further increase coalition capability. In addition, the exponentially increasing importance of cyberspace requires that we increase our efforts to operate effectively both offensively and defensively throughout the information domain.

In the realm of logistics, we are actively working to leverage our unmatched capabilities. The Joint Staff, the Services, the U.S. Transportation Command, and the Defense Logistics Agency work together to meet the personnel, equipment, and materiel needs of our combatant commanders. However, both the challenge of adapting to changing operational requirements and the demand to increase efficiencies require that we continue to enhance our logistics capabilities. Along these lines, we are working to improve unity of effort, domain-wide visibility, and rapid and precise logistics response.

Reconstituting the force presents real challenges. Our weapons systems and vehicles have experienced extensive use in Iraq and Afghanistan. Supplemental appropriations have helped us repair and refit during combat operations, nonetheless, we have more work ahead to ensure our forces remain combat-ready. Your support for resetting the future force is critical.

As we reset, the combat power of our Total Force is being increased. By moving the Reserve component from a strategic Reserve to an operational Reserve, we ensure it will be accessible, ready, and responsive. The Services have already rebalanced approximately 70,000 positions within or between the Active and Reserve components. We plan to rebalance an additional 55,000 military personnel by the

end of the decade and also continue converting selected military positions to civilian billets. This revised Total Force structure will provide us with greater combat capability and leverage the complementary strengths of our Active, Reserve, and civilian workforces.

IMPROVE THE QUALITY OF LIFE OF OUR SERVICEMEMBERS AND OUR FAMILIES

Taking care of our people is fundamental to the ethos of the American Armed Forces. Our men and women in uniform are our most precious resource. We must continue to ensure their welfare and that of the families who support them. The most advanced ship, aircraft, or weapon system is of limited value without motivated and well-trained people. Our experiences in Iraq and Afghanistan remind us that the Nation's security rests in the capable hands of the individual soldier, sailor, airman, and marine.

Quality of life, of course, transcends material considerations. Our young men and women join the armed services to patriotically and selflessly serve something larger than themselves. They serve with pride, and their families willingly bear the burden of sacrifice, because they believe they make a difference.

A clear indication that our personnel in uniform understand the importance of their service and appreciate the quality of life that we provide them is their decision to stay in our Armed Forces. Our retention levels are over 100 percent of Service goals. To underscore the point that our men and women serve because they know they are making a difference, units that have deployed multiple times to combat have seen the highest rates of retention. We are also seeing success in our recruiting.

We are grateful to the administration and to Congress for closing the pay gap between the private sector and the military, as well for vastly improving military housing and enabling our family members to enjoy a good standard of housing if they choose to live in the local community.

To our families, protecting our troops in combat is the most important measure of quality of life. Since April 2004, all Defense Department personnel in Iraq, both military and civilian, have been provided Interceptor Body Armor. However, as the threat has changed, we have continually improved body armor to ensure our troops have the latest and the best possible protection. Our latest improvements defeat armor piercing rounds and include shoulder armor and side plates.

In addition to body armor, armored vehicles are important to force protection. Thanks to your support we have had great success increasing production and fielding up-armored Humvees to protect our troops. Nearly all the approximately 40,000 tactical wheeled vehicles in the U.S. Central Command area of responsibility now have armor protection. We will continue to adapt as the threat evolves.

Improvised Explosive Devices illustrate the asymmetric challenges we will face in the future. The Joint Improvised Explosive Device Defeat Organization spearheads our effort to meet that threat. With the development and testing of technologies, tactics, techniques, and procedures we are learning to defeat the tactics of our adversaries and increasing the survivability of our servicemembers. Our transformational work with private industry to experiment with emerging technologies promises to break new ground in this vital endeavor. Thank you for helping us provide the best possible protective equipment for our troops.

Taking care of our troops and their families also means taking care of our wounded. During World War II, Korea, Vietnam, and Operation Desert Storm 24 to 30 percent of Americans injured in combat eventually died from their wounds. Today, due to tremendous improvements in our military medical system, nine of ten troops wounded in Iraq and Afghanistan survive. This dramatic improvement is the direct result of the hard work of our forward surgical teams and combat support hospitals, and the rapid evacuation of the seriously wounded to higher level care facilities in the United States. In Vietnam, it took 45 days on average to return wounded back to the United States. It now takes 4 days or less.

Our remarkable medical professionals return to duty over half of our wounded in less than 72 hours. Advances in medicine, technology, and rehabilitation techniques enable us to provide much better care for those more seriously wounded. We make every attempt to bring willing servicemembers back to duty—or return them to society empowered to continue to make a difference. Congressional funding for this effort is greatly appreciated. In particular, thank you for your support for our two new Advanced Amputee Training Centers—at Walter Reed Army Medical Center, here in our Nation's capital, and Brooke Army Medical Center at Fort Sam Houston, Texas.

CONCLUSION

I testify before you today with tremendous pride in the bravery, sacrifice, and performance of today's Armed Forces. Around the world, in every climate, and often far from home and family, America's men and women in uniform are making a difference. They do so willingly and unflinchingly—volunteers all. Their valor and heroism are awe inspiring and they serve this Nation superbly, as have so many who have gone before them. It is an honor to serve alongside them.

The past year saw the U.S. Armed Forces engaged in combat in Iraq and Afghanistan while we also provided humanitarian assistance to victims of the Asian tsunami, hurricanes along the U.S. Gulf Coast, and the earthquake in Pakistan. There are likely equal challenges and opportunities ahead for the U.S. Armed Forces in 2006. The imperatives to defend our homeland, defeat global terrorism, and transform for the future remain. With your continuing support, our military stands ready for the challenges and opportunities ahead.

Thank you for your unwavering support in time of war.

Chairman WARNER. Thank you, Mr. Chairman. My first question will be to the Secretary eventually on that very issue of the interagency cooperation that you have raised.

General Schoomaker, report on your Army, sir.

General SCHOOMAKER. Sir, good morning. I would be glad to. Good morning, Mr. Chairman, Senator Levin, and distinguished members of the committee. It is a pleasure to be with you today and I appreciate this opportunity to join Secretary Rumsfeld and General Pace, our Chairman, during their hearing to represent our Army, our soldiers, and our families who are serving so well today our Nation.

I would like to make a brief statement that covers really three things: where we were when all of this started on September 11, what we have been doing, and where we are going. Then I will be glad to get into any detail you would like during questioning, but with the reminder that next week I will be testifying with Secretary Harvey on the specific details of our Army and we will jointly issue a posture statement to the committee at that time for the record.

First of all, where we were. We went through a decade in the 1990s where the Army's portion of the peace dividend was about $100 billion in our investment accounts. Of course, we reduced our Army across the Active, Guard, and Reserve by a half a million soldiers. We started September 11 with a $56 billion shortfall in equipment across our Army, Active, Guard, and Reserve. That was $56 billion if you replaced it in kind; if you modernized it and replaced it, $68 billion roughly. Of course, these are our best estimates.

We also started with an Army that was largely structured for the Cold War we had just finished. Although it was a little smaller, it was still largely structured that way. What we found was that we had a significant amount of overstructure, which meant that we had more spaces, more jobs in the Army, than we had people or end strength to fill. This was particularly true in our Reserve components, who served as strategic Reserves during the Cold War.

We had a considerable imbalance between our Active component and our Reserve component. We have testified many times and I know you have heard from both the Guard and Reserve leadership that the Guard and Reserve were equipped at a lesser level than was the Active Force. Part of the very good reason for that was the Active Force also had holes in it, it had some disparity in terms

of its modernization, and therefore the equipment that was cascaded to the Reserve components was not equal to what had been fielded to the Active Force. We had some challenges in readiness, in our training, and in our equipage for deployment in that force.

We then get into this global war on terror and what is now known as the long war. I agree that it will be a long war, and it will be a redefinition of the paradigm that we have lived with through certainly most of my career and I would say much of my father's career of 30 years. We are now in the business of, as an Army and, quite frankly, as a joint force, learning and adapting to the world which we are entering. The 21st century is going to be far more dangerous and far more complex than what we have experienced in the past, and it is going to require a whole different set of dance steps, so to speak, to be able to operate in a way that we will need to.

We must take advantage of the momentum that we are having during this long war as we get the resources from you that you have been so good in giving us to not only fight the long war as we reset ourselves, as we consume this equipment and set ourselves forward. We must use this momentum with an eye to the future, not an eye to the past. We must use these resources to set ourselves forward the way we want to be and not the way we were when we started.

So it is tremendously complex and there is a tremendous amount of responsibility on it, but that is what we are learning as we go forward. Where we are going is growing both capability and capacity across our force. I agree with General Pace. We are moving from a largely service-centric force to one that was interoperable, to one that then became joint in a sense of the classical term of "jointness," towards one now that is interdependent, where we can rely upon other aspects of the joint force to provide a synergistic effect on any one of the components.

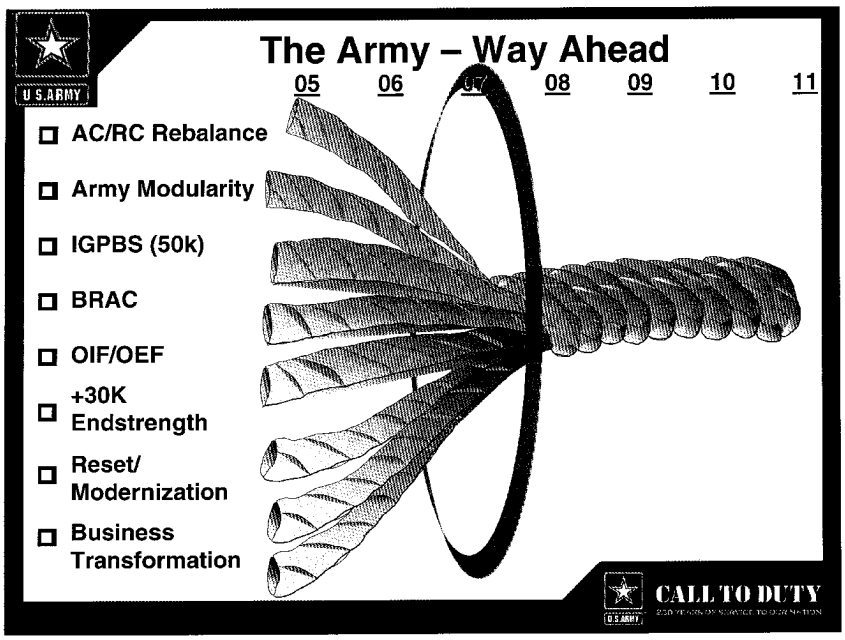
I think, as you take a look at the way that we are currently fighting the global war on terror, that there are ample examples of how we are now working better and better together, leveraging each other's capabilities, passing them off to each other, and able to be much more agile than we have been in the past.

But, we have also found that we lack capacity in certain areas. Certainly one of the areas that we find ourselves stressed more than others is in the combat service support and transportation, military police (MPs), civil affairs, these kinds of capabilities that are important, not only for duties here at home in the domestic scene, but also in the away game as we do the things that we do in Iraq, Afghanistan, and elsewhere.

Additionally, we are attempting to accelerate our modernization because, quite frankly, without the Future Combat System (FCS) spinouts that we have and without pushing through the FCS, we will spend almost 4 decades without a new start in the United States Army on equipment, on modernization. This is something we cannot go into the future and allow to happen, and, of course, we are rebalancing across the Active, Guard, and Reserve.

While I make this last statement, if you could put that rope chart up very quickly.

[The chart referred to follows:]



While they are doing that, I will just make one other statement here. We are moving our Reserve components from Strategic Reserve to an Operational Reserve. This means that we must give more predictability to Reserve components. We must count on them in their readiness. They must be identical to the kind of capability and they must deliver with a great deal of readiness.

Now, I want to talk about this notion of a broken force. Up here on this rope chart I have is a picture of all of the things that we are doing during the period that is of most interest to us today, 2006 and the budget that has just been submitted for 2007. I think if you take a look at that you will see that Operation Iraqi Freedom and Operation Enduring Freedom (OEF) is the fifth bullet down. But, your Army is involved in all of these other activities that are major activities during this period. We are balancing the Active component and Reserve component.

This notion that we are cutting the National Guard and Reserves is false. We are maintaining the end strength of the National Guard and we are maintaining the end strength of the Reserves, but we are rebalancing them both, just like we are rebalancing the Army, to do things that are more useful, have a better capability for the kinds of things that we are moving toward.

As a matter of fact, you will notice that the Active component is building to 42 brigades instead of 43, like I said before. That 43rd brigade turned into special forces, five special forces battalions, a Ranger battalion's worth of companies, aviation battalion for special operations, and we are doubling the civil affairs companies that are in the Reserve component. So all of that is still within the Army end strength, but it is being rebalanced to things we need.

We are building a modular force, the second bullet down. That means we will be able to plug and play across the force, regardless of component, and that we do not have to scrape together across the country half-filled units or partially filled units to create a whole one, like we have had to do in the past.

The third bullet down, Integrated Global Presence and Basing System (IGPBS), that is our global posture that we are taking, moving units and capabilities from all over the world and reposturing in a way that is more relevant to the strategic agility that will be required for the 21st century and the kinds of requirements that we are going to have.

That is associated with the next one down, which is Base Realignment and Closure (BRAC). Major moves in BRAC for the Army. In fact, we are the preponderance of any of it of the BRAC process.

OEF, the 30,000 additional overstrength that you have authorized us and provided supplemental funding for; our reset and modernization I have talked to; and finally, the major business transformations that we are going through to move many spaces that were otherwise outside of the operational force of the Army and growing the actual operational strength of the Army inside the Army by 40,000.

So, when you talk about an Army having stresses on it, yes, we are busy. Yes, there is stress from being busy. But this is not a broken Army. I will just say it one more time. I have mentioned it to many people. Any of us that have been around the Armed Forces for the last 25, 30 years had experience in a force that I would call bordered on being broken, if it was not broken. Most of you might remember the Armed Forces post-Vietnam, where we had major problems in discipline, major problems in readiness, major problems across the board.

The United States Army is not broken. Neither is the Marine Corps, the Navy, nor the Air Force. I can speak for the Army. We are meeting our recruiting goals. We are at our eighth month in a row now that we have made those across the force, and we are reenlisting in record numbers. I just left the 3rd Infantry Division in Baghdad prior to their return over the holidays. The 3rd Infantry Division, on their second 1-year tour in Iraq, made 136 percent of their reenlistment goal. Talking to those soldiers, they are proud of what they have done and they are going to be with us.

I thank you for the opportunity to say these words today. I would be glad to get into more detail and we certainly will be prepared to go in extraordinary detail at our Army posture hearing. I look forward to answering any questions you may have.

Thanks very much for your support.

Chairman WARNER. Thank you very much, General.

We will now proceed to a round of questions, 6 minutes for each member.

Mr. Secretary, the QDR stated the following, and I quote it directly: "The Department of Defense cannot meet today's complex changes alone. Success requires unified statecraft, the ability of the U.S. Government to bring to bear all elements of national power."

That is a very profound and perceptive and I believe, regrettably, accurate statement. I say regrettably because it has been the judg-

ment of this Senator that the DOD has done its work through the heroic service of the men and women of the Armed Forces and continues to do it, but we are not getting, as the Chairman said, the collective capacities that was your quote, Mr. Chairman, of the other elements of our Government to bring to bear to conclude this conflict and perform the mission and bring our forces back.

In my own discussions with young people coming back from Iraq, they talk about we apprehend the lawbreakers, the insurgents, we turn them over to their law enforcement. There are no jails, there are no judges, there is no way to administer justice, and all too often they are back on the streets.

Jobs. Jobs is the root cause in all probability for this, I believe, exponential rise in criminal activity and the graft.

We have failed to bring together all the resources necessary, and it is not fully—by no means the responsibility of the military—to restore the oil industry. They are sitting on, what, the second largest reserve of oil in the world. Your former colleague, Deputy Secretary of Defense Paul Wolfowitz, said at one time that he felt that that industry would be able to begin to bear the brunt of the costs that the American taxpayers and others are bearing today. Oil production is slipping.

The producing of the necessary potable water, the health situation, it is just not matching the efforts of the military, and it is going to obscure the gains that have been made. We cannot allow that to happen, given the courageous and the loss of life and the casualties and the sacrifice by the families and the contributions of the American taxpayer.

I call on you at this point in time. This is your time to make your public judgment of it. Do you agree or disagree with my view that we are not pulling together all elements of our government with equal force as is the men and women of the Armed Forces?

Secretary RUMSFELD. Mr. Chairman, you and General Pace have of course elevated this issue, which is a critically important one, as you have said. You have to begin with the beginning, and the beginning is that we are still organized in the executive branch and in Congress with committees and subcommittees basically the way we were in the last century, with the exception of the new Department of Homeland Security (DHS) and a few other things.

There has not been a Goldwater-Nichols for the United States Government, just to put it simply. As a result, the working together is improving in my personal view every month and every year. On the other hand, the DOD has a culture of deployments. They are used to it. They sign up for it. That is part of the way they are. That is their expectation level. The other departments do not have a culture of being deployed and therefore, if the task is a military one, we can do that. If the task then becomes one of creating a justice system in a country or border patrols or customs, the things that are different, off line from the Defense Department's major responsibilities, the task is more difficult because we need to try to find people, whether our country or from other countries, who can help out.

Remember the Bonn process in Afghanistan put lead countries in charge, and it said that Germany would be in charge of the police and the U.K. would be in charge of narcotics and the U.S. would

be in charge of training the military, and the police would be the Germans, and the border patrol the Germans; somebody else, the Italians, civil justice. They were not able to deploy the kinds of numbers of people into Afghanistan to do those to the extent that the military can deploy people into Afghanistan to do their job.

Now, it is a big task. I would go to something Senator Levin said. On the other hand, other countries are not likely to nation-build a country. The people of Iraq and Afghanistan in the last analysis are going to be the ones who are going to build their country. What we need to do is to create an environment where they can do that and allow them to do that, encourage them to do that, assist them in doing that, but not do it for them. If you do it for people, you end up creating a dependency.

You mentioned the infrastructure. The infrastructure in Iraq is decrepit. It is fragile from decades of underinvestment. It is going to take decades for them to get the infrastructure back where a modern country would have it. Anyone who expects it can be done in 15 minutes or a year or 3 years or 5 years, I think just does not appreciate the extent to which the underinvestment has created the fragility of these systems.

It is going to take patience. In the last analysis the Iraqi people are going to have to rebuild that country and it is our job to do what we have been doing, to help create an environment where they can do that, to launch them on the path to democracy, to train up their forces so that they can provide security while the building process takes place in the years ahead by the Iraqi people.

Chairman WARNER. Mr. Secretary, the message that has been employed by this administration is that we can bring our forces home as soon as we train the Iraqi military and other infrastructure of security. However, you better add another component, and it is of equal weight, and that is we cannot really pull out unless those people can pull together that government in such a way and put into the ministries people with strong backbones, not subject to secular pulls, but will perform those missions in such a way that all of the rest of the components of a sovereign nation can come together with the confluence of the security forces.

I am sure that you quietly speak with our President on this issue and the Chief of Staff. We have to redouble our efforts in this area.

Now, just for a few seconds, you brought this up in your direct testimony, Chairman Pace. Do you have anything you wish to add to this discussion?

General PACE. Sir, thank you. We have a world-class Department of State and a world-class Department of Treasury, so I would not want my comments to be in any way considered disparaging to them. They are great Americans, doing a great job.

Our system simply at this point in time, just like our system for the military 20 years ago, is not designed to encourage or reward tours of duty between various departments of our government or to reward joint, interagency education, or to facilitate and reward those who would want to volunteer or be assigned on deployments. We have an opportunity to increase our efficiency as a government by seeking ways to do that.

Chairman WARNER. General, those are nice words, but we have been at this thing over 2 years now. I am not trying to put people

on report for past actions. I am looking towards the future. We have to have a redirection of a full emphasis on this, equal to what we are doing militarily in the retraining program of the security forces.

Senator Levin.

Senator LEVIN. First, let me fully agree with what the chairman has said. It is absolutely essential that there be a national government created in Iraq. We know they are working on trying to put together such a government now. It is essential those ministries reflect the nation and not sectarian groups. We have our work cut out for us. More importantly, more accurately, they have their work cut out for us.

But, we have to put the pressure on them to achieve these goals. We have the right to do so. We have made the sacrifices which give us that right. Even though they are the only ones who can make the decisions, we have to keep the pressure on them to make those decisions to make their government a truly national one, reflective of the nation and not just a bunch of different sectarian groups.

Mr. Secretary, you said relative to my comments that they need to amend their constitution in order to share power more equitably and to share their resources more equitably and to bring in all the major factions, including the Sunni Arabs, that, well, it took us a long time to end slavery and to provide for women's rights. I think that sends the wrong message to them. It took us much too long to do those things. They do not have that time.

The analogy that you have utilized just simply is off the mark. It is not a useful analogy for a number of reasons. First of all, when our Constitution was formed each of the States signed onto the Constitution with its imperfections. In Iraq, one major group has not signed onto this constitution and a number of provinces where that group is in the majority have not signed onto the constitution. So it is going to take amendments to the constitution in order to bring all the factions onboard. The constitution itself provides for a 4-month period for changes to be recommended to the constitution. I think the analogy is wrong historically since all of our States signed onto that Constitution, a situation which does not exist in Iraq today.

Second, the failures and internal contradictions of our Constitution led to a Civil War and 600,000 casualties and generations of bitterness. We should be using our hard-found wisdom in that regard to impress upon the Iraqis that they might avoid a similar civil war and a similar fate if they will make those compromises now rather than later or think they can make them later.

Your analogy is off the mark for a third reason. It takes the Iraqis off the hook and I think that is a fundamental mistake. Our commanders, our military leaders in the field, have repeatedly told us that there will not be a military success over the insurgency without a political coming together of the major Iraqi groups. General Casey specifically said that the constitution turned out in the eyes of one of those major groups not to be a national document and that the Sunni Arab vote against the constitution could actually lead to a worsening political situation rather than a better one.

My first question is: Do you agree with our uniformed leaders that there will not be a military success over the insurgency without a political coming together of the major Iraqi groups?

Secretary RUMSFELD. There is no question about it. I would add, however, that the reality is the Iraqi people overall did vote for the constitution. You are quite right, the Sunnis voted in large measure against it. But there is an agreement, an understanding, as I am aware, that there will be discussions and some sort of an entity appointed to consider amendments to the constitution. Everyone agrees that is a good thing. Everyone agrees it is critical that the Sunnis come onboard. Nothing I said was inconsistent with that.

Senator LEVIN. There was an amendment which was adopted in the Senate with bipartisan support. Seventy-nine U.S. Senators said the following: "The administration should tell the leaders of all groups and political parties in Iraq" key words there, "should tell the leaders of all groups and political parties in Iraq that they need to make the compromises necessary to achieve the broad-based and sustainable political settlement that is essential for defeating the insurgency in Iraq within the schedule they set for themselves."

Secretary RUMSFELD. Everyone agrees with that.

Senator LEVIN. Has the administration told the leaders? Not said simply, you have an opportunity, which is so far all the administration has said, which is obvious. They have an opportunity to do that. The question is will the administration tell the leaders in Iraq of all the factions that it is essential that they make the compromises necessary in order to achieve that broad-based sustainable political settlement? Will you say that to them?

Secretary RUMSFELD. It has been said to them.

Senator LEVIN. By whom?

Secretary RUMSFELD. Oh, I am sure by the ambassador and by General Casey, and certainly by me when I visited with these people.

Senator LEVIN. That is good news.

Secretary RUMSFELD. Everyone agrees that it will require acceptance on the part of the elements in that country for the country to succeed, for the security situation to improve. We all agree with that. The way you get acceptance is having a national compact, an understanding on the part of all the participants, that they have a voice and a stake in the success of that activity. That means you simply have to reach out and see that the Sunnis are included in a way that is reasonable to everybody, including them.

Senator LEVIN. Mr. Secretary, I have tried now for 6 months, and my colleagues probably get tired of hearing me say this, but I am glad to hear you say that. I hope the President says publicly to the factions in Iraq that it is essential they make constitutional compromises to share power and share resources, so that the Sunnis come on board. That is the only way to bring a nation about and it is the only way to defeat the insurgency.

We cannot write those provisions for them, but we can tell them it is essential that they write them. I am glad to hear you say today that you have told them that it is essential that they make those constitutional changes, that our ambassador has told them that. I would love to hear the President say that rather than much more qualified, cautious words like they have an opportunity to do

that. There is a big difference between the two. One carries hopefully a message that that constitution is flawed, it will not do the job, it will not help bring them together to defeat the insurgency. The other one is a message of, hey, we are with you regardless of what you do, we are there for an unlimited period of time. That it seems to me is a flawed message and not one that is likely to produce those changes in the constitution, those compromises that need to be made.

We are talking about power sharing, resource sharing here, and those are difficult compromises. The only hope we have of defeating that insurgency is if they will put their house in order politically. I am glad to hear you say that you have carried that message to them because it is the most important single message that can be delivered to them.

Chairman WARNER. Thank you, Senator Levin.

Senator McCain.

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

I thank the witnesses for being here today. I agree, General Schoomaker, that this is the best Army in history. I also think it is important to note that members of this committee do not operate in a vacuum. We talk to a lot of people in the military, retired as well as others, and most of them tell us that the Army and Guard are under great strain because of these continued commitments. Many of us have felt that a larger Army and a larger Marine Corps would have relieved some of these strains.

On Iraq, it is a three-legged stool here. One is the military equation, which I believe we are making significant progress. There are many areas of Iraq which are very secure and progress is being made.

The other obviously is the political leg of the stool, which I met with a number of Iraqi leaders a couple of weeks ago and they are optimistic about reaching an agreement which will include the Sunni as part of the government, and that is very encouraging news, although it is going to be extremely difficult. Great credit goes to our ambassador in Iraq, who is doing an outstanding job.

The third leg, the news is not so good. Mr. Secretary, you said it would take a long time to restore their economy. I agree. Your former deputy testified before this committee that Iraqi oil revenues would pay for the war. Unfortunately, oil revenues now are less than what they were before we invaded Iraq. If that is not fixed, if that is not fixed, we are in significant difficulty, and we all recognize that is a matter of security.

Mr. Secretary, the issue I want to raise with you is part of a larger debate that is taking place here in the Senate and in Congress, and that is the issue of trying to restore the authority and responsibility of the authorizing committees. A lot of the attention is on earmarks. A lot of the attention is on emergency supplementals.

As I count it, this year you will be submitting your seventh emergency supplemental of some $50 billion, we are told, coming to a total of some $400 billion in the last 5 years to 4 years that are emergency supplementals.

I do not know how you call it an emergency any more when we know that we are going to have costs for a number of years associ-

ated with the Iraq war. So what it effectively is, is an end run around the authorization process, going directly to the appropriations committees. For example, in last year's emergency request I counted $5 billion in unauthorized earmarks.

It has to stop. Your requests have to be included in the normal budget process, in the normal authorization and appropriations process, because we all know and can estimate that the war in Iraq and Afghanistan is going to cost a certain amount of money. So to continuously come up here with an emergency, which we all fully anticipate, although maybe not the exact numbers, and not go through the authorizing process, is something that has become unacceptable and it has to stop.

Now, Mr. Secretary, are you going to continue to do business by coming up here with emergency supplementals which thoroughly bypass the entire authorizing process, which is supposed to be the way the Congress of the United States operates?

Secretary RUMSFELD. Senator, this is an issue that the senior leadership of Congress works out with the President and the Office of Management and Budget (OMB). From my standpoint, I could do it either way. Indeed, we tried to do it by estimating what the Afghanistan war costs would be and proposed an amount of money and gave a theory as to how it might be reasonably appropriate. The Senate and the House rejected that several years back and asked us to fund the war in supplementals.

From my standpoint the criticism was a fair one. The criticism was that the theory we propounded for funding the Afghan war aftermath was not solid fact, and of course it was not. It was what we expected or what we guessed or what we thought and what we could speculate. People said: Do not do that; come in when you have information and ask for a supplemental.

Now, I understand the problem for the authorizing committee. There is no question but that once it goes into a supplemental it goes straight. Maybe there is a way to change the rules of Congress so that the authorizing committee gets a look at a supplemental as well as a basic budget. I do not know what the answer is. We could do it either way.

Senator MCCAIN. If we could start out with the administration making a budget request that includes funding fully anticipated for conduct of the war on Iraq, then that would be a good beginning and would give us some added influence in this battle, and it is going to be a big battle, with the process that now has become corrupted here in Congress.

General Pace, I am hearing from a lot of people in the Guard that they do not like this plan for the reorganization of the Guard. Have you talked to the adjutants general (TAGs) in the various States about this issue? Or should I be directing that question at Secretary Rumsfeld?

General PACE. Sir, happy to take a shot at it. I have personally talked to the leaders who are from the Guard and Reserve who are part of my staff and through them have gotten information from the TAGs. I have not met personally with the TAGs. I know that the Army yesterday, for example, had a conference call on which they had all 50 States on the phone call. I am told by General Cody it lasted about 2 hours. I know there was a conference about a

week or so ago where the TAGs were all in town and the Army met with them and they talked in great detail.

What I do know is that the plan that the Army has to be able to provide 28 fully manned, fully trained, fully equipped brigade combat teams in the National Guard is a huge improvement over where we were several years ago, when we had 15 of what we called enhanced brigades, but even their equipment was not up to the standards that it needs to be. The total number of brigades that the Guard has today and will retain stays at 106 and the total number of brigades that are fully manned, trained, and equipped in the combat role will be 28. That will allow us then to have a very solid base of fully trained, manned, and equipped folks.

Senator MCCAIN. I strongly suggest, Mr. Secretary, close consultation with TAGs. We are getting initial negative feedback, and obviously it is important to have these very trusted individuals onboard in any reorganization plan.

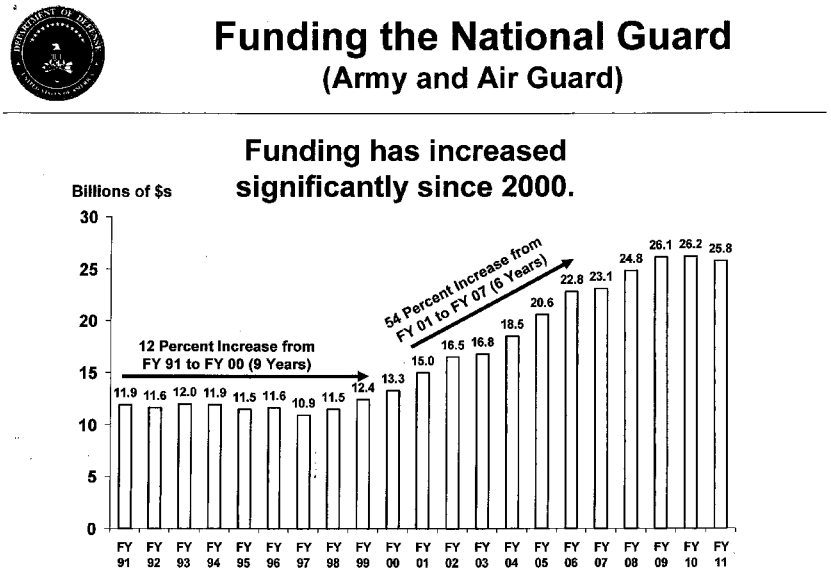
I thank the witnesses.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you, Senator McCain. I concur in your observation.

Secretary RUMSFELD. Thank you, Senator. There is a chart that you might want to put up if you have it here, the National Guard funding.

[The chart referred to follows:]



I agree with you completely. We have to stay in close touch with them. This is the funding. Pete, you may want to describe it.

General SCHOOMAKER. Sure, if I could. In fact, if I could help answer part of your question. The answer is that we met with all of

the TAGs last week, and there were some objections to some of the plans that we had, and we listened to those objections and we are making adjustments and working with them on it.

Yesterday the Vice Chief of Staff of the Army, as General Pace said, was on a meeting with the chiefs of staff of the governors where we worked through the whole thing. We are working very carefully, and their concerns are really local concerns about the impact at the local level, at the armory level. We are working with them to make it as neutral as possible as we do this transformation and rebalancing of the Guard. I believe we will get there and I think that we are starting to get some very good traction.

If you look at the chart that Secretary Rumsfeld asked to put up, it will give you some idea of the increase in funding for the National Guard to meet some of the traditional complaints they have had. In fact, the Army Guard is being funded across this next POM at about four times the rate that it was in 1999.

Senator MCCAIN. General Schoomaker, in all due respect, we have 40 percent of the Guard over in Iraq. I mean, 40 percent of our forces are in Iraq, deployed and working there. Of course the funding has to go up. In 1999 none of them were deployed anywhere, in all due respect.

General SCHOOMAKER. This is not supplemental funding. This is funding inside of our program.

Senator MCCAIN. That has nothing to do with their deployments overseas?

General SCHOOMAKER. It has to do with making them whole and rebalancing them, providing them equipment that is equivalent to the equipment in the Active Force, and to doing exactly what I said.

Senator MCCAIN. Replace the equipment that they are wearing out in deployments?

General SCHOOMAKER. Some of that is happening with supplemental funding, but I am talking about fundamental investment in making them whole. We are moving their helicopter fielding, modern helicopter fielding, 5 years to the left in this program, which is a huge investment that is historic.

So we are listening, and we are very proud of what the Guard and Reserve has done and contributed to our whole Army, because we are working as one Army.

Senator MCCAIN. So are we.

General SCHOOMAKER. Yes, sir, I know you are. It is through your help that we are able to do this. So we are getting past communicating past each other. We are listening and we are talking to everybody we can talk to, to get this right.

Senator MCCAIN. Thank you very much, General.

Thank you.

Chairman WARNER. Thank you, Senator McCain.

This committee will very assuredly listen to the Guard and Reserve representatives in the course of our review of this budget.

Senator Byrd.

Senator BYRD. Thank you, Mr. Chairman.

Mr. Secretary, the President's 2007 budget request for defense is $439.3 billion. That is $439 for every minute since Jesus Christ was born. This does not include $50 billion for an emergency bridge

fund tacked onto the budget for the Iraq war for next year or an estimated $70 billion in supplemental funding that the President intends to request for the wars in Iraq and Afghanistan. When these costs are included, the defense budget balloons to nearly $560 billion, well over half a trillion dollars.

This is a mind-boggling sum of money for defense. The American taxpayers deserve to know whether this is in fact money well spent. I stand second to none in my support of and in my gratitude to America's military forces. Our soldiers, sailors, marines, and airmen are the finest in the world. All Americans owe them a debt of gratitude for their service to our country.

But, we owe them something more. We owe them a forward-looking defense policy that includes a definitive strategy for transitioning U.S. troops out of Iraq sooner rather than later. We owe them not only megamillion dollar missiles and tanks and airplanes, but also basic body armor and detection devices to protect them from the deadly nickel-and-dime IEDs of the Iraqi insurgency. We owe them a military health care system and a veterans benefits program that serves them as well as they have served the Nation.

Amid all the buzzwords, like "the long war," "military transformation," and "capabilities-based planning," this budget falls short of the mark of making the needed investments in the people who serve in our Armed Forces. We here in Washington can never afford to lose sight of the fact that our military is made up of people.

General Schoomaker, let me shift to the center of the world. This morning's Charleston, West Virginia, Gazette has a story about a soldier who was wounded in Iraq and medically discharged from the Army. According to this report, upon his separation the Army presented him with a bill for $700 for the body armor that was destroyed when he was wounded. Lieutenant William Rebrook gathered up the money from his friends and paid the bill.

General Schoomaker, how can it be that the Army is charging wounded soldiers for replacing damaged body armor? Rebrook, of course, scrounged up the cash from his Army buddies and returned home to Charleston last Friday. Let us hear what he has to say: "I last saw the body armor when it was pulled off my bleeding body while I was being evacuated in a helicopter," Rebrook said. "They took it off me and burned it."

But no one documented that he lost his kevlar body armor during battle, he said. No one wrote down that the armor had apparently been incinerated as a biohazard.

General Pace, Mr. Secretary, or General Schoomaker, how can it be that the Army is charging wounded soldiers for replacing damaged body armor? Is this standard practice?

General SCHOOMAKER. That is a very unusual story. I do not deny that it is not in the newspaper, but we will be glad to follow up. I have no idea why we would ever do something like that. We have issued over 700,000 sets of body armor, the very best that exists in the world. Every soldier has it. We certainly have procedures that account for battle loss, and I just find it a highly unusual story. But, we will certainly follow up and correct it if there is any truth to it.

Senator BYRD. Will you also supply this committee with the answers to my questions?

General SCHOOMAKER. Yes, sir, I would be glad to.

[The information referred to follows:]

UNITED STATES ARMY
THE CHIEF OF STAFF
FEB 0 9 2006

The Honorable Robert C. Byrd
United States Senate
Washington, DC 20510-4801

Dear Senator Byrd:

This replies to your question during testimony on February 7, 2006, on behalf of Lieutenant William E. Rebrook IV, concerning reimbursement for missing equipment. The Army will reimburse Lieutenant Rebrook the appropriate amount for his government issued equipment due to combat loss once the investigation is complete.

I understand from 1st Cavalry Division officials that, when Lieutenant Rebrook departed Fort Hood and the Army, he decided to pay for approximately twenty items of equipment that were unaccounted for, including his Outer Tactical Vest which had been destroyed when he was injured in Iraq. Lieutenant Rebrook decided to pay for all the missing items instead of initiating the paperwork that would have relieved him from accountability of the Outer Tactical Vest and possibly several other items that were properly documented as combat losses.

The 1st Cavalry Division has been in contact with Lieutenant Rebrook regarding this matter and has made the resolution of it a high priority. The unit is continuing to process a Financial Liability Investigation of Property Loss to properly account for the discrepancies. We expect that this investigation will relieve Lieutenant Rebrook of the financial responsibility for the equipment he paid for that was damaged or destroyed in combat. The command will complete its portion of the Financial Liability Investigation of Property Loss by the end of this week. Lieutenant Rebrook will then have the opportunity to respond to any findings of financial responsibility for any of the other missing items.

Please be assured that this issue has my attention and is being monitored closely by the command leadership. We will let you know when this matter has been resolved.

Sincerely,

Peter J. Schoomaker
General, United States Army

Senator BYRD. Will you supply me with the answers to my questions? That will not be hard to do. Would you do that?

General SCHOOMAKER. Provide the committee with the answers to your questions?

Senator BYRD. Sir?

General SCHOOMAKER. I am sorry, I am not understanding you. Provide the committee with the answers to your questions?

Senator BYRD. Provide the committee with the answers, and also come and see me and let me know what the answers are, too.

General SCHOOMAKER. Absolutely, be glad to, sir.

Senator BYRD. I do not sound like I have my mouth full of turnips now, do I?

General SCHOOMAKER. No, sir. It is my problem. I have Army-provided hearing aids. They are supposedly the best in the world.

Senator BYRD. I do not use hearing aids.

How can it be that the Defense Department—she says my time has expired?

Chairman WARNER. You can complete your question.

Senator BYRD. I thank the Chairman.

How can it be that the Defense Department, which is requesting $439 billion in this budget, has to resort to dunning a wounded soldier for $700 to replace a piece of body armor? General Schoomaker, will you look into Lieutenant Rebrook's case to see what can be done about this?

General SCHOOMAKER. Sir, absolutely.

Senator BYRD. Will you supply this committee with the answers?

General SCHOOMAKER. I will.

Senator BYRD. Will you supply me with the answers?

General SCHOOMAKER. I will.

Senator BYRD. Bless your heart. Thank you. Thank you.

Mr. Chairman, my time is up.

Chairman WARNER. Thank you, Senator Byrd. Those responses should be in writing, because all members of the committee will want to have personal knowledge of that response.

Senator Inhofe.

Senator INHOFE. General Schoomaker, do you know of any policy whereby damaged body armor from combat is charged to the individual?

General SCHOOMAKER. Sir, I know of my policy, other than if, obviously, a soldier abuses equipment or loses or damages it as a result of negligence, obviously we have policies to recoup that. But, this does not sound like such a case.

Senator INHOFE. Yes, I understand that. Let me get on with the questions here.

First of all, I am going to resurrect a question I have not asked in a long time because I saw a statement that was made in the QDR concerning media. This morning at the breakfast, General Schoomaker, you made a comment about the opening of that health center in Iraq, where all the media was involved, 40-some members of the Iraqi media showed up, not one showed up from the United States, from the American media over there.

I know that is true because I have been over there. I made my tenth trip to the area of responsibility (AOR) and every time I come back it is with more stories, great heroic stories that I hear from these guys, and of great accomplishments that we are making. They talk about in the Sunni Triangle. You mentioned this morn-

ing, General Schoomaker, that the eastern half of Baghdad is now secured by the Iraqis, not by the Americans. What you did not mention is that the general in charge of that is General Madhi, who was, General Pace, the brigade commander in Fallujah for Saddam Hussein, who hated Americans. I was over there when they started the embedded training with the marines, and he learned to love the Americans so much that he told me that when they rotated the marines out he cried. In fact, he renamed the Fallujah Iraqi security forces the "Fallujah Marines." Now that same general is over there in the eastern half of Baghdad. We do not have any of our boots in the eastern half of Baghdad providing security.

These great success stories like that just seem to go unnoticed. I was glad when General Jordisada actually came to my office in Tulsa during the break and gave me all the details, which are now coming out public, and he has now shared those with General Maples and with the Intelligence Committees of both the House and the Senate, that in fact the WMDs, which I consider to be the phoniest issue in the characterization of this war, they were there, we knew they were there. He also has information now as to where they were transported in Syria and even the names of the pilots and some of the telephone numbers. So that, thank God, is going to be a dead issue.

What we should be concentrating on is the real reason. Here we had a guy with a bloody regime, torturing thousands and thousands of people. We had terrorist training camps in Salman Pak, Ramadi, Samarrah, and other places that are now out of business. So that is the real issue over there.

Now, we have talked about the various troops and some of the things that they said, like Lieutenant Colonel Tim Ryan, who made the statement—it is a lengthy statement that I read before in these hearings. The last sentence is: "Many members of the media covering the war in Iraq are aiding and abetting the enemy." Having been over there and watched this, I believe that is the case.

Now, it seems to me that we are winning the war and losing the Public Relations (PR) war. The QDR accurately states that we need to effectively communicate U.S. actions. Now, I would ask you, Secretary Rumsfeld, is there anything specific that we are doing to try to communicate the truth back here?

Secretary RUMSFELD. The DOD has public affairs activities where they try to explain and discuss and elaborate on what the DOD is doing in every respect. In terms of trying to communicate back to the United States from Iraq, we have battlefield commanders who at least once a week are there discussing what is going on.

One of the most effective things is what you point out, is the 138,000 men and women over there in uniform who are emailing back and telling the truth about what they see. That is a powerful force in this country.

Senator INHOFE. That too, and Fuzzy Webster bringing back the 3rd I.D. after two tours over there and a 133 to 136 percent retention. These are success stories.

Let me get into another thing real quick because our time is so limited here. The Senator from West Virginia talked a lot about the

exorbitant amount of money that is being appropriated for our Nation's defense. You might remember, Mr. Secretary, years ago in your first appearance before this committee I asked you the question, in terms of a percentage of the gross domestic product (GDP) that is spent on defense, where do you think it should be. At that time, it was after the drawdown of the 1990s. It got down to 2.9 percent.

Your response to me was—and I am going from memory now, and I do not know how your memory has served you so well, because you came right up with it—that in the last 100 years it has averaged 5.7 percent of GDP for a 100-year period, and that was averaging war times and peace times. You said something to the effect somewhere around 5 percent.

Last year when we talked about it, you said maybe 4.5 to 6 percent. Is that still a general range where you think some day we may be and we should be?

Secretary RUMSFELD. Certainly if you think about it, when I came to Washington in 1957 and served in the 1960s in Congress in the Kennedy and Eisenhower period, it was 10 percent of GDP. When I was Secretary of Defense 30 years ago, it was about 5 percent. Today it is about 3.6 or 3.7 percent. So, it is not a large fraction of the GDP, and certainly this country is perfectly capable of spending whatever it is we need to provide for the security of the American people.

We also have an obligation to see that we spend the money efficiently and effectively, and we are trying very hard to get more bang for the buck.

Senator INHOFE. Thank you, Mr. Secretary. I could not agree more with you. Going through the 1990s, if you take just a static line and apply inflation to it, we actually went down by $412 billion, if you take the amount that the President had requested. Since the Bush administration went in, it has been above that line by $334 billion, plus that amount which is in the supplementals, but still not getting anywhere near. We are right now at 3.8 percent.

I just hope that we would be able to relook at this and say, what are we really supposed to be doing up here in terms of defending America? That is the number one thing we are supposed to do.

I would ask you, General Schoomaker, and you, General Pace, that in the event that we went back up to, let us say, 4.5 percent, that would be an additional $80 billion, what do you two think we should do with that if that were the case? My time expired a while ago. Thank you.

Chairman WARNER. Thank you very much, Senator.

Senator INHOFE. That is for the record.

[The information referred to follows:]

General SCHOOMAKER. The Army will use all available resources to meet its title 10 responsibilities to support four overarching, interrelated strategies:

a. Provide relevant and ready land power for the 21st century security environment;

b. Train and equip soldiers to serve as warriors and growing adaptive leaders;

c. Sustain an All-Volunteer Force composed of highly competent soldiers that are provided an equally high quality of life; and

d. Provide infrastructure and support to enable the force to fulfill its strategic roles and missions.

General PACE. A topline increase of any amount would provide additional funds no resource joint warfighting capabilities necessary to win the global war on terrorism, accelerate transformation of our legacy systems, and improve the quality of life of our servicemembers and their families. Of particular consideration, due to the extensive use our weapons systems and vehicles have experienced in Iraq and Afghanistan, additional funding would accelerate the repair and refit of our equipment to ensure that our forces remain combat-ready.

Chairman WARNER. Senator Lieberman.

Senator LIEBERMAN. Thanks, Mr. Chairman.

Mr. Secretary and Generals, thanks very much for your testimony. General Schoomaker, I do want to say first that I looked at that National Guard chart and I asked Senator Reed if he could read all the small print. He said to me that if I could you would immediately take me into the Special Operations Forces. I cannot, but I got the basic point.

I want to make three points quickly before I ask a question. The first, I cannot resist getting into the constitutional debate, the Iraqi constitutional debate. While it is not a perfect document, it is a remarkable accomplishment when one considers the context: three major groups in Iraq, one group, the Sunnis, dominant for decades, dominant not only in terms of their own status, but suppressing, brutally suppressing, the other two groups.

We, the coalition forces, overthrow Saddam and they enter into a constitution-writing process, which ends up with a product which is really ultimately much more unifying than divisive. In the context of that particular part of the world, an extraordinary, in fact historic, document.

It isn't perfect, and the Sunnis are particularly unhappy because they think there ought to be more power at the center, there ought not to be as much federalism, power to the provinces, as there is. Also, they are troubled by the allocation of resources or revenue from oil. Two legitimate concerns. But, now there is a promise that they will negotiate on it, all three parties will.

I agree with Senator Levin and everybody else, the involvement of the Sunnis is critical to the success of the military operation, because history tells us that insurgencies, terrorist insurgencies, do not go on if there is not popular support, and the Sunni insurgency will inevitably be weakened as the Sunnis come more into government.

I am heartened also by the fact that, as Senator McCain said, the Kurds and the Shias have agreed that the Sunnis will play a significant, at least proportionate, role in the new government, that is proportionate to the 20 percent vote that they got. So, there is work to be done. I do think that the constitution, considering the history there, is a remarkable step forward.

Second, on the discussion that you started out, General Pace, very important—Senator Warner took you up on it—about the nonmilitary aspects of our involvement there and that they will ultimately determine how we do as much as our military success because, Lord knows, we know that the enemy can inflict damage, but they never can beat us. We are making real significant progress training the ISF.

In this regard, I must say, though it does not relate to the three of you, that I was very troubled by the suggestions from the administration that there would not be increases recommended in reconstruction funding for the Iraqi economy. Look, you can cut and run economically as well as you can militarily. There is so much on the line for our investment in the economy, as the chairman has said, our investment in the capability of their ministries—yes, our allies in the Arab world and throughout ought to be giving more money. The fact is, we took a lot of the money we appropriated from this Congress for reconstruction and put it into security, understandably. A lot of it, unfortunately, according to the special inspector general, was stolen.

We cannot stop funding that non-military part of our involvement. We need more of it and I hope the supplemental will include it.

Third, the DOD budget has gone up, and the newspapers and the media overnight and today highlight that as the most significant increase in the Bush administration recommendation. We are at war and it would be bizarre and irresponsible if it did not go up. It is a hot war. People are dying, people are trying to kill us, not only our soldiers in the field, but us right here at home.

My gripe is not about the increase in the military budget. I worry that some parts of the budget we are actually not funding enough in the DOD. But also, because we have not asked the American taxpayers, particularly those of higher income, to do a little more, to pay a little more to support the country that allows them to earn the money they do in time of war, we are forcing the Department, both in the budget and in the QDR, to make resource-constrained, budget-constrained decisions. Incidentally, in the budget the President has given us, very badly underfunding a host of non-military parts of our budget: Medicare, education, et cetera, et cetera. That is an argument for another time and day.

But, that is my preface to ask this question. The budget you have put before us makes some significant and very positive increases in our preparations for what might be called irregular or nontraditional war—the increases in funding for special operations, for unmanned surveillance planes, et cetera. Combining that with the basic status quo increases in the weapons systems that we are funding, you are asking us to fund, that are more conventional and traditional, it seems to me puts us in an untenable position over the years ahead.

I hear this from a lot of people who analyze the budget, that unless we either increase defense spending dramatically in the next 5 years or we cut some programs, we are not going to be able to afford the budget that you put before us. I want to ask you to respond, if you would, to that question.

Secretary RUMSFELD. Every year the budget looks out 4 or 5, 6 years, and every year the adjustments are made as to what those years would look like. This is true, obviously, in business, just as it is with respect to a government budget, because the world changes, things happen, programs that are in a forward year defense plan do not work out and they stop because the technology is not there or something. Things that were not in there at all come on the scene and are injected into it. Predator unmanned aircraft,

for example, was still experimental. Now we have a sizable amount of money in there for Predator aircraft.

So, there is always going to be changes. It is hard to predict as to what will happen, but I personally have for years been aware that there has always been a bow wave, as they describe that big bite that it looks like is coming at us. Every bow wave has always been manageable. Everyone has always been able to deal with it.

Furthermore, we are undertaking a series of efficiencies in the Department that are giving us added capability. The number of ships in the Navy has gone down. We have almost doubled the number of days that ships are deployed, with the lower number of ships. I looked at a chart the other day from Buz Moseley, General Moseley, the Chief of Staff of the Air Force, and it showed the number of wings coming down and it showed the number of targets that are able to be tackled in a given day going up dramatically. The lethality and the ability to put power on a target in the Army, the Navy, the Air Force, and the Marine Corps today is vastly different from before.

We are shifting our weight over into the combat military as opposed to the institutional military. We are moving military people out of civilian jobs into military jobs, where they belong. There is a great many things happening, a lot of moving parts. But, the capabilities of the four Services, I think, are significantly increasing.

Senator LIEBERMAN. My time is up, but I would just say I hear you, and I remain concerned that we are not going to be able to fund the increases that you have quite correctly asked for to support our ability to face the irregular, nontraditional enemy we have and still support the conventional systems that we need. We have really got to have some enormous increases in our procurement effectiveness or we have to spend more money for defense to be able to afford all that you are asking for and I believe we need. In fact, I think we are underfunding the number of ships in the Navy and there is not enough money for long-range strike for the Air Force, and I am one of those who believes that we actually do need more people in the Army. I believe that we are only reducing the number for budget reasons and in the normal course if you had enough money you would keep the numbers higher because of the tremendous stress on the force.

I thank you for the answer.

Thank you, Mr. Chairman.

Secretary RUMSFELD. Senator, a powerful example. If you have 12 carrier battle groups and 6 years ago you were able to have 3 deployed and the ability to surge 2 out of 12, the rest are in drydock, the rest are refitting, the rest the crews are in training, the rest they are steaming back and forth going to or from the AOR. Today, with 11 carrier battle groups functional, we have 6 deployed and a surge of one. That is because of sea swaps: flying people out to their ships and not having to steam them back and forth.

It is because of keeping repairs and maintenance and the ability to get them moving faster. It is an expensive, a carrier battle group is an enormously expensive thing. Yet, to only have 3 plus 2 surge when you have 12 of them is not an efficient use of them. God bless Gordon England and Vern Clark, Admiral Clark as CNO, and Mike Mullen, the new CNO. They are now, I believe it is correct to say,

at six deployed and a surge capability of one, which is impressive and vastly more capable for our country, and not at an increased cost.

Senator LIEBERMAN. I thank you. Look, this is an important discussion, critical to our military future, and I look forward to continuing it with the Service Chiefs and the Secretaries as they come before us.

Thanks very much, Mr. Chairman.

Chairman WARNER. Thank you very much, Senator Lieberman.

Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman.

General Schoomaker, I remain so concerned about the strain on the National Guard, and I know that you recently met with the TAGs to discuss deployment of troops. But, I want to follow up on the conversation that you had with Senator McCain. I want to use my home State of Maine as an example.

Of the 2,000 members of Maine's Army National Guard, more than 1,600 have been deployed to either Afghanistan or Iraq. Of the approximately 400 troops remaining, more than 100 were identified just this past weekend for mobilization and the official alert order is expected within the month. That leaves fewer than 300 Maine Army National Guard soldiers remaining who are available for active duty service without violating the policy that restricts the total aggregate time a Guard member may be placed on active duty involuntarily to 24 months.

Maine's adjutant general has recently said to the press that Maine is going to be out of the fight in another year; we are simply not going to have any more soldiers that are available.

Now, during the past few years, as many as 40 percent of all the forces in Iraq were members of the Guard and Reserve. Today the number, I am told by the Army Liaison Office, is about 30 percent. But, it is still a significant component of our forces in Iraq.

If the experience of the Maine Army National Guard is typical, it appears that we are quickly approaching a wall where we will run out of Guard members with time left on their mobilization clocks.

Now, of course all of us hope that conditions will improve in Iraq and we will be able to draw down our forces. If the conditions do not improve, the heavy reliance on the Guard and Reserve is cause for concern. How do you intend to ensure that there are a sufficient number of troops available without further stressing the Guard and seeking a change in the 24-month rule.

General SCHOOMAKER. There is a lot to that question. Let me see if I can hit a couple. First of all, I am not sure that is a typical description across the force, but I will certainly look at it, at Maine, and find out exactly what the numbers are and what you are talking about.

Second, I would say that one of the reasons we surged National Guard presence over the last year, year and a half, was to provide time for us to restructure and modularize the Active Force. In other words, we deployed 10 National Guard brigades into Iraq over the last 18 months, buying time for us to modularize 101st Airborne Division and their four brigades, the 3rd Infantry Division, the 4th I.D., which now by the way, are in Iraq in a modular

formation, covering a lot more territory with a lot more modern organization.

We bought time, using the National Guard to do that. Now we must get the National Guard modularized, organized, and equipped and the way we want. We have an Army campaign plan that goes out over several years, that goes out over this program, this year and next year to have some of the highest levels of activities in this, and we are moving towards a predictable rotational model that will provide us 18 and 19 brigades from across the entire Army. I am talking about brigade combat teams now, that we can sustain our level of operation within the rules that we have.

The last thing I would say is the policies that you are talking about are internal policies. These policies are not in law. They are management policies the DOD set. We are trying to manage our Reserve components on a predictable and manageable level that basically deploys them, gives them about five times the amount of dwell time as it does deployment time. We want to deploy them on a one in six model. One year gone let us say, or for every month gone, 5 months back; a year out, 5 years back, that is the direction in which we are moving.

So, kind of in summary, I will look at and provide you an answer for your specific State, but it does not sound typical of where we are.

General PACE. Senator, if I may add to what General Schoomaker has already said. Across the 800,000-man Guard and Reserve, to date we have mobilized about 50 percent. You are rightly so proud of what the soldiers from your State have done. You are also right that when we first went into combat about 40 percent of the total force was Guard and Reserve. It is 30 percent now. The force that is deploying over the next year, from March of this year to March of next year, will be about 19 percent Guard and Reserve.

The size of the force is coming down and the need for contribution from the Guard and Reserve is coming down. In addition, that 50 percent of the Guard and Reserve that has not yet been mobilized, we are looking at 2 or 3 years. In the possibility that we may need to sustain today's level of forces, we are identifying those individuals whose training and skill set need to be changed so that they can do a military police function, for example, instead of artillery.

We are looking out as far as we can. But overall, what General Schoomaker has indicated, the Guard and Reserve has not only served us exceptionally well in combat, but they have also allowed the regular Army to modularize in a way that provides us much more combat capability on the Active side so we will have to rely less on the Guard and Reserve.

[The information referred to follows:]

Currently, there are 1,996 soldiers assigned to the Army National Guard. Of these soldiers, there are 307 soldiers currently mobilized in support of current military actions (Operation Iraqi Freedom/Operation Enduring Freedom/global war on terrorism/continental United States support).

Since September 11, 2001, 1,430 Maine Army National Guard soldiers have been mobilized and returned from Active-Duty. This does not include the 307 soldiers currently mobilized. Of the 1,430 soldiers mobilized, 3 have completed all 730 days of their mobilization time. Forty-eight have between 545 and 729 days of mobilization

time. Six hundred twenty-four have between 365 and 544 days, and 34 have between 180 and 365 days of mobilization time. There are 51 soldiers with less than 180 days mobilization time. There are 750 Maine Army National Guard soldiers with no mobilization time at all. Currently, there are no Maine Army National Guard soldiers officially alerted.

The apparent discrepancies with the numbers are due to various reasons. The most common reason is the turnover of soldiers since September 11. There are soldiers that were mobilized during Operation Iraqi Freedom I and Operation Iraqi Freedom II that are no longer in the Maine Army National Guard. They would also have new recruits and transfers in the Maine Army National Guard that were not there 3 years ago.

Senator COLLINS. Thank you.

Chairman WARNER. Thank you very much, Senator Collins. We are all concerned about that in our States likewise and I am glad you brought that up.

Senator Reed.

Senator REED. Thank you very much, Mr. Chairman. First let me associate myself with your remarks about the need to deploy our whole spectrum of national power rather than just military power. I returned from a trip just about 3 weeks ago from Iraq and that was my conclusion, which I also shared with the Chairman.

General Schoomaker, can you give me an idea of the total today in dollars of the recap and reset figures that you are looking at, the equipment you know you have to repair?

General SCHOOMAKER. Steady state, it is about $4 billion annually for reset.

Senator REED. For how long?

General SCHOOMAKER. As I have testified before, we anticipate that will be 2 years beyond the end of whenever this level of operation terminates.

Senator REED. Ten years, 20 years? I mean, that is pretty imprecise. Let me ask another question. What is the total amount of money for recapitalization? You must know that. How much are you going to have to spend to recapitalize the force today?

General SCHOOMAKER. As I said, we started with about a $56 billion hole. To totally modernize it is about $68 billion. Part of what we do when we reset is chip away at that recapitalization. Some of it is in the base budget, we are actually initially capitalizing the force. So it is about that magnitude.

Senator REED. We are talking about $60 billion, roughly?

General SCHOOMAKER. Roughly.

Senator REED. $60 billion. How much of that do you have in the current budget, the budget the President sent up yesterday?

General SCHOOMAKER. I will have to give you that for the record.

[The information referred to follows:]

In the Army's fiscal year 2007 budget, approximately $4 billion is programmed for recapitalization and depot maintenance. This funding includes $2.5 billion for procurement upgrades, $0.3 billion for operations and maintenance funded recapitalization, and $1.2 billion for depot maintenance.

Senator REED. Fine. Some of it will be in supplementals?

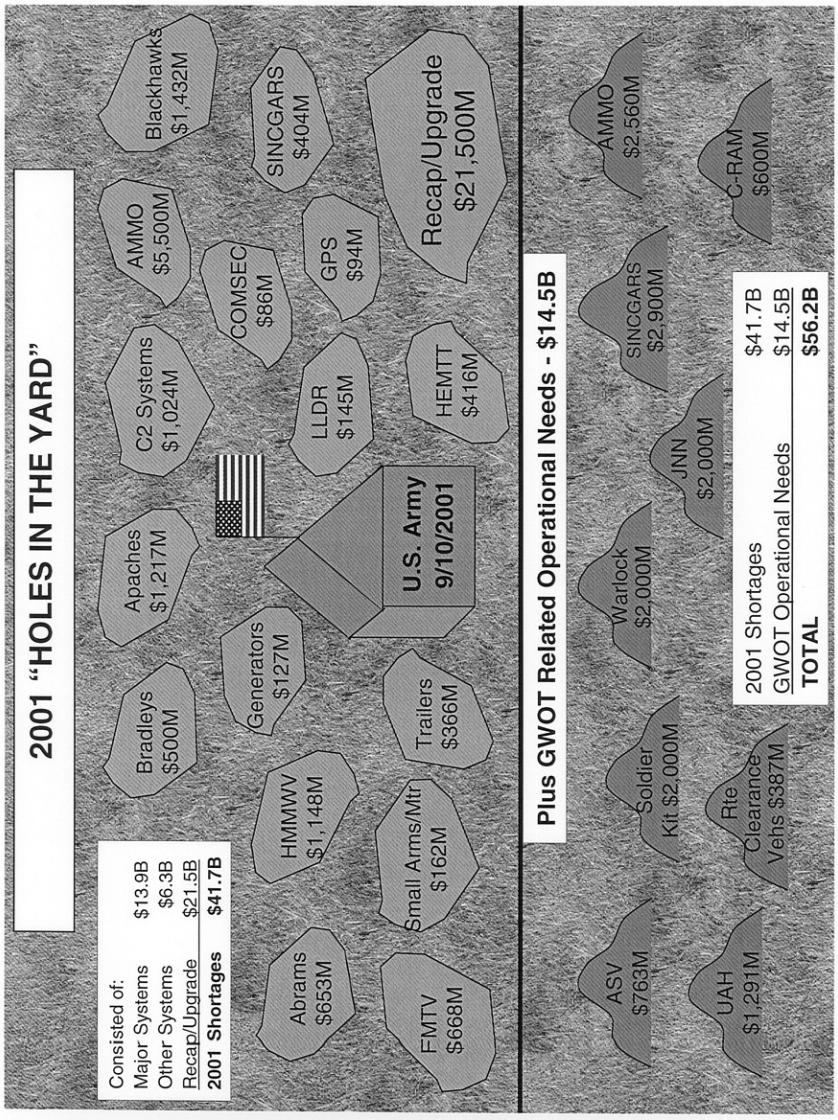
General SCHOOMAKER. About $4 billion annually of that is in the supplemental.

Senator REED. So at a $4 billion rate, $60 billion, my math is not that good, but that is around 15 years?

General SCHOOMAKER. If you are talking purely supplemental. But because we have increased our investment account in our base

budget, we are making our biggest moves not in the resetting of equipment that has been consumed, but in actually—in fact, I think if I could—where is the "Holes in the Yard" chart, the first chart?

[The chart referred to follows:]



Secretary RUMSFELD. I think there may be a little confusion between the word "reset" for resetting the force when they come back and "recapitalization" of the force because of the procurement holiday. It is not clear to me which you were talking about.

General SCHOOMAKER. I am talking to both. We are recapitalizing the force that has deployed and is returning and resetting it, replacing equipment lost or worn out in combat, with supplemental funding, because it is consumed in the war, and in our base budget we are capitalizing the force.

I use this chart right here, and I know you cannot see those numbers, but below there is about $14.5 billion of supplemental funding that were unprogrammed, unknowns, since September 11 that you have provided. Above there is the $41 billion worth of a lack of capitalization that was inside the actual base budget. It is that kind of a relationship that we are managing.

Senator REED. My concern is more of the total amount of resources that you claim today you need to either rehabilitate the equipment from service, active service, or to improve the equipment, recapitalize it.

General SCHOOMAKER. That is correct.

Senator REED. That totals about $60 billion, both?

General SCHOOMAKER. Let me back up and let us approach it this way. I have testified before you today that we need about $3 billion a year for the additional manpower that we are bringing on active duty. We need $5 billion a year to modularize the Army, which is the piece you are talking about, to capitalize the new structure in the Army, and $4 billion a year to reset the Army that has been consumed as a result of operations.

Some of that has to do with depot costs, some of that has to do with actual hardware that is being replaced on the deal. So if you talk about just the capitalization part, it is about $9 billion a year currently that is spread between the base budget and the supplemental.

Senator REED. You claim that you will need this supplemental funding every year that we are engaged in Iraq plus 2 years?

General SCHOOMAKER. As long as we are at this level of operations we will continue to have to do it, not unlike we did in Operations Desert Shield/Desert Storm.

Senator REED. Just a point. This is confusing and I think when you come up for the next hearing hopefully we can make it clearer. But, it goes to the point I think Senator McCain made. We know these costs are already accrued. We know we cannot avoid fixing this equipment, changing the force. To the extent that we are going to rely for X years forward plus 2 on supplementals, it is probably in this environment not the best budget strategy, and it begs the question, why do we not put this, these numbers at least, into the budget?

General SCHOOMAKER. Senator Reed, the numbers that I just gave you for the past 2 years, 2005 and 2006, were in supplemental funding. This year we moved the $5 billion, in the 2007 budget, for Army modularity, moves inside the Army's budget. The supplemental funding for resetting the force is going to be dependent upon the amount of the force that we deploy and the rate at which we operate and consume equipment and have to reset it.

Senator REED. Let me ask another question, stop-loss. How many soldiers are subject to stop-loss today, General?

General SCHOOMAKER. I will have to give you that for the record. It is typically several thousand.

[The information referred to follows:]

For the month of January 2006, the number of soldiers affected by stop-loss was: Active-Duty 8,826; Army Reserve 2,238; and Army National Guard 2,250; for a total of 13,314. This figure fluctuates monthly based on deployed strength and length of individual enlistment contracts.

Senator REED. Several thousand. It goes to the issue of retention, recruitment, personnel strength. How long do you think we have to maintain a stop-loss policy that prevents soldiers from leaving when their enlisted term is up?

General SCHOOMAKER. I think we will get better at that as we get the Army fully into the predictable force rotation model. The reason we are having to use stop-loss today is because we have to stabilize the forces at a time prior to their deployment and hold them stable through their deployment. We typically stop-loss at a preset time ahead of their deployment so that the soldiers that we train up with that unit deploy stay with the unit during their deployment.

Senator REED. Mr. Secretary, in September 2004 General Curran testified that, after his inspection was completed, that the DOD Inspector General (IG) was investigating the issue of ghost detainees. A year later, September 29, 2005, I asked you about the status of that investigation and you indicated to me, and I think probably fairly, that you did not have any information at that time and you would get back to me.

Subsequently, our inquiries have led us to the conclusion that no such investigation is taking place. Have you directed that no investigation take place or have you directed that the investigation be suspended or are you directing that the investigation go forward, but it is just taking an awfully long time, now almost a year and a half?

Secretary RUMSFELD. Certainly I have not directed that anything be stopped or not go forward at all. My impression is that there was only one investigation that was still open. Do you recall, General Pace?

General PACE. No, sir.

Secretary RUMSFELD. But, I will be happy to look at that this afternoon and give you a call this afternoon.

Senator REED. I appreciate that, Mr. Secretary, because again I understand that this is a complicated, difficult, and sensitive issue, but I think it is now almost 5 months since our last exchange and the information we have tried to obtain from your staff in the DOD.

Secretary RUMSFELD. You used the phrase "ghost detainees." We do not have any ghost detainees.

Senator REED. There are reports General Curran was looking at several years ago that prisoners were being kept in Iraq without proper registration under the Geneva Conventions.

Secretary RUMSFELD. Oh, okay.

Senator REED. In fact, there are newspaper reports that some prisoners were moved out of the country, moved back into the country, in a collaboration between the DOD and the Central Intelligence Agency (CIA). I specifically asked General Curran because this is a very important issue. He indicated after his exhaustive in-

vestigation that the task had been passed on or appreciated by the DOD IG.

I asked you 5 months ago and I received the answer that I read, which is basically: I will get back to you. Subsequent to that, we have asked the DOD and it does not appear that there is any active investigation going on. If that is the case, then I think we should make it clear and also give the rationale why this issue is not being fully investigated.

Chairman WARNER. Perhaps the Secretary can take this for the record if you wish.

Secretary RUMSFELD. I am told by staff that it is the CIA IG that is doing an investigation on this that is outstanding. I will get back to you with the facts this afternoon.

Senator REED. I appreciate that. But again, the impression I received from General Curran in open testimony was that this was part of his task to look into the operations of Defense personnel and that task was being taken over by DOD IG.

I would also suggest, since this was apparently some type of joint operation, that a CIA investigation might be looking at their operatives, but I wonder who is looking at DOD personnel.

Secretary RUMSFELD. We will find out.

Senator REED. Thank you, Mr. Chairman.

Chairman WARNER. Thank you, Senator.

Senator Ensign.

Senator ENSIGN. Thank you, Mr. Chairman.

General Schoomaker, could you comment on the recent study by the Institute for Defense Analyses (IDA)? I do not think anybody has brought that up. It has to do with the Army's transformation into the brigade combat teams. The study indicates that the number of maneuver battalions would be 20 percent below the number that was available in 2003. The study points out that there would be an increase of almost 11.5 percent at headquarters level while reducing the number of troops in the field.

When we get reports like that, that seem contradictory to what you are saying, it is important to at least bring them up so that you will have an opportunity to address some of the things that were mentioned in the report.

General SCHOOMAKER. I am not familiar with that report, but what you are saying does not sound logical to me. We have restructured the modular brigade combat team to—we used to have three battalions of three companies. We now have two battalions of four companies. So we have gone from nine maneuver companies to eight, but we have increased by 30 percent the number of brigades we have created.

When you go down to the maneuver company level—and what is not counted in that is the fact that each brigade also has a Reconnaissance, Surveillance, and Target Acquisition (RSTA) squadron, which is a cavalry-like squadron, of three maneuver units. So, you have actually moved the number of maneuver units from in the previous configuration from 9 to now 11, and you have increased the number of brigades. So any way you cut it there is more combat power available, plus it is more relevant combat power to the century we are in. We do not want to structure the way we were during the Cold War period.

So it sounds incomplete to me. I am sure the IDA does good work and so I would have to look at it and see.

Senator ENSIGN. I would appreciate if you could get back to me on your analysis of the report and some of the claims that they are making. It does not seem to be complementary to some of the things that you are trying to do. It is important when we have a credible source like that out there that is saying something that is not so complementary at least to see what your analysis is and see if we are going in the right direction.

General SCHOOMAKER. I want to assure you that we have looked at a number of different possibilities and we have modeled them, and we have brought the very best people we can together with the most experienced, to include a lot of critics, and have come up with what we believe is the best course of action across the board. It is not perfect, but it is more appropriate to the century and the kind of challenges we are going to have in the future. It is clearly different than what we were organized to do in the past.

But I remind you again that in the past we were also less whole than the formations that we are building today. So all the way around, I am very confident that we are on the right path.

Senator ENSIGN. Mr. Secretary, if you could address the way Congress does some parts of our funding for the military. Sometimes the military wants something, a certain product, that is made in a Member of Congress's district and they fight to get that into the military budget instead of fulfilling exactly what the military needs. The whole earmarking process is obviously what I am referring to.

Could you address the amount of money you think goes as part of that earmarking process? Do you have any idea? Have you looked at the amount of money that would actually be more efficiently used by the military, by the DOD?

Secretary RUMSFELD. Senator, I think the debate is over your phrase "more efficiently." Under article I of the Constitution, obviously, Congress has the right to appropriate funds and they can decide those things they wish to do. The President proposes what he thinks is best and then there is a debate and a discussion and a compromise and something happens in Congress between the two houses. Then it goes to the President and he either signs it or does not.

My recollection, and I could be wrong, General Pace may have a better memory, is that in the last year something like $10 or $12 billion has been taken out of other parts of the budget that we proposed and some $10 or $11 billion has been put into things that Members of Congress have proposed.

Now, to characterize that as less efficient it was not what we proposed, but in some instances Congress has inserted things into the budget that have led to capabilities that were important. In other instances, Congress has required that we continue doing things that we think we should not continue doing. It is a debate, it is an issue.

Are those numbers about right?

General PACE. Yes.

Senator ENSIGN. The reason that I bring that up is because there is always going to be the give-and-take and I understand that, but

I guess one of the things that disturbs me is when Members of Congress have put their own districts before the national interest, and we do see that sometimes. We see that with pieces of equipment.

It was brought to my attention just on one example, but I have many others on one piece of equipment that happened to have been made in the State of Nevada. That is the only reason it was brought to my attention, and it was the same type of product made by a different company in another State. The military wanted the product from the State of Nevada, but somebody a little more senior on an appropriations committee was representing a district where the inferior product was made and the military ended up getting that inferior product.

That is the kind of thing that we have to take a look at and try to clean up around here. We have to put the interests of our warfighter out there before we put the interest of our own congressional districts or our States.

Secretary RUMSFELD. Thank you.

Chairman WARNER. Senator, I certainly concur in those observations.

Senator Dayton.

Senator DAYTON. Thank you, Mr. Chairman.

Mr. Secretary, I certainly agree with what you said about our military, not only not being not broken, but also, I think your quote, battle-hardened and an enormously capable force. I was just 2 weeks ago in Camp Shelby, Mississippi, with over 2,600 Minnesota National Guard men and women who were training down there. They told me they are receiving the equipment they need, some of it on a just-in-time basis, but they have received it. They were told that they are now probably the best trained and equipped force in the Army, so that is to the credit of the training they have received. I want to pass that on and I think that is a real tribute to all of you and to them as well.

I think what we are trying to get at here is the sustainability of this level of effort in what you, Mr. Secretary, and the President have described as the "long war." I also think you are correct, and my memory is at least the same, that you did try to fund the ongoing military operations in Iraq and Afghanistan through the regular budget process and were rebuffed in that attempt, and that is what led to these continuing supplemental requests.

I also agree with Senator Levin that method obscures the present and the future costs of our overall military effort as it is likely to be continued in those theaters of war. I refer to others that have said that the 5-year budget that has been presented understates some of the weapons systems and the health care, and also underfunds some of the critical objectives.

Mr. Chairman, I would hope that we can be a beacon of truthfulness in present and future budgeting in this whole operation, which involves both the executive and legislative branches in some of these games and gimmicks to obscure the real costs of the various things that we want to do: cutting taxes, making tax cuts permanent, along with whatever—and since the military and the homeland security are what are driving the spending side of the discretionary part of the budget, if we understate these future costs

or, as Senator Inhofe pointed out and I concur, if we need to increase by some $50 to $80 billion a year to actually fund these, all these necessary programs, as well as continue our ongoing military operations around the world, if we understate by that order of magnitude we are talking about a huge difference. Conversely, if we do state it accurately I think we are going to inject a much-needed note of reality into the desire to continue these tax cuts, as Senator Lieberman pointed out.

I just hope we can factor these predictable continuing operations. Some of the questions about the Guard we can get to next week, as General Schoomaker said, about the costs. I see that there are 17,000 positions and we are going to need amending the budget to reflect that switch according to General Stanton. I do not know if that is included in this.

I hope we can get these numbers squared away, Mr. Chairman, so that we can be honest with ourselves, with the American people, with our colleagues, about what we do need to do, because we do need to do, in my opinion, everything that has been outlined here and we need to do it as well as possible. I hope you will assist us in that effort.

General Pace, I wondered if you could just be a little bit more specific about what constitutes your phrase "renorming" the health care? Specifically, does that mean that there will be additional costs for the individual Active-Duty soldiers, the National Guard men and women, reservists?

General PACE. No, sir. Thank you. There is zero impact on Active-Duty. The impact would be on retired under the age of 65. The Joint Chiefs' recommendation was that we take the legislation as enacted in 1995 and the cost to the individual in 1995 and renorm that to 2006–2007 numbers to be able to sustain for the foreseeable future the tremendous capacity and benefit that it provides to both active and retired, sir.

Senator DAYTON. I would agree with you about the value of that, the fact that they deserve the best. They certainly earn it, and their families as well. I think also in terms of retention of our forces. I know with the National Guard men and women, their families, that availability of top-notch health care is really vital, and also to private sector employers in terms of hiring National Guard men and women.

I hope those costs, again, are accurately reflected looking forward, because that is a huge factor. If we understate those and we fool ourselves, we do a disservice again to the whole enterprise.

Yesterday in the Post former Defense Secretary Melvin Laird claimed the QDR reduces the Guard and Reserves overall by more than 45,000 members, and it appears to be a polite way of starting downsizing. Could one of you, Mr. Secretary or Generals, comment on whether that is accurate or not?

General SCHOOMAKER. That is totally inaccurate. The National Guard's end strength remains the same, 350,000.

Senator DAYTON. At the end of the QDR timetable?

General SCHOOMAKER. It has not impacted them at all.

Senator DAYTON. All right.

General SCHOOMAKER. I will be glad to get into the other numbers for the record or in a separate session.

[The information referred to follows:]

We are not reducing the number of Reserve component soldiers in uniform. To date, the National Guard has only been able to recruit to a level of 334,000 and the Army Reserve 189,000 soldiers, both of which are below the authorized end strengths of 350,000 and 205,000 respectively. However, since December 2004, we have increased the number of Army National Guard recruiters by over 1,100, and the number of Army Reserve recruiters by almost 800, as well as providing funds for recruiting costs and advertising in the fiscal year 2007 budget to assist the Reserve components in meeting their recruiting goals. Finally, the Army will still program for up to 350,000 National Guard soldiers and 205,000 for the U.S. Army Reserve.

Senator DAYTON. I think that concludes mine. I yield back my time. Thank you, Mr. Chairman.

Chairman WARNER. Thank you, Senator Dayton.

General Schoomaker, yesterday you will recall that we had this very productive meeting with the Secretary of Defense and I raised that question about the end strength of 350,000 versus the actual status today, which is about 335,000? What is it?

General SCHOOMAKER. Yes, sir, it is 333,000, 334,000.

Chairman WARNER. Right. Congress wants to authorize, keep that 350,000, but you are only asking for the funding to go to 335,000 and try and escrow a fund to go from 335,000 to 350,000 if you can access the balance of those individuals. I cannot take up a Senator's time here, but we need to go back and clarify that and perhaps in the course of this testimony we can.

General SCHOOMAKER. Sir, as I stated yesterday, we want them to recruit to 350,000, too. If they do, they will be funded to that. There is no sense in funding what is not there. We can use that money to do other things and accelerate what we are doing.

Chairman WARNER. Understood.

Senator Talent.

Senator TALENT. Thank you, Mr. Chairman.

I appreciate you all being here yet again and continue to respect your leadership. You have always, Mr. Secretary, had a plan. It has always been plausible. You have stuck to it and defended it. I have not agreed with everything all the time, but I appreciate that leadership over the years.

I am going to pick up on what Senator Reed, Senator Lieberman, Senator Dayton, and to some degree Senator Inhofe were talking about, although without getting into overall fiscal policy for the government, because one of my concerns is that the tax reductions are driving the economic growth without which we cannot do any of this.

So, let me just go back to the issue of the top line over the next few years and go over a little history. For the first 4 years under your leadership, the administration sustained real, if modest, increases in the defense budgets as against inflation, and I think—I was concerned at the time that they may not have been enough because of the procurement holiday in the 1990s, for which you are not responsible, the increased personnel costs, they have gone from $92 billion in fiscal year 1999 to $109 billion today without end strength going up, and increased strain due to the war and mission creep.

I am sort of with Senator Inhofe that we need as a Nation to commit to increasing the percentage of GDP that we spend on defense. It is historically at a pretty low level.

Now, the last 2 budget years, at the end of the budget cycles the OMB has demanded from you $62 billion in reductions over the Future Years Defense Plan (FYDP). That was not based on your analysis of your needs and I think it was contradictory to the longstanding analysis that you had had. I think it has already either contributed to or resulted in reducing the number of *Virginia*-class subs we are planning on buying, DDX, LPD–17. We have an F–22 restructure that I think is at least partly due to that; now a proposed 45,000 decrease in Air Force personnel; and the Guard and Reserve reductions which may occur if they do not recruit up to the authorized strength.

Yet, as I figure it you still have $50 billion delta to cover over 4 years from 2008 to fiscal year 2011 as a result of those two OMB directives, $50 billion less than what 2 years ago you had projected you would need according to the consistent plan that you developed from the time you took over, and this is going to occur when that next generation of platforms is coming on line.

I have a concern. I want to ask you in your professional judgment whether we can reduce over the next 4 years by that $50 billion and also buy DDX, buy Joint Strike Fighter (JSF), buy F–22, design this new cargo tanker, meet the increases in health care costs that you are projecting, reset the force, which you talked about before, General, reverse the negative wedges in military construction (MILCON) which I see in the budget, and then any other unexpected contingencies?

Can you do that, will you be going further out on a margin of risk than you are comfortable doing? I say this—I think we all have a basic level of confidence that the men and women in America's military will under any circumstances complete the mission that we assign them. But the question is can we follow through with those $50 billion in reductions over the next 4 years without going further out on a margin of safety than you in your professional judgment would prefer to go?

Secretary RUMSFELD. Senator, this is a critically important question and all I can say is this: that the senior leadership in the Department, military and civilian, spent the better part of the year balancing risks, and there are always risks. There is present investment versus future investment. There is hardware investment versus research and development (R&D) types of things and the investment in the force, the personnel, to make sure you can attract and retain the people you need. They spent a lot of time, as General Pace said, hundreds of hours and they came out with a QDR that sets a course that they believe and we believe and I believe is the correct one.

The current top-line proposals were taken into account in that. The Joint Chiefs then proceeded to analyze a whole host of different scenarios and contingency plans and make judgments about them, and the conclusions are expressed in the QDR and in our forward year defense plan. Would everyone always like more? You bet, that is just realistic.

But, all of us have been around this business for a good many years now and there has always been a big so-called bow wave out there that you look like you cannot fund, and in fact it always becomes manageable. A little pain once in a while. You have to give up something, but that is true in any budgeting exercise. I feel pretty good about the budget we are presenting. I feel pretty good about the forward year defense plan. I do not know what the nature of the world will be out there and it may very well require changes.

Someone handed me a note saying during World War II we were spending 38 percent of GDP, Korea 14 percent, Vietnam 9 percent, during the Reagan buildup 6.2 percent, post-Cold War drawdown 4.8 percent, today 3.7 percent. So it is a relatively modest portion of the GDP that is invested in defense, and I guess it is a matter of balancing risks and making judgments.

Senator TALENT. I appreciate that and that is very fair. I think what is also fair to say is that all of us sitting up here and you have to have a level of concern that at some point maybe we can do it, maybe we cannot or maybe we are further out on that margin than we want. When we consider the level of additional safety and security that we could get just by sticking to where you were 2 years ago, and when you consider how much depends on the reality and perception of American power in the world, you certainly begin to see the case being made for buying that extra piece of insurance at such a low cost.

But, I appreciate your fair answer, Mr. Secretary.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much, Senator.

Senator Bill Nelson.

Senator BILL NELSON. Thank you, Mr. Chairman.

Good morning, gentlemen. I want to take just the opportunity to thank you, Mr. Secretary, for stepping up to the plate before Christmas, responding to the chairman and the ranking member, who had requested your policy position, at my request, regarding the testing and training area in the Gulf of Mexico off of Florida. We have this battle Senator Martinez and I fight ever day of the oil industry wanting to drill off of Florida's coast. Of course, we will fight that battle on the substance.

One of the overlooked key essential elements is the protection of the interests of the United States military in one of the largest testing and training areas, where you have virtually all of the Gulf of Mexico that is restricted space off of the State of Florida.

In your letter, and this is what I wanted to thank you publicly for, you basically said this line that DOD set up in 1981, called the Military Mission Line, longitude 86–41 north-south, comes basically off of Fort Walton Beach, Eglin Air Force Base, and it goes straight south. Your words in the letter were something to the effect, anything east of that line where there would be oil drilling it would be incompatible, was your words, with the mission of the military in the training and the testing.

Now, that having said, I wanted to thank you. I want you just to know that Senator Martinez and I in trying to pass legislation that will put this into permanent protection, for the next 5-year period we have given you an additional 25-mile cushion to the west,

so that in the course of the next 5 years should you decide that because of the weapons systems that you are testing that you need more space than the line that was set up in the early 1980s, that it would be available to you. Then after 5 years, if you decided that you did not need that area, then you could relinquish that additional 25-mile buffer.

I am not asking anything. I just want to tell about the battles that we are doing up here and what was the reason for the legislation that Senator Martinez and I filed.

Secretary RUMSFELD. Thank you very much.

Senator BILL NELSON. Furthermore, I would just echo some of the comments of my colleagues and tell you that comments that we are receiving from our National Guards are not the kind of comments that have been presented here, and comments that we are getting from our Governors are comments that are of considerable concern.

It may be one thing in a State where the National Guard is not considered so essential to the public welfare as is our State of Florida, where the National Guard is now recognized as someone that can move in in the aftermath of a hurricane and establish order pretty quick. It is interesting that the Florida Guard arrived about 4 days after Katrina into New Orleans. Remember, they are battle-hardened with regard to hurricanes because we had four hurricanes within a 6-week period the previous year, which is 2004. They know how to move in, establish order, assist the local government, set up supply lines, and get things in by truck and helicopter, if needed.

But, in what you are proposing, we are hearing everything from the cutting out of possibly 1,000, 2,000, 3,000 of our Guard. They are talking about removing our only airlift capability battalion in our Guard, which is the helicopter. That is about 300 people, but it is 22 helicopters that are essential to our mission in the aftermath of a hurricane, not even to speak of the value that the Guard is, as you all recognize.

The Florida Guard was in Iraq, first in. They were actually in Iraq before the war started. They were in western Iraq with Special Operations Forces. That is how good they are.

So as you evaluate that, I want you to understand the pushback that you are getting from us because of what we are hearing back from our people and from our Governors.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you.

Secretary RUMSFELD. Senator, I have been over this with General Pace and General Schoomaker and Secretary Harvey many times, and I would like General Schoomaker to comment, but from everything I have been told I am persuaded that the program that has been laid out will provide a Guard and Reserve that will be fully manned and fully equipped and, as the rebalancing of skill sets takes place within the Reserve component and between the Active and the Reserve components, the Guard will have the kinds of capabilities that will be vastly more useful to a governor and to a State in a domestic disaster of some kind than exist today. The long drought in the Guard with respect to the best equipment will end, and they will be equipped appropriately. That I cannot prom-

ise anything, but I would think it is almost certain that the Governors and TAGs will be very pleased with the program that has been put forward and the investment that has been committed.

General Schoomaker.

General SCHOOMAKER. Sir, I will say what I said again. Number one, we are listening to the Governors, the TAGs, to the National Guard, and we are going to reconcile all discomfort that we can in the plan.

Senator BILL NELSON. I heard what you said, General, in your opening comments and I appreciate that. You need to hear what we are hearing.

General SCHOOMAKER. Yes, sir, and I know what you are hearing, and we are listening to everybody that is doing it. The kinds of things that you are talking about wanting we are accelerating into the force and increasing the density of the things that you need to do exactly what you just said. We are accelerating helicopter fielding in the force, and more modern helicopters. We are accelerating engineering capability. We are accelerating security forces, like MPs and these kinds of things. Plus we are making whole the combat forces, and we have had this conversation before about the underequipping of your brigades in Florida and how we have to do better with that. We are addressing that.

I believe we need to continue the dialogue. I think we need to listen to everybody. We are committed to making it better, to making it right, and making it whole, to having a force that minimizes the impact to any State or to any local area. We are going to try to work this very carefully.

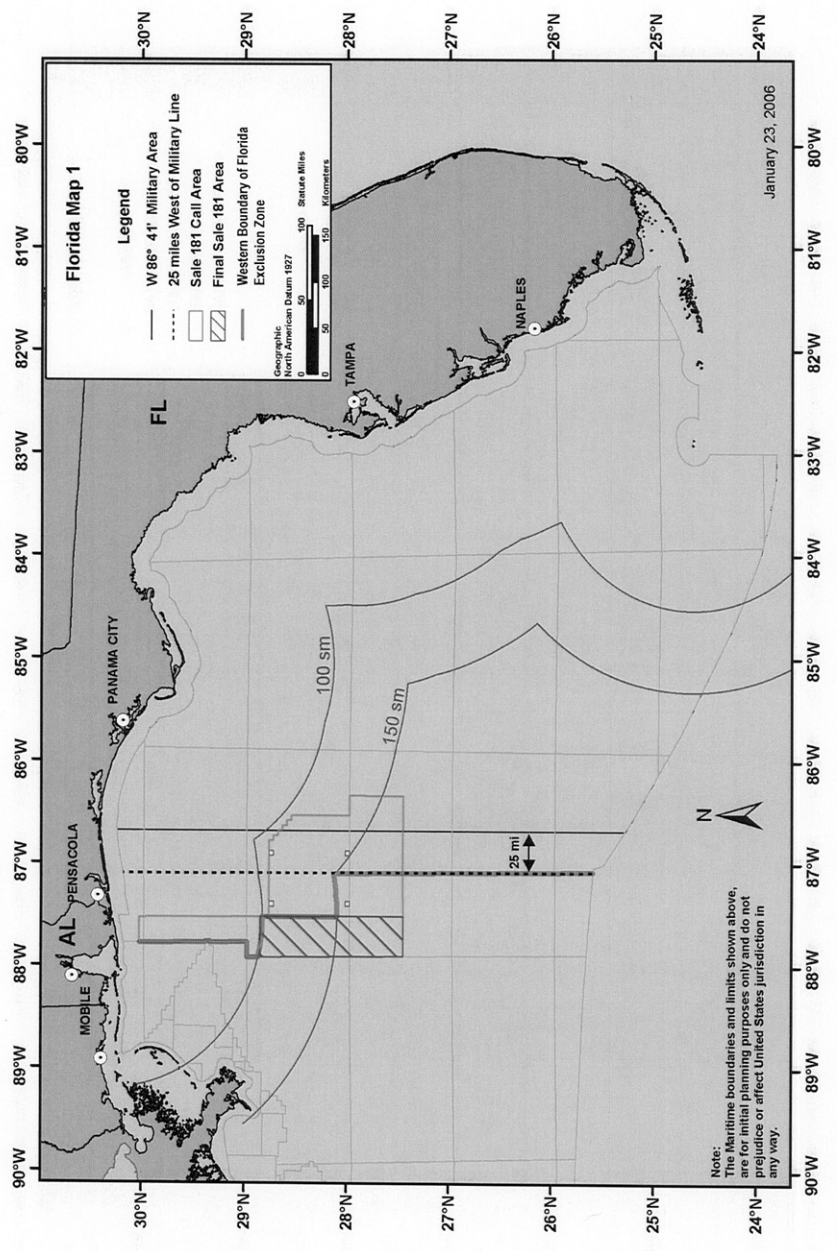
I will just say it one more time: We are not going to cut the National Guard.

Chairman WARNER. Thank you very much, Senator Nelson.

Senator BILL NELSON. Mr. Chairman, would you put the map of the Gulf of Mexico off of Florida in the record on the line, the Military Mission Line, that Senator Martinez and I have drawn and the 25-mile buffer?

Chairman WARNER. We will do that, and we thank you, General, because I think you are leaving the clear impression before this committee that you are listening to the Guard and if they come up with ideas that you feel are enhancing to your own studies you will accept them. Thank you.

[The information referred to follows:]



Chairman WARNER. Senator Dole.

Senator DOLE. Thank you, Mr. Chairman.

Let me say first of all that I have the greatest respect and profound admiration for the gentlemen who are seated before us this morning and for the men and women that they lead. You represent

all that is best in America: service before self, patriotism, and leadership. I want to thank you for your service.

I also want to underscore what has been said with regard to National Guard issues, and I am pleased that there is going to be continuing consultation and dialogue with the Governors and TAGs because I too have been hearing a great deal about concerns that do need to be more fully addressed.

Now, I want to ask a couple of more specific questions. Mr. Secretary, a 2005 Department of Veterans Affairs (VA) study was published in the New England Journal of Medicine recently and it showed that more than 26 percent of Afghanistan and Iraq combat veterans treated at VA hospitals were diagnosed with mental disorders. Many have reported symptoms of depression, anxiety, or post-traumatic stress disorder. We have the best-trained, best-equipped troops in the world, but are we falling short when it comes to mental health services when they return home?

This is especially important to me because, obviously, representing North Carolina, we have so many troops from bases in North Carolina who have seen combat on the ground. What are we doing to ensure that when our troops come home they have professional counseling that is readily available and that they know how and where to seek that type of counseling?

Secretary RUMSFELD. Thank you, Senator. Your State does indeed have a great many military personnel, Active and Guard and Reserve, and they do a superb job.

If you take the health care broadly from the war zone, it is better today than it has ever been. The lives that are being saved are just amazing. You have all seen that out there. The treatment when they return back to the United States and the rehabilitation process while they are still within the military handling, both from a physical health and mental health standpoint, is extensive and in my view, from everything I have been told, thorough.

There is a passover where some people then leave the Service, but get connected to the VA, and they have done a great deal to try to make sure that that passover takes place in a manner that is in the best interest of the soldiers. I do not have the data at my fingertips with respect to the VA, the information that they accumulate on the troops. Do you, General Schoomaker? Do you want to comment on it at all?

General SCHOOMAKER. Sir, I do not have the specific details of it, but I will tell you that this process starts with our reintegration process early in the return from deployment, and there is increased recognition that the mental health side of this—in other words, that we have to address more than just the physical health of the soldier. We have to work on the reintegration of the soldier, sailor, airman, or marine back with their family upon return, and there has to be encouragement to seek out and to use the help that is available. All of the indicators are—and I would be glad to get you some statistics—in the Army that we are having increased usage of counseling and mental health counselors and other follow-up kinds of services while on Active-Duty, and then of course post-Active-Duty there is this handoff to the VA, et cetera, as we go.

My view is the trend is positive. It probably will need to continue to improve, but I believe that we have done very positive things

over the last several years in recognition of this problem and it is paying off for us.

General PACE. Senator, if I might add?

Senator DOLE. Yes.

General PACE. We do have pre-deployment screening. We have post-deployment screening. We have 3- to 6-month follow-up after the post-deployment. Equally important I think is the focus on the families, because there are reintegration problems with the families, and there are some terrific organizations now that have been stood up both inside the military, but also through just groups that want to help, that allow us to provide the screening and assistance not only to the active duty member, but to the families if needed.

[The information referred to follows:]

We cannot comment on Department of Veterans Affairs (VA) workload for post traumatic stress disorder (PTSD) or research on the prevalence of combat stress disorders among VA patients. Army surveys of soldiers deployed during Operation Iraqi Freedom indicate approximately 15–17 percent will experience PTSD and nearly 23 percent will experience other behavioral health problems.

The Army's Deployment Cycle Support Program is designed to help soldiers and their families cope with the stress of deployment as well as the reintegration process and are briefed on what stressors to expect upon homecoming, the common symptoms of post-deployment stress disorder, ways to ameliorate these symptoms, how to recognize when further professional help is needed, and how to access treatment services.

All soldiers redeploying from overseas are required to complete a post deployment health assessment before leaving theater to screen for PTSD, major depression, concerns about family issues, and concerns about drug and alcohol abuse. The health care provider reviews the form, interviews the soldier as required, and refers the soldier to a behavioral health care specialist as required. The Army is currently implementing an expanded Post-Deployment Health Reassessment of global health with a specific emphasis on mental health. This assessment is performed 90 to 180 days after redeployment.

The Military OneSource Program offers 24/7/365 telephonic support and referral for six or more confidential counseling sessions for soldiers and their family members. Military OneSource is not designed to offer psychotherapy, but does maintain lists of military and civilian mental health providers as a referral resource for soldiers and families.

Despite these screening and outreach programs, we remain concerned about shortages of mental health professionals in civilian communities. We continue to work closely with the TRICARE management activity and TRICARE regional offices to ensure we have a robust network of mental health providers to care for our soldiers and their families.

Senator DOLE. Thank you.

General Pace, in your submitted testimony you point out that during World War II, Korea, Vietnam, and Operation Desert Storm, 24 to 30 percent of Americans who were injured in combat eventually died from their wounds. Today, 9 of 10 troops wounded in Iraq and Afghanistan survive. What advances in battlefield medicine are responsible for this vast improvement in the survival rate and, more importantly, where can we do more and what funding are you requesting to further improve battlefield medicine for our injured troops?

General PACE. Thank you for pointing that out, Senator. We have an incredible professional medical team that is part of our Armed Forces. The biggest thing we have is exceptionally well-trained doctors, nurses, corpsmen, and medics. Those who provide inside that first golden hour the medical treatment on the battlefield to get the injured person to a waiting helicopter, to get them

to the hospital in country, that allows them to stabilize that patient.

Examples: In Vietnam it took on average about 45 days, 40 to 45 days, to get a wounded soldier or marine back home. Today it takes less than 4 days from the time they are wounded to the time they are in the world-class facilities that we have here at home. In the process, they stop at a world-class facility in a place like Balad in Iraq and in Landstuhl in Germany.

Those precious hours of getting to the expert medical doctors that we have on scene both forward and here in country make all the difference in the world.

I do not know the exact figures that we have requested on the medical side of the house, but I do know that our medical professionals continue to seek every possible advantage in saving lives.

Senator DOLE. Thank you.

Mr. Secretary, the QDR has identified the importance, of course, of Special Operations Forces. We will be increasing Army Special Forces by one-third, augmenting our Navy Sea/Air/Land teams. I was particularly pleased that four of the five components of the newly formed Marine Special Operations Command (MARSOC) will be based at Camp Lejeune, North Carolina.

How do you envision MARSOC operating within the current special forces command structure and how will it be funded?

Secretary RUMSFELD. Do you want to go ahead?

General PACE. I would be happy to, sir.

Thank you, Senator. There are several elements of the MARSOC. One will be the one that will be stood up in February as the command itself forms, February of this year, and that will be the companies that are formed to help train other countries' militaries to do their job. The other part will be the 2,400 marines who will be trained to special operations-level skills, who will deploy with our Marine Expeditionary Units aboard amphibious ships, and while they are aboard those ships will be part of the special operations chain of command. They will be inside the Marine Corps structure, but they will be working specifically for General Brown, Special Operations Command, through the theater commander, and through the theater commander's special operations commander.

The Marine Corps will have the ability to do more training of indigenous personnel, but also to be able to reinforce the very capable Special Operations Forces that our country has been fortunate to have for several decades now.

Senator DOLE. Thank you very much.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you, Senator.

Senator Akaka.

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

Mr. Secretary, I want to wish you well this year in all that you do. Mr. Secretary, the DOD has made a commitment to investing in new equipment and technology for the forces. I am concerned that this will come at the expense of maintaining technology currently in use. Can you assure me that expenditure of funds necessary for DOD's planned technology transformation will not undercut efforts to implement sustainable corrosion prevention policy

which is necessary for the upkeep of military equipment and infrastructure?

Secretary RUMSFELD. I think we can, Senator. All of the senior people in the Department, military and civilian, spent an enormous number of hours balancing the investment proposals and we believe we have found a proper balance where we maintain the capabilities we have, where we invest in our personnel and being able to attract and retain the people we need, investing in the research and development necessary to advance the force in the future, but at the same time assuring that we have both the ability to deter and defend from a conventional standpoint and to deter and defend, to the extent that is possible, against asymmetric or irregular warfare challenges.

No one can say with perfect certainty that we have done it exactly the right way and my guess is next year you will find we will make changes in the forward year defense plan because we will have learned more and the experiences we will have had will have informed us in a way that will enable us to have a better insight.

Senator AKAKA. Mr. Secretary, you have argued that the Armed Forces must adapt and change in order to win a long and irregular war outside of the scope of conventional warfare. At the same time, recent successful operations in Afghanistan, Kosovo, and Iraq have demonstrated the effectiveness of conventional warfare tactics. Given the high costs associated with transformation, would not routine modernization and systems maintenance be sufficient to maintain the superiority of America's defense for many years?

Secretary RUMSFELD. Our answer would be no, that first of all, the cost of failing to be able to deter and defend against whatever challenges come up, the cost to the country would be enormous. Second, all one has to do, it seems to me, is to compare the challenges we face today to the challenges of the Cold War. In the Cold War there was the Soviet Union. It was large, it was expansive, it was purposeful. We could understand it, look at it, see it, know where the armies, navies, and air forces were.

Today the challenges are quite different. They are networks, they are people operating viciously against us and against our friends and allies around the world, sometimes in countries that we are not at war with, sometimes at the seams between countries, that make the task very complex. We simply have to shift our weight from being able to finish a task by capturing or killing a target and shift it over towards being able to do a better job of finding the targets and fixing them in a way that enables us to use that knowledge to finish properly.

I think just hanging onto what we have would leave us with an imbalance in the ability to finish and too light on the ability to find and fix.

General PACE. If I might add, Senator. We have taken over the course of this last year the process for the 2007 budget plus the forward year defense plan plus the QDR and the force that will be available to the Nation over the next 20 years, and then done a large number of iterations of war games that take war plans from today, war plans that we believe we will have in the near future, possible threats from the future, and mixed and matched those in the most difficult way we could, thinking through the most difficult

scenario for the Marine Corps, the most difficult scenario for the Army, et cetera, and wargamed against that, and in every case this process that we have been through and the program that is being laid out has been sufficient to take care of any potential adversary we can envision on the horizon.

Senator AKAKA. Mr. Secretary, in its December 2004 report the GAO reported that key practices for successful transformation of the Armed Forces include leadership that sets the direction and assigns accountability for results. Mr. Secretary, can you tell me what, if any, formal mechanisms have been or will be put into place to ensure that clear and consistent priorities are set amongst the key organizations involved in the transformation, and that the appropriate resources are allocated to these priorities?

Secretary RUMSFELD. Senator, one of the outcomes of the QDR was to establish a set of tasks and priorities. The Deputy Secretary of Defense, Gordon England, is assigning a series of tasks for people to monitor, to try to determine the pace at which the execution is taking place and the success or lack of success that is being achieved in tracking those priorities that came out of the QDR.

So there is a process in place. Needless to say, that does not guarantee that it will work or that everything will happen the way one would want. But we are serious about it and a great deal of time was put into it. I know that, working with General Pace, the Deputy Secretary believes that they have put in place a process that is appropriate.

Chairman WARNER. Thank you very much, Senator.

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

Chairman WARNER. Colleagues, I have committed to the Secretary to see that he has other engagements beginning at 1 o'clock. So we are going to be able to finish if everybody will stay within their times, and we will have Senator Sessions at this time.

Senator SESSIONS. Thank you, Mr. Chairman. I would like to join with you on this day to express my sympathy to the family of Coretta Scott King and to recognize her contribution to making our country a better place. She is a native of Barry County, Alabama, and was with Dr. King and Rosa Parks at the bus boycott that was really the event that began to alter the legalized discrimination that existed in our country, and we are all better for her life, and we respect her and would note that today.

General Pace, I have just been thinking about that remarkable statistic that you or General Schoomaker mentioned, that the 3rd Infantry Division is at a 131 percent reenlistment rate, far above their goals and far above what we would normally see. I think some of that, from my experience, is the concern and leadership provided by the officers, who seem to be so committed to their soldiers in extraordinary ways. I know the Marines likewise and the other Services have, too.

The highest numbers come from the units who have served in Iraq and have come back from a tour in Iraq or Afghanistan. Would you share some thoughts on what it is that having our young soldiers feel good about their service and choosing to reenlist?

General PACE. Sir, thank you for the opportunity. First of all, they are proud of what they are doing. They feel good about 27 mil-

lion free Afghan people and 27, give or take, million free Iraqis and the opportunity to serve our country and to provide freedom for our own country. They know that what they are doing is important because they have been doing it. They are on the ground. They see for themselves.

They also appreciate very much the collective leadership of this country, both inside and outside the DOD. When Members of Congress provide the kind of resources you do, that is a very loud message. When you go visit them in the field and listen to their stories and come back and take action, when you visit them in the hospitals, when leaders at every level in uniform and in civilian clothes in the Department do the things that we should be doing to take care of them, that sends a very loud message.

It is true not only for the troops who are serving currently in Iraq and Afghanistan. I had the privilege of being in Korea last Friday for the change of command. I had the opportunity to go to a tank gunnery range in Korea, and 29 soldiers from 2nd Infantry Division were waiting for me to reenlist them. We did it in a platoon formation. It was fabulous—first term reenlistments, second, and third.

The fact that they value their own service to the country and, equally important, that the country tells them how important their service is is a huge plus in their decisions to stay.

Senator SESSIONS. I think you are close to that. I think that you are close to the truth on that, because we certainly have utilized them, we certainly have asked them to go into harm's way, we certainly have asked them to serve under difficult circumstances. They are not coming back whining and complaining. They are reenlisting. It is really remarkable, and I do believe that from the leadership on down to the lowest recruit they seem to be excited about their mission, and that is something that we can take pride in.

General PACE. Sir, I forgot one very important factor. Please excuse me, if I can add it because it is important. That is the families of these servicemembers. They are serving this country, and when a servicemember comes home and their family tells that servicemember they are proud of them for what they are doing, they support what they are doing, they are willing to continue to support them in the future, that makes all the difference in the world.

So we reenlist families, not just soldiers, sir.

Senator SESSIONS. It would be shame on us if we break faith with these young people. They have given their all. They put their life on their line. Many of them have lost their lives and been injured. I do hear them say their number one concern is Congress, that we might somehow screw up what they have sacrificed to achieve, and I think it is a challenge to all of us, I really do.

I would like to follow up a little on the Chairman's comments. Secretary Rumsfeld, you understand your role. First, let me say how much I appreciate your leadership. You come to this Secretary of Defense job at this critical point in history with unprecedented experience in government and as a former Secretary of Defense, and you have challenged this Department repeatedly. We are not only fighting successfully a war, we are also transforming the military at the same time.

But, we are asking you questions about the government of Iraq. We are asking you questions about oil production and turning on the water and creating a new government and the constitution and all those things. I know you are not going to be critical, but is it not true that this is a sovereign nation that has been created and that our formalized relationships are now through the ambassador and through the State Department, and the military is a supporting part of that, a critically supportive part of that? How is that relationship going and are there are any things that we could do to enhance it?

Secretary RUMSFELD. Senator, thank you very much. I do not think the relationship could be any better between the ambassador and General Casey, between the embassy team and the military team, Multinational Force. They are together continuously. When we have National Security Council meetings or principals meetings, they are almost always both sitting there together next to each other.

It is critically important that we be well-linked in Washington for this task because it does require all elements of national power. It is also critically important that they be well-linked in the field and they are, and it is going exceedingly well, I believe.

Senator SESSIONS. I would just conclude by noting that I know General Bowen, our Adjutant General, will not hesitate to express his views on what is best for America and our Guard. General Schoomaker, I appreciate your listening to that. I do believe you are committed to seeing that it is better and more strongly supported than ever, and I do think that is important.

My time has expired.

Chairman WARNER. Thank you, Senator, for that strong endorsement of our military.

Senator Thune.

Senator THUNE. Thank you, Mr. Chairman.

I wanted to again thank our witnesses today, our panelists, for their extraordinary service to the country, and also associate myself with some of the comments that have been made earlier by some of my colleagues about the importance of making the necessary investment to keep America strong. We need to ensure that you have all the resources at your disposal to complete the missions that this country asks you and the young men and women who serve under you to complete. I believe as well that I would much rather see us investing in technology as we look at the future and the challenges that we are going to face around the planet, and you look at Iran and hot spots in Asia. We just flat have to make sure that this country is prepared for any of those challenges. Militarily, we are looked to around the world as the leader and the expectations are high, and if we do not have that as a priority, if we do not make the necessary commitment we need for the defense of this country and to the military people who serve it, everything else we do around here, is conversation. It is just that important. I would associate myself with many of the comments that have been made about investment and also about the fine work that our troops are doing.

In that vein, I guess I have a couple of questions with respect to the future and the completion of the QDR and looking at some

of the observations that are contained there. There are some platforms as we look down the road that put us in a position where we are investing more in technology. I would much rather invest in technology than in American lives.

One of the things that the fiscal year 2007 budget will focus on is expanding missile defense to protect the United States against intercontinental and theater ballistic missiles. I guess I would be curious to know what the developmental status is of the airborne laser (ABL). It is a platform that I had an opportunity to look at out at Edwards Air Force Base.

General PACE. Sir, the ABL program now has been made into a program, proof of concept to take it out to where it can function to do its job, see then what size that is and what the cost is, and then determine the proper way forward. But, the current program will take the laser to the point where it can do its mission and then determine from there what we should do next.

Senator THUNE. One of the other questions I had with respect to maintaining America's military superiority is, I think, investing in air dominance and in global strike capabilities. I am curious to know what your views are about the role that the B–1 bomber will play in performing that mission and ability to fly long ranges, the flexible payload that it possesses. That is something obviously I have a particular interest in because of my State, but I am also in a more global way interested in long-range strike and what some of the priorities there are going forward. So, Mr. Secretary or General Pace, anybody who would like to comment on that?

Secretary RUMSFELD. The B–1 bomber is considered a key part of our air dominance and there to my recollection have not been significant proposals made to adjust it in any way. So, we look forward to having it continue as a critical part of the Air Force and of the joint warfighting capability of the Department.

Senator THUNE. Thank you, Mr. Chairman, and I yield back the balance of my time.

Chairman WARNER. Thank you very much.

We will now have Senator Cornyn.

Senator CORNYN. Thank you, Mr. Chairman.

Gentlemen, thank you for sticking in here with us. We are almost through. One of the priority areas of the QDR was defending the homeland in depth. My question really relates to how the Federal Government integrates its efforts to protect the homeland through the interaction of the DHS and the DOD. Recently we had an episode in Texas where there were some reports of border incursions by, it was initially thought or suspected to be members of the Mexican military. That matter is still being investigated. It appears that it could well be drug cartels operating along the border region. We are looking into it and we do not want to jump to any conclusions about it until we have the facts.

But, as a result, I called General Riojas down at Joint Task Force North, and also placed a call to Admiral Keating at Northern Command (NORTHCOM), so I could understand how we were using our national assets, whether they are within the DOD or DHS, to make sure that we protect ourselves along the border. I am sure you will agree with me that the terrorist threat that we have in the world today will exploit vulnerabilities where they find

them, including our porous border, which is a matter obviously of grave concern.

So I wonder, Secretary Rumsfeld, if you would share with us your thoughts on DOD's supporting role to the lead role played by the DHS. Also, give us some reassurance and perhaps the American people some reassurance that we are using all of the assets that we have available to us to defend the homeland, including to secure our border and protect ourselves against any threats that may come at us.

Secretary RUMSFELD. Thank you, Senator. The QDR process over the past year worked closely with the DHS, recognizing that defense of the homeland is a critical responsibility of the Government of the United States. As you pointed out, the DOD has a mixed role. We have the responsibility for the Operation Noble Eagle activities with respect to the air and we have responsibilities that we coordinate with the Coast Guard with respect to varying distances on the coasts. The DHS, of course, has the borders and from time to time the DOD has been asked to assist in support of various things, but it is only in support. The last, most recent one happened to be on the Canadian border, as I recall, where we were asked to provide some capabilities for a specific activity and did so.

Another example might be the Hurricane Katrina, where I guess the National Guard had something like 50,000 people in a relatively short period of time available and the Active Forces had 22,000 available in a relatively short period of time, at the request of the Government. We do have a lot of capabilities that are available, but in almost every instance it is in support of one other department or agency.

Senator CORNYN. In relaying to you the reports that I have read about and heard of the source or the reasons or the people responsible for the incursion, I did not want to suggest that I have reached any conclusion or that we really know what the reason is. In that vein, I would say that the reports I am getting is that our cooperation, mil-to-mil cooperation with Mexico, is improving, and I think that is very reassuring news.

Let me just, before I close here on one final note, just congratulate you and really applaud the Department for setting up the Joint IED Defeat Organization and committing additional resources to this threat. It is absolutely critical that we continue to do everything that is within our capacity to defeat the use of IEDs. We all know the sort of ravages that it has resulted in and the lives and the injuries sustained by our men and women in uniform.

Finally, let me just say that I want to congratulate the Joint Chiefs, General Pace, you and the other chiefs, for a letter that you wrote on January 31, 2006, to the Washington Post condemning a cartoon that had been run in the Post which depicted a military person with amputations. They used a bad attempt at humor, but one that really trivialized, I believe, the sacrifices being made by our men and women in uniform. We are a country that believes strongly in the freedom of the press, but I think we believe just as strongly in the importance of identifying as in bad taste and even a demoralizing sort of use, attempt to use humor that such a cartoon depicted.

I want to say that we believe in the freedom of the press, but we believe that we ought to defend the integrity of our military and particularly the reputations of those men and women who have sacrificed so much so that we can be free. Thank you for standing up for them and standing up for all of us in the process.

Chairman WARNER. Thank you very much, Senator.

Mr. Secretary, I am delighted the Senator brought up the DHS. All reports that we received are that you have an excellent working relationship with that department and the men and women of the Armed Forces, the American people should know, are standing by to support, as you carefully underlined. The National Guards of the several States, the other entities in the several States, we have 52 highly-trained teams under your jurisdiction to respond, one in each State, should there be a WMD or other type of weapon used that requires special equipment.

NORTHCOM, I visited with the Admiral here this past week—as you say, out in Colorado is constantly looking at the entire Nation, the lower 48 as well as Hawaii and Alaska, to monitor any incursions or other threats to this country. Quite a considerable amount of your assets were utilized to secure the Nation's Capitol for the State of the Union and other major events. Quietly you are backing them up. I really want to credit your Department for that, because the American people are gravely concerned about the security here in our Nation.

Senator Graham.

Senator GRAHAM. Thank you, Mr. Chairman.

I would like to associate myself with Senator Sessions' comments in this regard, that the military has performed above and beyond the call of duty. If you really wanted to help your country as a young person and you are wondering, what could I do with my life to make a difference, join the military. Now is the time to stand up to the forces of evil and wear the country's uniform. I assure you, you will get more out of it than you gave. I would like to associate myself with that idea, that those that are serving really are making a difference.

Mr. Secretary, thank you for sending over the nomination of General Jack Rives to be the Judge Advocate General (JAG) of the Air Force. I think I got it today. I know him. He is a great officer. It has been held up for different reasons for a while, but it is coming over. I want to thank you and the Secretary of the Air Force for sending him over to be the new JAG of the Air Force.

Senator Sessions said something too that was very important: Shame on us if we let the troops down, as far as funding, as far as support. This budget is robust and these are robust times, so I am completely supportive of what you are wanting to do.

I want to acknowledge something that has happened with my ranking member and my chairman, about a problem that I think we need to look at as to whether or not we are letting the troops down. The chairman has expressed concerns about a two-star general—I think it is General Geoffrey Miller—invoking his Article 31 rights when he was called to a courtmartial to testify in a case involving two enlisted personnel who are being accused of abusing prisoners through the use of military dogs.

I have been concerned about this for a very long time. General Miller was the former Deputy Commanding General for Detention Operations for Iraq. He was sent to the region I think at the request of General Sanchez to try to get a hand on the insurgency and get good intelligence. I can understand that.

Colonel Pappas was the commander of the prison, and there are two stories out there that cannot be reconciled in my opinion. One story is that Colonel Pappas was told by General Miller how to use the dogs in interrogation to get useful information. General Miller says he only mentioned the dogs in terms of perimeter security.

We have two enlisted people facing courtmartial. How that story is resolved matters, and the legal proceedings are going to go forward and it is up to the military legal system to handle these matters at that level. I think it is important for this committee, because General Miller came before our committee to testify, that we get to the bottom of what happened. Shame on us if we allow a story to go forward that is not true and the two dog handlers are paying the price.

I look forward to those hearings.

Chairman WARNER. Senator, I have indicated to you, in consultation with the ranking member, that this committee stands by to address that issue at such time as it is the judgment that we will not in any way interfere with the normal course of the Uniform Code of Military Justice (UCMJ) in addressing this question.

Senator GRAHAM. I want to congratulate both you and the ranking member for having that attitude. There will come a day. It is not now, but there will come a day.

Senator LEVIN. If the Senator would just yield so I could add my support for his point. The lack of accountability for those above the enlisted levels here has been stunning, unacceptable. The inconsistencies have been unacceptable. I commend Senator Graham and the chairman of the committee for their determination that there be some justice brought to bear here and that there not be an injustice perpetrated on enlisted personnel in any way in these courtmartials. They should have access to all the information which can help their case. That is what they are entitled to. That is what our system of justice is all about.

I just want to commend you, Senator Graham, and our chairman for the statements that you have made and, as the chairman knows, I am taking on a responsibility of conducting some additional factfinding also in this area. I think it is important for the reason you give, Senator.

Senator GRAHAM. Thank you both.

Now, Mr. Secretary, I have a lot of confidence in the legal system in the military, by the way, a tremendous amount of confidence. I want people who have heard my comments not to believe for a moment that I do not think these people will be treated well. We have good lawyers, we have good prosecutors, good defense attorneys, and we have fair-minded juries. But, we do need to get to the bottom of an inconsistency.

The growth of military health care. This is a great budget, but, Mr. Secretary, I want to compliment you on bringing reform to the table. These are not pleasant topics to talk about. I will soon one day, if I can get 3 more good years, be retired, and when I get to

60, if I ever live that long, I will be eligible for my Reserve retirement. I am sure that, of all the people you will pay as reservists, I will probably deserve it the least, but I am going to take it.

But, what I am willing to do as a reservist one day is to contribute a little bit more when it comes to my health care, because you are having to choose between health care premiums, guns, bullets, airplanes, and ships. The TRICARE system that our chairman helped design is a wonderful military health care delivery system. The Guard and Reserve now have an opportunity to be part of it. That is a long-overdue reform. I appreciate what we have been able to do together on that front.

To my colleagues who are worried about budgets, the premiums for those under-65 retired community have not changed since the inception of the program. The military health care budget is doubling every 10 years. It will be 12 percent of the entire military expenditure soon.

Mr. Secretary, Secretary England, and others have come over to my office, and I want to applaud you and thank you for putting on the table some new ways of looking at military health care and, quite frankly, some new choices.

Could you comment on what you think is necessary for us as an institution to get a handle on the growth of military health care?

Secretary RUMSFELD. Senator, thank you, and thank you for your personal interest and support in finding ways to see that the health care costs that are imposed on the budget are brought under control.

The facts you cited are correct. There is one other fact that is an interesting one and that is that currently the taxpayers are spending about $84 billion, if you look, for military health present and past, if you combine the amount that goes to the Treasury, the amount that goes to the VA, and the amount we are currently spending. That is an enormous sum of money.

We have a terrific health care system and we want to keep it. The only way we can keep it is to put it on a basis that is sustainable. The chairman has taken the lead in the Department, along with Dr. Chu, and, as you know well, has taken this matter to the members of the Joint Chiefs of Staff on a number of occasions, and they have unanimously supported the proposals that have been fashioned, which we believe are fair and equitable and will in fact put it on a sustainable basis.

Senator GRAHAM. I stand ready to help, and think big. One day maybe the VA should handle retiree health care and we should have a military health care footprint for the Active Forces. Think big.

Chairman WARNER. Thank you very much, Senator, for monitoring that and the number of personnel issues that you have taken a leadership role on, on behalf of the men and women and their families.

Senator Levin?

Senator LEVIN. Just a few questions because I know that 1 o'clock is soon here.

We have had some numbers that were given to us a few months ago as to the number of Iraqi army battalions, as to how they were rated, how many were rated at level one, how many at level two,

level one being operating independently, level two being able to take the lead with coalition support. What is the current number of level two Iraqi battalions if you could tell us, General?

General PACE. Sir, level two Iraqi battalions today are 60. For clarification, as a rifle battalion commander myself in 1983 to 1985, if I were to grade myself and my battalion on that scale, I would have been level two.

Senator LEVIN. And level one?

General PACE. Level one is one.

Senator LEVIN. Still one, okay.

In the New York Times a couple days ago there was a report that, while there is a decline in the number of attacks on coalition and Iraqi military units, that sectarian violence has risen sharply in recent months, particularly in mixed Sunni-Shiite neighborhoods, where people are being expelled from their homes or killed. According to the Iraq national security adviser and the chairman of the joint Iraqi-American committee planning for the transition to Iraqi military control—it also includes, this committee, our ambassador and General Casey—quote, according to now the Iraqi security adviser: "The Americans do not want to intervene in stopping sectarian violence."

What is our policy on that? Mr. Secretary, you can answer it, or General, whoever can tell us that.

Secretary RUMSFELD. I will start. Commanders on the ground have a great deal of discretion and the circumstance on the ground varies dramatically in different parts of Iraq. It requires making judgment calls. I would submit I doubt if there is an overall policy that is rigid because of the differing circumstances on the ground.

Needless to say, our commanders are concerned when there is violence and to the extent they can, they contribute to a situation where the violence does not exist.

I think that the people in that country have had arguments and difficulties and differences among tribes and militias for a great many years, and thinking that it is all suddenly going to end or that there is some way for a coalition set of forces to make it end I think is unlikely. I am impressed, however, that there have been people who have been predicting that there would be civil war and sectarian violence of a major nature and it has not happened. We have been very fortunate. The people have gone through this period, this political period, and made judgments that everyone would lose if that were to deteriorate into that circumstance.

We did have a policy in Afghanistan where we avoided using U.S. and coalition forces to go directly against warlords if they were engaged in various types of activities and solved it politically.

Senator LEVIN. I will just end with my thanks for your assurance on the Guard issue in terms of consultation and funding. I think that is important to all of us and all of our States, and your assurances are helpful in that regard. We thank you for them, General.

General PACE. To your last question, if I may, Senator, also just one additional point. That is, our commanders on the ground also strive to have the ISF and the Iraqi police deal with Iraqis on Iraqi problems. So although it is not a standing policy, as best we can, where the capacity exists, we prefer to have the Iraqis deal with it.

Senator LEVIN. Are those integrated Iraqi forces or are they mainly sectarian-dominated forces?

General PACE. Sir, they are getting better integrated. They are not as well integrated as they should be, and everyone in the Iraqi leadership understands and is vetting right now former Iraq, mostly Sunni, majors and below, to be able to get a better mix of Kurd, Shia, and Sunni inside the organizations.

Senator LEVIN. Thank you.

Secretary RUMSFELD. The Ministry of Defense (MOD) forces are much more integrated than the Ministry of the Interior (MOI) forces, because the MOI forces are for the most part recruited locally, the police and the like.

Chairman WARNER. Senator Lieberman.

Senator LIEBERMAN. Thanks very much, Mr. Chairman. One question and I do want to ask that, I have a statement on the budget generally, that it be included in the record.

Chairman WARNER. Without objection.

[The prepared statement of Senator Lieberman follows:]

PREPARED STATEMENT BY SENATOR JOSEPH I. LIEBERMAN

Good morning and thank you for attending. This hearing begins our examination of our Nation's military strategy for today and tomorrow and how well the budget request offers a defense program to support that strategy. I want to thank Senators Warner and Levin for holding this hearing which gives us the opportunity to ask questions about the 2007 defense budget, the Quadrennial Defense Review (QDR), and the continuing operations in Iraq. Our purpose must be to guarantee that the men and women of our armed services have the resources and support they need to protect the United States and the American people, who live in an all too dangerous world. Good morning to Secretary Rumsfeld, General Pace, and General Schoomaker. I appreciate all the hard work you have done to ensure our Nation's security.

I believe that 2006 is an extremely important year for our military. It is imperative that coalition forces make significant progress in securing and stabilizing Iraq. In order to do that, the military must receive the necessary support in both equipment and personnel to get the job done. We must also look forward in our planning with the assumption that our military will not return to a comfortable conventional warfare posture. Instead, we must be ready to defeat the kind of threats that have confronted us for the past 15 years. I am concerned that the decisions represented in the budget and the QDR do not adequately consider the extent and duration of operations to defeat these threats.

We must evaluate what defense programs will help us transition from a traditional fighting force into a military that can respond to nonconventional threats, as well as conventional ones, and sustain that response, for years if necessary. We must discuss many of these programs and where they fit into our future military.

Given the new strategic threat environment described in the QDR, I want to focus on the adequate size of land forces we need to meet these demands. Our soldiers in the Army are the most technologically advanced in the history of our Nation and this budget will help them become even more so. We are doing them a disservice if we do not make sure we have enough brigades to both deploy and support troop rotation for extended periods of time, and to be able to do so in more than one place, if necessary. We also must maintain the institutional Army—the training, support, and educational part of the Army that has made our combat units so successful. We cannot outsource these vital, core institutional functions and remain as good as we are.

The 2007 budget also calls for a reduction in the authorized end strength of the National Guard, which is a decision that seems to reflect the tight fiscal environment rather than the military's operational demands. I must ask the obvious, yet difficult question: if we are transitioning from a traditional force to a military more responsive to irregular and potentially catastrophic threats, then why have all the traditional weapons systems remained in the budget, in many cases receiving an increase in funding, while funding for personnel has been reduced?

I am also concerned about the size of our Navy, particularly in light of the aggressive development of submarines by other nations—such as China. If we wait until

2012 to increase our sub production to two a year, we will fall beneath the number of boats needed to satisfy the Navy's force structure requirement and to remain the world's dominant undersea warfare force in the future.

Although the QDR recognizes the need for increased long-range strike capability by 2018, I do not find any funding in the 2007 budget request for this. There continues to be a lot of money for short-range strike capability. Even if we start now, which we aren't, I doubt it is possible to field the land based bomber part of this capability by 2018 as the QDR calls for. That is 11 years from now, and we normally take 15 or more years to field such a program.

The bottom line is that I see critical discontinuities between the strategic threats outlined in the QDR, and the resource decisions allocated in the 2007 defense budget. Our military must continue to transform from a conventional to an irregular and conventional fighting force, and we must increase and shift our resources to achieve this goal. We are engaged in a "long war" against terrorism. It is imperative that our choices reflect that new strategic reality.

Senator LIEBERMAN. Thank you.

Mr. Secretary, we talked before about the money available and the possible efficiencies that can be obtained internally to free up some more funding for programs. I was pleased that the QDR recognizes the acquisition process, the procurement process, as a problem area, and uses the term it is hampered by "inefficient business practices," and agrees that there is a lack of confidence.

Senator McCain and I in the Airland Subcommittee focused on this in the last year or so, and the full committee has, too. In the QDR there is not a specific plan of action as to how to deal with this. I wanted first to say that I think it would be great if we could work executive/legislative together to see if we can really stretch to achieve some reforms in procurement as soon as possible, because, needless to say, the average acquisition time I think is now 15 years. That is from the conception to the development of a weapon system. That adds costs and means that we do not get the systems as soon as we could.

I wanted to just extend that hand to you, and also ask if you have any specific thoughts about what course of action we might take together to save some money on procurement.

Secretary RUMSFELD. Senator, it is a very big concern of ours in the Department. Gordon England, the deputy, is devoting a lot of his time to the subject. I would be happy to accept your invitation and work closely with you and your committee and Senator McCain.

Since 30 years ago, the time it takes in the procurement cycle, the acquisition cycle, has about doubled.

Senator LIEBERMAN. Yes.

Secretary RUMSFELD. During that period, Moore's Law has been at work and technologies have in fact every 18 months doubled their power and changed at a much more rapid pace. One would have thought just the opposite, instead of elongating the acquisition process. Time is money. It is hurting.

Partly, I think there was a pattern in terms of costs, a pattern of using lower costs in hopefulness. We came in and said, look, it has been consistently wrong, it has always been more, and we took some different cost accounting approaches and have been trying to use a higher level of cost which we hope would be more realistic. I think that is proving out.

Under Secretary of Defense Ken Krieg is working closely with the deputy and we will be happy to connect with you.

Senator LIEBERMAN. Excellent. Thank you very much. Thanks to you, and to you, General Pace, General Schoomaker, for your testimony and your service every day.

Chairman WARNER. Thank you very much.

Mr. Secretary, I am just going to ask a short question here. The JSF seems to have received strong support in the budget, which is very important. That is a key weapons system that we have expended a great deal of effort to bring about and it has the appearance of being an effective system.

We do take notice of the budget, which a decision has been made not to pursue a second engine. That has, understandably, raised concern among the eight nations that are partners in that program. Could you describe first the procedures that were followed in such consultation as was done with those partners, and your own views as to that decision?

I believe you are the first military-trained aviator ever to be Secretary of Defense. Would that be right?

Secretary RUMSFELD. You got me.

Chairman WARNER. I did a little research. I think you are.

Secretary RUMSFELD. Is that right?

Chairman WARNER. So, you are eminently qualified to answer to this question.

Secretary RUMSFELD. I am not so sure of that. I feel like a broken-down ex-Navy pilot, that is all.

Chairman WARNER. You are not broken down. We can recall you. [Laughter.]

Secretary RUMSFELD. The original plan had been to have a backup engine for the JSF and it was in the program. We have a wide number of partners, as your question suggested. The decision was made, and there has been extensive consultation with others. Some are very happy about it because it saves money, about $1.8 billion by discontinuing it. Others are not happy about it.

But, the senior leadership in the Department looked at it. They made a recommendation to me. I found it persuasive. The history suggests that we will be fine with a single engine as opposed to the engine with a backup and we are going forward on that basis. It has been true with other programs that a single engine has worked out, and to the extent there are difficulties you can manage your way through them.

It is the right decision and we appreciate the cooperation of all of our partners around the world who are participating in the JSF program.

Chairman WARNER. Mr. Secretary, we have just received that information here in the committee yesterday with the delivery of the budget. We have a responsibility, particularly because of the international aspects of that program, and particularly Great Britain, who has been our most steadfast partner in the Iraqi coalition forces. It is deserving of the careful attention by the committee, and I think you appreciate and understand that.

Secretary RUMSFELD. I appreciate that. My recollection is that U.K. industry is participating in other aspects of that program. Is that not right?

General PACE. Yes.

Secretary RUMSFELD. There are a couple of things, Mr. Chairman, if I could clarify.

Chairman WARNER. Yes, if you want to wrap up.

Secretary RUMSFELD. One involves the questions by Senator Reed that had to do with a possibility of a DOD IG looking into so-called ghost detainees. We have checked with the office and we are told that it is the CIA IG that is doing that and the Director of the Defense Intelligence Agency (DIA) will be meeting with Senator Reed this afternoon.

I want to say, I appreciate the previous exchange with Senator Graham on the question of accountability over the treatment of detainees, and I just want to make sure that the record is clear. There have been something like 251 individuals that have been held accountable for detainee mistreatment. There have been 87 courtmartials and 91 nonjudicial punishments. There has been extensive functioning of the UCMJ.

Chairman WARNER. He was particularly concerned—and you and I have been associated with the DOD for a very long time and I cannot recall a flag or a general officer invoking this privilege, which he has the right under the UCMJ. But it does bring to mind that the heart and the soul of the officer corps and the noncommissioned officers is something that is always entrusted to the current Secretary of Defense and the current Joint Chiefs, and particularly the Chairman. I discussed this issue privately with the Chairman yesterday and received assurances that the Department is going to look into this situation, as will this committee because this individual did testify under oath before the Committee of the Armed Services.

Lastly, the record should note that we all are mindful of what is taking place in the world today by reason of extraordinary protests occasioned by certain actions by the Danish media. Hopefully, that will not further spread. But should it occur in Iraq, it would be my expectation that the ISF would have the primary mission for such containment as the government of Iraq felt is necessary. Could you just give us that assurance?

Secretary RUMSFELD. That certainly would be one's first choice. The qualification to that of course is that there are locations where the ISF are in the lead and there are other locations where coalition forces are, and it would be really dependent on the circumstances on the ground. But to the extent that the MOI forces could handle it, that are located well across the country, that would be the preference.

Chairman WARNER. I certainly hope that is the case.

Senator LEVIN. Would the Secretary provide for the record the list of all of the actions which have been taken relative to detainee abuse cases? You gave us the total. If you could just give us for the record the names of the people who were involved in those, it would be helpful.

Secretary RUMSFELD. We will certainly do that.

[The information referred to follows:]

As of December 10, 2006, the 106 military members provided below were courtmartialed for detainee related offenses.

[Deleted.]

Chairman WARNER. Mr. Secretary and Chairman Pace and Chief of Staff of the Army, we have had a very fine hearing today, quite an important and constructive and indeed very courteous and respectful exchange of views and information here. I join all others on this committee in commending you for your leadership given to this great Nation, and particularly the men and women and their families of the Armed Forces.

This hearing is now concluded.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JOHN WARNER

BIOMETRICS

1. Senator WARNER. Secretary Rumsfeld, the effective employment of an integrated and coordinated biometrics system is a key component in efforts to track, locate, and detain terrorists in Iraq or anywhere in the world they seek to travel. I understand the Department is collecting biometric information from individuals detained in Iraq and from forensic investigations of improvised explosive device (IED) attacks. How is this information shared with relevant components within the Department?

Secretary RUMSFELD. The Department of Defense (DOD) Automated Biometric Identification System (ABIS) is the central DOD repository for detainee biometric data. ABIS also receives latent fingerprint files derived from forensic investigations through various sources. The ABIS is modeled after the highly successful Federal Bureau of Investigation (FBI) system, the Integrated Automated Fingerprint Identification System (IAFIS). Within the Department, ABIS shares match results with the original source and with relevant entities from the Intelligence Community (IC), detainee operations, and interagency partners.

All DOD match results on detainees, enemy combatants, and local (host nation or third country) employees are forwarded to the National Ground Intelligence Center (NGIC) in Charlottesville, Virginia, for processing, intelligence analysis, exploitation, and production. The results are made available via Biometric Intelligence Analysis Reports, which are posted to a classified Web site and e-mailed to intelligence consumers.

The NGIC Counter IED Targeting Program and Weapons Intelligence Teams (WIT) collect forensic evidence, including biometrics, on the battlefield. The WIT are trained in basic evidence collection and basic latent print collection, consistent with environmental and operational limitations. There are currently 13 teams deployed in Iraq. They have been active there since December 2004.

The NGIC augments the Combined Explosive Exploitation Cell-Iraq (CEXC-Iraq) to support IED forensic collection of latent finger prints and DNA from material that would not otherwise be collected or exploited. CEXC-Iraq has been active since December 2004 and is the most sophisticated forensics lab in the Iraqi theater of operations. The growing visibility and value of this program resulted in a similar capability being implemented in CEXC-Afghanistan in March 2006.

Latent prints and forensics evidence collected either by CEXC or WIT are sent to facilities in the United States for processing and matching. In-country personnel electronically submit the top 5 percent of latent prints to Certified Latent Print Examiners at the DOD Biometrics Fusion Center (BFC) in Clarksburg, West Virginia. Those prints are formatted, submitted, and stored in both ABIS and IAFIS. Results are submitted back to the NGIC, U.S. Central Command Intelligence, and several other agencies. The highest priority cases are completed within a day of their receipt by the BFC. The Department of Homeland Security (DHS) has access to DOD latent prints through IAFIS.

The remaining latent prints and physical evidence are packaged and physically shipped to the FBI Terrorist Explosive Device Analytical Center (TEDAC) in Quantico, Virginia. TEDAC forensically exploits physical evidence for additional latent prints as well as the entire suite of forensic evidence, such as DNA, hairs, fibers, etc. These remaining and additional latent prints are searched through the FBI's IAFIS and shared with the BFC for ABIS searching. Due to lengthy shipping times and manual transfer processes from IAFIS to ABIS, the process of obtaining a latent print identification from ABIS can take up to a month.

Finally, the BFC, in conjunction with the Naval Criminal Investigative Service, developed a pilot project for a forward deployed forensic collection lab. The facility became operational at Camp Fallujah, Iraq on January 28, 2006. It processes bio-

metric evidence, electronically formats it, and sends the fingerprints directly to latent experts at the DOD BFC for immediate processing. The evidence is then submitted to the DOD ABIS for matching. Over 100 latent prints have been received and processed using this new capability.

2. Senator WARNER. Secretary Rumsfeld, is the biometric data collected in theater connected to, or shared with, the Department of Justice (DOJ), the Department of State, and the DHS?

Secretary RUMSFELD. The DOD established the DOD ABIS in July 2004 as an automated means to share biometric information in the interagency environment. The ABIS is the DOD central repository of fingerprint data files on non-United States persons of interest and primary interface with the FBI IAFIS. As the preferred portal to interagency sharing of biometric information, ABIS normally receives persons of interest, including detainees, biometric data from theaters of operations worldwide the data is then entered into the database and an automated comparison is performed. Fingerprint file matches to candidate terrorists are then shared with the FBI Criminal Justice Information Services Division. Other U.S. Government entities then may access DOD match data through the FBI IAFIS.

In order to speed and automate the interagency data-sharing process and reduce the time delay between data collection and data sharing, representatives from the DOJ and DHS met with representatives from the DOD Executive Agent for Biometrics, the Office of the Assistant Secretary of Defense for Homeland Defense and the Deputy Assistant Secretary of Defense for Detainee Affairs to agree on the rapid exchange of fingerprint files on persons of interest from the DOD ABIS data base. By the end of February 2006 over 320,000 files had been shared with DOJ and DHS.

3. Senator WARNER. Secretary Rumsfeld, if a detainee were to escape from custody, would our current system of screening people prevent him from entering the country using a forged name?

Secretary RUMSFELD. The current watch list process that would stop such a scenario from happening is being refined. The DOD National Detainee Reporting Center (NDRC) submits all detainee information to include biometrics to the DOD Biometric Fusion Center, which in turn sends information to other U.S. Government intelligence agencies. NDRC also submits detainee information (excluding biometrics) to the Joint Intelligence Task Force for Combating Terrorism (JITF–CT). JITF–CT also has read-only access to the NDRC database on detainees in Iraq, which includes detainee status (e.g. in camp, released, repatriated, or escaped). Consistent with a Secretary of Defense directive, the JITF–CT passes certain information to the National Counterterrorism Center (NCTC), which prepares terrorist watch lists that are distributed throughout the government.

Through the State Department visa issuance process, a person applies through the State Department name check system (CLASS). In addition, the State Department utilizes fingerprints and the US-VISIT database (IDENT) for their Bio Visa and Border Crossing Card programs. US-VISIT obtains their database information from an extract provided by the FBI IAFIS.

4. Senator WARNER. Secretary Rumsfeld, what is the Department's policy on the development, integration, and use of biometrics technology?

Secretary RUMSFELD. DOD recognizes biometrics as a key enabling technology for combating asymmetric threats. All efforts to develop, integrate, and use biometrics are emphasized. Presently, considerable focus is being applied to institutionalizing the biometric capabilities of the DOD through programs and process development. Additionally, DOD is actively involved in national and international biometric standards bodies to ensure seamless integration of biometric capabilities with other information technology aspects of the Department. DOD serves as the U.S. Government lead for biometrics standards development through the National Science and Technology Council.

The global war on terrorism is redefining combat capabilities required for networks and data sharing boundaries. Specific activities the DOD has identified to incorporate the development, integration, and use of biometrics technology include credentialing, management of a person's privileges and entitlements, authentication of a person's identity, dynamic decisionmaking for authorization to access information, privacy protection, and forensic data collection and analysis.

DOD will also be assessing which biometric modalities, such as iris scans, voice prints, and facial recognition, to invest in to enable current and future mission success in the global war on terrorism.

5. Senator WARNER. Secretary Rumsfeld, what resources are included in the fiscal year 2007 budget to facilitate sharing of terrorist information with other departments as outlined by Homeland Security Presidential Directive?

Secretary RUMSFELD. The DOD continues to support in the fiscal year 2007 budget the DOD BFC in Clarksburg, West Virginia, the DOD Biometrics Management Office in Arlington, Virginia, the Program Manager, Biometrics at Fort Belvoir, Virginia, the NGIC in Charlottesville, Virginia, the DOD ABIS, the Biometric Automated Toolset, and the Biometric Identification System for Access. These resources all play a significant role in facilitating the sharing of terrorist biometric information.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

EMERGENCY SUPPLEMENTAL SPENDING

6. Senator MCCAIN. Secretary Rumsfeld, a major issue in the congressional debate on funding continuing military operations and reconstruction in Iraq and Afghanistan is whether military and peacekeeping operations should be funded with supplemental requests or via the regular authorization and appropriation process. Last year, I urged you, as well as several of my colleagues on the Senate Armed Services Committee (SASC), to include the costs of current and future operations in Iraq and Afghanistan in the DOD's regular appropriations, arguing that these are now ongoing operations that should be planned for and funded in the annual defense budget. It is a responsibility, not a privilege, that the SASC exercises oversight in the normal authorization process at the beginning of the budget debate. During the last 2 years the SASC has provided for limited authorization in bridge supplemental requests in the defense authorization bill. The DOD assesses the incremental cost of Operation Iraqi Freedom (OIF) at approximately $4.4 billion a month and Operation Enduring Freedom (OEF) in Afghanistan at $800 million a month. As General Pace has appropriately stated in his testimony "[w]e are in a long war." Do you intend to use supplemental appropriations as the vehicle to fund this long war?

Secretary RUMSFELD. The President, not the Secretary of Defense, determines how to fund requirements such as DOD incremental costs for war. For fiscal year 2007, the President decided to include $50 billion in his budget request as an emergency allowance (estimated future emergency funding for the global war on terror) or bridge fund to finance the military war efforts through part of fiscal year 2007. Once fiscal year 2007 begins and the Department can estimate what its total fiscal year 2007 funding requirements for the war are likely to be, the President will decide how to finance these requirements. At that time, the President may decide how he will request war-related funding for fiscal year 2008.

ACQUISITION REFORM

7. Senator MCCAIN. Secretary Rumsfeld, according to the Quadrennial Defense Review (QDR), the DOD is focused on bringing capabilities to the joint force more rapidly, by fashioning a more effective acquisition system and associated set of processes. The Center for Strategic and International Studies (CSIS) provided two reports on "Beyond Goldwater-Nichols," referring to the 1986 legislation which reorganized the DOD into its current organization. In its reports, CSIS emphasized the need to include the combatant commanders (COCOMs) in the acquisition process. CSIS also made recommendations to increase the role of the Service Chiefs in the acquisition process as a means to increase Service responsibility into the system. How will the COCOMs be integrated into the requirements and budgeting process?

Secretary RUMSFELD. We recognize and value the importance of COCOM participation and influence in the Department's requirements and budgeting processes and are taking steps not only to strengthen existing means available for that participation but creating new ones as well. Central to this is a COCOM's Integrated Priority List (IPL). The IPL details a COCOM's highest priority requirements across functional lines and defines shortfalls in key programs. In the past, the IPL was a fiscally unconstrained list but now includes detailed capability trade-off recommendations to inform funding choices. Moreover, the Joint Forces Command (JFCOM) has assumed a more prominent and proactive role in rationalizing and integrating capabilities across all unified and specified commands.

The Joint Staff also sponsors periodic visits to the COCOMs to engage in direct discussions on requirements and budget issues. They have begun to expand the participation in these discussions to a much broader set of participants from Office of the Secretary of Defense (OSD) as well. Now, representatives from Program Anal-

ysis and Evaluation (PA&E), Comptroller, Policy and Acquisition, Technology and Logistics (AT&L) among others are there to discuss COCOMs' specific issues relating to programming, budgeting, and acquisition. Also, Senior Leadership Conferences are held throughout the year at junctures aligned with the budget process and provide COCOMs similar opportunities to participate directly in formulating programs and budgets.

8. Senator MCCAIN. General Schoomaker, the Service Chiefs already have influence over the requirements and budgeting processes. What are your thoughts regarding the increased role of Service Chiefs in the acquisition process?

General SCHOOMAKER. Under well-established public law, responsibility for the Headquarters, Department of the Army acquisition function resides solely in the Assistant Secretary of the Army for Acquisition, Logistics, and Technology, and the Department's acquisition process is ably executed by the dedicated Acquisition Corps professionals who work under his supervision. The Chief of Staff of the Army and other Army Staff principals have a crucial lead role with respect to certain closely related activities such as requirements generation and validation, resource allocation, testing, and determination of fielding priorities. While I always am receptive to exploring ways in which the Department can improve and streamline its processes, I am of the opinion that the Department is well-served by the current delineation of responsibilities.

9. Senator MCCAIN. Secretary Rumsfeld and General Pace, procurement reform will continue to be a priority for the SASC/Airland Subcommittee. A recent Government Accountability Office (GAO) report examined 20 Air Force and Army contracts and found that, over 4 years, $8+ billion was overpaid in incentive fees to defense contractors. Are the program offices receiving proper oversight from within the DOD?

Secretary RUMSFELD. The Department generally agreed with the report findings that the application of award and incentive fee arrangements needs improvement. We are looking to make those improvements. We are committed to reviewing our policy and oversight structures on Award and Incentive Fee Contracts and expect to issue a comprehensive update on the proper use of award and incentive fees by March 31, 2006. A key to proper use of award and incentive fees contracts is training of the acquisition workforce, and we will work with Defense Acquisition University to ensure this topic is included in the curriculum.

General PACE. Historically, some program officers have not received proper oversight within the DOD. I share your concern that the Department needs to more effectively use contract award and incentive fees as an enhancement tool for achieving desired acquisition outcomes. Oversight efforts need to be constantly reviewed and improved. The Under Secretary of Defense for Acquisition, Technology, and Logistics is formally addressing desired outcomes and the role award fees play in acquisition strategy via a policy memorandum in the coming months. I support Secretary Krieg's efforts to define the necessary oversight and the process for effectively administering contract management across the Department.

10. Senator MCCAIN. General Pace, reports have described the Boeing 767 tanker deal as the most corrupt acquisition deal in more than 35 years. A key finding in the Department of Defense Inspector General (DOD IG) report was that the Joint Requirements Oversight Council (JROC) process failed to recognize that an Air Force officer (LTC Lepanta) lied to the JROC (a $30 billion misrepresentation) on whether the tanker operational requirements document (ORD) was tailored to the Boeing 767. This officer's action makes a mockery of the joint requirements process and highlights the importance of the JROC process to be above reproach. What steps are you prepared to take to ensure that this does not happen again?

General PACE. When creating the Joint Capabilities Integration and Development System (JCIDS), we recognized the lack of an independent assessment on programs coming before the JROC. To address this shortfall, the Functional Capabilities Boards (FCBs) were created. The FCBs are co-chaired by a Joint Flag Officer and a senior representative from the OSD with a permanently assigned staff and representation from the Services, combatant commands, and OSD. The FCBs assess each program that comes before the JROC, providing an independent assessment and recommendation that identifies key issues for the JROC. This independent assessment process is helping us avoid future issues like those experienced with the tanker ORD. We are continually identifying ways to improve the effectiveness of the JCIDS/JROC process in making program decisions and will press ahead to implement changes as necessary.

11. Senator MCCAIN. General Pace, can you assure this committee that you will do everything possible to promote the ideal of integrity within the military and civilian members of the Department?

General PACE. I will do everything possible to promote the ideal of integrity with our military and civilian personnel. Integrity and ethics are fundamental tenets of our military, and you have my assurance that I will continue to promote these traits throughout our military.

SPECIFIC GUIDANCE FOR IMPLEMENTING THE MCCAIN AMENDMENT

12. Senator MCCAIN. Secretary Rumsfeld and General Pace, Deputy Secretary England has issued a high-level memo directing the implementation of the detainee legislation that became law this winter. This memo is less than a page in length, and merely restates the provisions—that the Army Field Manual (FM) shall become the uniform standard for interrogation, and that cruel, inhumane, and degrading treatment is barred. What specific guidance has been given to soldiers, military police, interrogators, translators, intelligence officers, medical personnel, etc. at Guantanamo and throughout Iraq and Afghanistan?

Secretary RUMSFELD. DOD Directive 3115.09, DOD Intelligence Interrogations, Detainee Debriefings, and Tactical Questioning, was issued on November 3, 2005. It consolidates and codifies existing departmental policies, including the requirement for humane treatment during all intelligence interrogations, detainee debriefings, or tactical questioning to gain intelligence from captured or detained personnel. It further assigns responsibilities for intelligence interrogations, detainee debriefings, tactical questioning, and supporting activities conducted by DOD personnel.

The U.S. Army Training and Doctrine Command has added additional blocks of instructions on the Geneva Conventions and Law of War to all programs of instruction. The U.S. Army Intelligence Center and School (USAICS) has updated their interrogation training program of instruction to ensure all training is in full compliance with the Army FM (FM 34–52) and emphasized legal, policy and regulatory requirements for human treatment of all detainees, as well as prohibitions against cruel, inhumane, and degrading treatment in the conduct of interrogation operations. USAICS' mobile training teams have deployed to provide reinforcement training to both deployed forces and "next deploying" units throughout the United States.

General PACE. The Deputy Secretary of Defense issued a memorandum on 30 December 2005 that addressed the McCain Amendment. First, this memorandum clearly reiterated the McCain Amendment provision that no person in the custody or control of the DOD or under detention in a DOD facility shall be subject to any treatment or interrogation approach or technique that is not authorized by and listed in the United States Army FM on Intelligence Interrogation. Second, this memorandum directed that U.S. Armed Forces in the war on terrorism had the continuing obligation to ensure that no person in the custody or under the control of the DOD, regardless of nationality or physical location, was subjected to cruel, inhuman, or degrading treatment.

13. Senator MCCAIN. Secretary Rumsfeld and General Pace, have these individuals received directives with instructions?

Secretary RUMSFELD. The Under Secretary of Defense issued DODD 3115.09, DOD Intelligence Interrogation, Detainee Debriefings, and Tactical Questioning on November 3, 2005. It consolidates and codifies existing departmental policies, including the requirement for humane treatment during all intelligence interrogations, detainee debriefings, or tactical questioning to gain intelligence from captured or detained personnel. It further assigns responsibilities for intelligence interrogations, detainee debriefings, tactical questioning, and supporting activities conducted by DOD personnel. USD(I) is also updating DODD 2310, the DOD Detainee Program. This directive revises policy and responsibilities within the DOD for a Detainee Program to ensure compliance with the laws and policies of the United States, the law of war, including the Geneva Convention of 1949. A memorandum on Medical Program Principles and Procedures for the Protection and Treatment of Detainees in the Custody of the Armed Forces of the United States was also issued. The memorandum reaffirmed the historic responsibility of all health care personnel of the Armed Forces (to include physicians, nurses, and all other medical personnel including contractor personnel) to protect and treat, in the context of a professional treatment relationship and established principles of medical practice, all detainees in the custody of the Armed Forces during armed conflict.

General PACE. The McCain amendment limited all interrogations to the Army FM on Intelligence Interrogation, currently embodied in FM 34–52, and prohibited the cruel, inhuman, and degrading treatment or punishment of detainees. FM 34–52 and DOD Directive 3115.09 provide sufficient guidance regarding detainee interrogations. The President's 7 February 2002 memorandum directed that all detainees in the war on terrorism be treated humanely. Accordingly, and consistent with the President's memorandum, U.S. forces shall continue to ensure that no person in the custody or under the control of the DOD, regardless of nationality or physical location, are subjected to cruel, inhuman, or degrading treatment or punishment.

14. Senator MCCAIN. Secretary Rumsfeld and General Pace, has the Department developed regulations to implement the legislation?

Secretary RUMSFELD. Army Regulation 350–1, Army Training and Leader Development, February 13, 2006, provides specific regulatory guidance concerning Law of War training and integration of detainee operations training into other appropriate training events.

General PACE. The McCain amendment limited all interrogations to the Army FM on Intelligence Interrogation, currently embodied in FM 34–52, and prohibited the cruel, inhuman, and degrading treatment or punishment of detainees: FM 34–52 and DOD Directive 3115.09 provide sufficient guidance regarding detainee interrogations. The President's 7 February 2002 memorandum directed that all detainees in the war on terrorism be treated humanely. Accordingly, and consistent with the President's memorandum, U.S. forces shall continue to ensure that no person in the custody or under the control of the DOD, regardless of nationality or physical location, are subjected to cruel, inhuman, or degrading treatment or punishment.

15. Senator MCCAIN. Secretary Rumsfeld and General Pace, how are the new rules being communicated down the chain of command?

Secretary RUMSFELD. The new rules are being communicated through the Directives, Army Regulations, and FMs. The U.S. Army Intelligence Center and School is also training commanders and leaders, plus soldiers, airmen, sailors, and marines on the new rules through mobile training teams. U.S. Army Training and Doctrine Command has added additional blocks of instructions on the Geneva Convention and Law of War to all programs of instruction. All interrogators conducting interrogation operations receive Geneva Convention training every 90 days.

General PACE. As noted previously, the Deputy Secretary of Defense issued a memorandum on 30 December 2005 that addressed the requirements of the McCain amendment. This memorandum was sent directly to all COCOMs for immediate implementation.

CRUEL, INHUMANE, AND DEGRADING TREATMENT

16. Senator MCCAIN. Secretary Rumsfeld and General Pace, in the Judiciary Committee last week, Attorney General Alberto Gonzales was asked whether the newly-passed prohibition on cruel, inhumane, and degrading treatment unconstitutionally interferes with the President's power as Commander in Chief. The Attorney General responded that he could not answer that question, because "we have not done that analysis." What is your current operative understanding of the law we passed?

Secretary RUMSFELD. DOD personnel are required to comply with the law. The Deputy Secretary of Defense issued a Department-wide memorandum on December 30, 2005, regarding the requirements of the Detainee Treatment Act of 2005. The Deputy Secretary noted that the President's February 7, 2002, direction that all persons detained by the U.S. Armed Forces in the war on terrorism shall be treated humanely remains in effect. He further directed that, consistent with the President's guidance, DOD shall continue to ensure that no person in the custody or under the physical control of the DOD, regardless of nationality or physical location, shall be subject to cruel, inhuman, or degrading treatment or punishment, as provided in U.S. law.

General PACE. No individual in the custody or under the physical control of the U.S. Armed Forces, regardless of nationality or physical location, shall be subject to cruel, inhuman, or degrading treatment or punishment. The term "cruel, inhuman, and degrading" treatment or punishment means the cruel, unusual, and inhuman treatment or punishment prohibited by the 5th, 8th, and 14th Amendments to the Constitution of the United States, as defined in the United States Reservations, Declarations, and Understandings to the United Nations Convention Against Torture and Other Forms of Cruel, Inhuman, or Degrading Treatment or Punishment done at New York, 10 December 1984.

17. Senator MCCAIN. Secretary Rumsfeld and General Pace, are DOD employees prohibited from engaging in cruel, inhumane, and degrading treatment in all cases, even if ordered otherwise—even if ordered otherwise by the President?

Secretary RUMSFELD. As I previously stated, DOD personnel are required to comply with the law. The President's February 7, 2002, direction regarding the humane treatment of detainees under DOD control is clear. The Deputy Secretary of Defense issued further guidance on December 30, 2005, that DOD personnel will comply with the requirements of the Detainee Treatment Act of 2005.

General PACE. The President's 7 February 2002 memorandum directed that all detainees in the war on terrorism be treated humanely. Accordingly, and consistent with the President's memorandum, U.S. forces shall continue to ensure that no person in the custody or under the control of the DOD, regardless of nationality or physical location, are subjected to cruel, inhuman, or degrading treatment or punishment. Comments regarding hypothetical questions concerning the authority of the President to issue orders are more appropriately addressed to the White House.

PRESIDENT'S SIGNING STATEMENT

18. Senator MCCAIN. Secretary Rumsfeld and General Pace, when the President signed the legislation, he issued a statement indicating that he would construe it "in a manner consistent with the constitutional authority of the President to supervise the unitary executive branch and as Commander in Chief and consistent with the constitutional limitations on the judicial power. . ." What does this mean for Department interrogation and detention operations?

Secretary RUMSFELD. The Deputy Secretary of Defense issued Department-wide guidance on December 30, 2005, concerning the requirements of the Detainee Treatment Act of 2005. The Deputy Secretary directed that pursuant to the act, "effective immediately, and until further notice, no person in the custody or under the effective control of the DOD or under detention in a DOD facility shall be subject to any treatment or interrogation approach or technique that is not authorized by and listed in United States Army FM 34–52, "Intelligence Interrogation," September 28, 1992.

General PACE. While I do not believe it is appropriate for me to speculate as to the President's intended meaning of his signing statement, I will emphatically state that interrogation and detention operations conducted by U.S. Armed Forces will strictly adhere to the requirements of the Detainee Treatment Act of 2005 and other laws that prohibit cruel, inhuman, and degrading treatment or punishment of persons under our custody or control.

19. Senator MCCAIN. Secretary Rumsfeld and General Pace, in your understanding, does this mean that the President could authorize an exemption to the legislative prohibitions?

Secretary RUMSFELD. The DOD is complying and will continue to comply with the requirements of the law, including the requirements of the Detainee Treatment Act of 2005.

General PACE. I do not believe it is appropriate for me to comment on the separation of powers issues that are raised by this question concerning whether the President could properly authorize an exemption to the Detainee Treatment Act of 2005. Again, I express my strongest commitment to you that the U.S. Armed Forces will adhere to the requirements of the Detainee Treatment Act of 2005 and other laws, regulations, and guidance that clearly prohibit cruel, inhuman, and degrading treatment or punishment of all persons under our custody and control.

20. Senator MCCAIN. Secretary Rumsfeld and General Pace, is there any circumstance in which a Department employee could legally engage in cruel, inhumane, or degrading treatment?

Secretary RUMSFELD. I am not aware of such a circumstance.

General PACE. It is my firm view that no member of the U.S. Armed Forces could lawfully engage in cruel, inhuman, or degrading treatment of persons under our custody or control.

MILLER TAKING FIFTH

21. Senator MCCAIN. General Pace, MAJ GEN Geoffrey Miller, who ran Guantanamo from October 2002 to March 2004 and helped set up operations at Abu Ghraib, has asserted his Fifth Amendment, Article 31 right against self-incrimination in two court martial cases involving the use of dogs during interrogations. I do

not contest General Miller's right under the Constitution, but would you agree that he also has a duty as an officer, especially a general officer, to take responsibility for his actions and orders?

General PACE. All officers, regardless of rank, must take responsibility for their actions. Similarly, all officers must be held accountable if their conduct does not meet expected standards. I expect all general officers to always give truthful answers, but that in no way obligates them to forego the rights afforded under the U.S. Constitution and the Uniform Code of Military Justice.

22. Senator MCCAIN. General Pace, do you believe, given everything we know now, only low-level personnel were responsible for detainee abuse at Abu Ghraib, Guantanamo Bay, in Afghanistan, and elsewhere?

General PACE. The U.S. military continues to treat allegations of abuse seriously, and the DOD has taken appropriate action against those found to have committed abuse against detainees. More than 466 criminal investigations have been conducted and more than 100 individuals have been held accountable for alleged detainee abuses.

END STRENGTH

23. Senator MCCAIN. General Pace and General Schoomaker, please rate the current levels of retention and recruitment for the total force. Have the Active and Reserve components met their goals for the year, and what is the outlook with regard to achieving future levels specified in the QDR?

General PACE. Recruitment and retention for the total force is presently on track. Across the board, our professional recruiters and retention experts are doing an outstanding job in assessing and retaining the forces we need to continue to be successful in the war on terrorism. Due to their great efforts and the support of Congress, we anticipate being able to meet the end strength levels specified in the QDR.

I am pleased to report that through February 2006 all Active Services have met or exceeded their recruitment goals. In fact, the Army has met or exceeded its goal for 9 consecutive months.

Our Reserve component recruiters, while extremely effective, have not shared the same level of success across the board. Four of six of these components are meeting or exceeding their goals, but we continue to experience some challenges with the Navy Reserve and Air National Guard. Although their recruiting production is lower than desired, this is mitigated by the fact that both of these components are at or near their prescribed end strengths for fiscal year 2006. With the continued support of Congress, we are aggressively working to meet recruiting goals in these areas. The Navy has recently transferred oversight of its Reserve component recruiting efforts to its Active component, and the Air National Guard is adding 100 new recruiters and is considering instituting a referral program similar to that of the Army National Guard (ARNG).

Retention is an area where the Services (both Active and Reserve) are experiencing success. All Active Services have exceeded their retention goals through the month of January. Additionally, through the first quarter, fiscal year 2006, the overall retention rates in the Reserve components are ahead of those of the same period in fiscal year 2005. We anticipate mission accomplishment in retention in both the Active and Reserve Forces in fiscal year 2006. This is mostly because the troops are proud of what they are doing. They feel good about the millions of free Afghan and Iraqi people and the opportunity to serve our country. They know what they are doing is important—they see it firsthand. This dedication and job satisfaction is exemplified in the 3rd Infantry Division, which recently returned from OIF, achieved 136 percent of their retention goals while in theater.

General SCHOOMAKER. The current recruiting and retention environment remains challenging. The Army is working to achieve all three components' fiscal year 2006 recruiting and retention goals. All three components have achieved their recruiting missions to date and are confident they will also meet their retention missions. Worldwide deployments and an improving economy directly affect recruiting and potentially affect retention. All components closely monitor leading indicators, including historic recruiting and reenlistment rates, retirement trends, first-term attrition, and DOD and Army attitudinal surveys across both areas to ensure we achieve total success. Moreover, all components are employing positive levers including increased enlistment bonuses, force stabilization policy initiatives, updates to the reenlistment bonus program, targeted specialty pays, and policy updates to positively influence the Army's recruiting and retention programs. These efforts will continue to be a

challenge and the Army continues to reshape its resourcing priorities to meet that challenge.

Given current success in meeting retention and recruiting goals and the availability of policies and tools to enhance continued success, we believe that the Army is well-positioned to achieve its target fiscal year 2011 QDR strengths.

24. Senator MCCAIN. General Pace and General Schoomaker, what are your greatest recruitment and retention problems and how do you intend to resolve them?

General PACE. Superbly trained, well-equipped, and highly dedicated Americans have always been our Nation's ultimate advantage. Our ability to assess and retain these outstanding servicemembers is vital to our success in the long war. I am pleased to report that we are currently enjoying success in both recruiting and retention in the Active and Reserve components. However, we also understand that we cannot be satisfied today at the expense of tomorrow, so we will continue to closely monitor the progress of all recruiting and retention programs and are poised to meet challenges as they occur.

Our primary concern is to ensure the Active Army is able to maintain the momentum that it has established in achieving recruiting objectives for the past 8 months. We are cautiously optimistic and are preparing now for the summer months because continued success will take a lot of hard work and effort, especially in today's challenging market. We are grateful for the tools that Congress has provided to us (such as increased recruiting bonuses and raising the maximum enlistment age) because they are proving to be valuable to our recruiting and retention efforts. However, these tools can carry us only so far. To compete with an improving economy, in an era when the main influencers of our youth (parents, teachers, etc.) are not inclined to recommend military service, it will take the entire Department and our Nation's senior leaders pulling together collectively to ensure the American people understand and appreciate the critical importance of service to our Nation.

General SCHOOMAKER. The current recruiting environment remains a challenge. The global war on terror and a strengthening economy continue to impact military recruiting. Increased private-sector competition, an upward trend in those pursuing higher education, and negative trends in centers of influence recommending military service are contributing to an erosion of recruiter productivity and could create significant challenges in fiscal year 2006 and beyond. With congressional assistance, the Army is aggressively adjusting its resources to meet these challenges. The key issue remains to attract high quality men and women to serve as soldiers and meet future manning requirements. We are working to overcome the market effects of increased alternatives to youth and a decreasing propensity to enlist, by increasing incentives, developing new programs, and reducing attrition. We must remember that this is not an Army issue alone, but a national issue.

In fiscal year 2006, the Active Army retention mission is 64,200. We are ahead of last year's pace. We remain confident that we will achieve all assigned retention goals. Thus far, the Active Army has achieved 108 percent of the year-to-date mission, while the Army Reserve has achieved 96 percent of the year-to-date mission, and the ARNG has achieved 103 percent of their year-to-date mission.

25. Senator MCCAIN. General Pace and General Schoomaker, the QDR reduces the authorized level of Army Guard and Reserve from 350,000 to 333,000—a 17,000 man reduction. Why would we reduce this authorization while we are engaged in operations in Afghanistan and Iraq, both of which require significant levels of Army and Reserve personnel?

General PACE. The President's budget submission reduces the force size to 333,000 because the Army believes that it can retain and recruit to this amount. If the Army Guard/Reserve recruit/retains to above 333,000, the Service will have the authorization for the increase and will fund the increase in the Army budget. Through its modularization efforts, the Army is not reducing the size of the ARNG. In fact, the total number of brigades will remain at 106. The plan is that the Army has to be able to provide 28 fully-manned, fully-trained, fully-equipped brigade combat teams (BTCs) in the National Guard, which will be a huge improvement over where we were several years ago when we had 15 of what were called "enhanced brigades."

General SCHOOMAKER. Army is not reducing the size of the ARNG; the total number of brigades remains at 106. The Army will fund the ARNG up to its authorized end strength of 350,000. Prior to the 2005 QDR, the Army had developed a plan for 34 combat brigades and 72 support brigades in the ARNG and 43 combat brigades and 75 support brigades in the Active component. This provided up to 20 combat brigades for steady state operations. The QDR showed a lower requirement for combat brigades but a greater requirement for brigades able to respond more imme-

diately to meet homeland defense/civil support. Therefore, we elected to increase the ARNG domestic capability by rebalancing six BCTs and one Combat Aviation Brigade to seven support brigades—four multi-functional brigades and three engineer brigades. These seven brigades provide engineer, communications, transportation, logistical, chemical, and medical capabilities critical to homeland defense and civil support.

26. Senator MCCAIN. General Pace and General Schoomaker, should we not be seeking to increase these authorizations, as well as taking other steps that would increase Army end strength?

General PACE. Thanks to you and the other members of this committee and the support of Congress, the authorized temporary increases already approved for the Army and Marine Corps will ensure we have adequate end strength to meet the needs of the Nation.

General SCHOOMAKER. The Army is building the Active component force structure under a 30,000 temporary end strength increase above the 482,400 program. Under the Secretary of the Army's End Strength Plan, the operational force will undergo transformation while at the same time deploying to meeting force commitments. Additionally, the institutional force will undergo restructuring between fiscal year 2007 and fiscal year 2011. Therefore, the temporary end strength increase is required to ensure effective capabilities are provided as the Army transforms both its operational and institutional force structure.

27. Senator MCCAIN. General Schoomaker, please explain why the Army has utilized stop-loss on more than 50,000 soldiers while simultaneously planning to draw down the Reserve component by 17,000 soldiers.

General SCHOOMAKER. Stop-loss policy is not about numbers but is a temporary measure that does not permanently affect the Army end strength. It has not been a planning element in determining potential cuts in authorized troop strength for the Active Army or the Reserve components. We have consistently stated since the onset of the global war on terror that the Army focus, indeed the charge, of Army deployments is to deliver to the COCOM trained and ready units, not individuals. Random and continuing unit losses caused by individually oriented separation, retirement, and replacement policies have the potential to adversely impact training, cohesion, stability, and readiness in the deploying units. Stop-loss is a means that effectively sustains a force, which has trained together, to remain a cohesive element throughout the unit's deployment. Our commitment to pursue the global war on terror and provide our warfighters with the cohesive, trained, and ready forces necessary to decisively defeat the enemy, requires us to continue the Army's stop-loss program to attain the above goals. Consequently, any proposal to reduce Reserve component end strength or reduce the Reserve component participation in Operations Iraqi and Enduring Freedom will not in and of itself determine the level of stop-loss we will need to honor our contract with the American people to fight and win our Nation's wars.

The size of future troop rotations will in large measure determine the levels of stop-loss needed. Army leadership fully understands that by executing stop-loss, the policy has, to some degree, disrupted the lives of soldiers and their families. To minimize the impact of stop-loss on our soldiers, the program only affects soldiers assigned at the unit's mobilization/deployment date minus 90 days, continues through the demobilization/redeployment date, plus a maximum of 90 days. Consequently, since reaching large scale application, the average monthly number of soldiers affected by stop-loss is approximately 13,000. It is also noted that many of the soldiers who were initially retained beyond their stop-loss obligation have voluntarily elected to remain in the military and reenlisted or extended. While it is not palatable to some, our ability to retain these fine soldiers and their expertise is contributing immeasurably to our continued success in the war on terror.

IRAQ

28. Senator MCCAIN. Secretary Rumsfeld, General Pace, and General Schoomaker, to build a truly national Iraqi army, I believe it is necessary to build units of mixed ethnicities and religions (Shia, Sunni, Kurds)—not simply an army comprising homogenous units. How far have we gone toward the goal of building mixed units so far, and what steps are we taking to accelerate it?

Secretary RUMSFELD, General PACE, and General SCHOOMAKER. We agree it is important to build Iraqi units that are representative of the diverse ethnic and religious fabric of Iraq. In order to achieve this, the Ministry of Defense (MOD) is mak-

ing a focused effort to recruit personnel from across the spectrum of Iraqi society, in accordance with the new Iraqi constitution that guarantees equal opportunities for all Iraqis. Mobile recruiting missions focused in areas such as the Euphrates River Valley have mitigated a lack of recruiting centers in largely Sunni areas. It is important to note that although these efforts are ensuring that current recruiting efforts are aimed at creating a representative force, this does not mean that all units are fully representative of the national ethnic composition. Indeed, some cross-leveling is being done, but it is not practical to achieve uniform balance across all 10 divisions at this time. Iraq's limited banking system requires soldiers to take their money home each month. The longer distances soldiers must travel increases unit attrition. We are mindful of this as we cross-level these soldiers. MOD policy strictly prohibits unit commanders from hiring their own personnel and clearly requires enlisted and commissioned personnel to attend national training schools to receive certification of their rank and duty specialty.

29. Senator MCCAIN. Secretary Rumsfeld, General Pace, and General Schoomaker, why does the Department persist in rotating senior officers in and out of Iraq, even after they have gained hard-won experience and expertise during their time there?

Secretary RUMSFELD and General PACE. Senior leader continuity and combat proven experience are two significant factors that are considered in virtually every decision made with regard to the rotation of personnel. In some cases, these factors are sometimes mitigated with the inherent advantage of having commanders deploy with the units they have trained and led; thereby knowing their capabilities to a far greater degree. We keep our senior leaders in Iraq for a relatively long period of time. Recently, General Casey's tour in Iraq was extended as well as General Abizaid's as Commander, U.S. Central Command (CENTCOM). LTG Chiraelli has returned to Iraq as a corps commander, and LtGen Odierno will also be returning after serving a tour as my Assistant Chairman of the Joint Chiefs of Staff.

General SCHOOMAKER. Leaders train with their units for combat and deploy with those same units. The 12 months (sometimes more) spent in combat are preceded by a proportionate amount of time preparing the unit and followed by a proportionate amount of time refitting the unit for its next mission/deployment. This 24–36 month process must be viewed in relation to the 12-month combat tour. The positive effectiveness, cohesion, and morale of our units are the direct result of this process. Our most senior leaders (three- and four-stars) are routinely spending more than 12 months and are often capitalizing on their experiences from a previous tour. We routinely consult with General Abizaid to ensure he has the senior leaders he requires to achieve mission success.

30. Senator MCCAIN. Secretary Rumsfeld, General Pace, and General Schoomaker, the Department continues to assert that there will likely be significant U.S. troop withdrawals in 2006. Given that there appears to be no drop in the violence plaguing that country, why would we continue to make that assertion?

Secretary RUMSFELD, General PACE, and General SCHOOMAKER. There are several reasons why we are optimistic about U.S. troop withdrawals in 2006. The first is the substantial progress being made in the operational capability of Iraqi security forces (ISF). The President of the United States recently authorized an adjustment to the U.S. force posture in Iraq, decreasing the number of combat brigades from 17 to 15, a reduction of about 7,000 troops. This decision was based on several indicators of progress but primarily on the growing capability of the ISF. The number of Iraqi units able to take the lead in counterinsurgency operations continues to increase. Forty-three Iraqi army battalions now control their own battle space. Second, reductions in coalition forces are based on the conditions unique to their specific area of operation. The majority of attacks occur in only 4 of the 18 provinces. Multi-National Force-Iraq assessments determine when areas are ready for security transition. Third, reducing our visible military presence may diminish the perception of occupation that many Iraqis hold. This may remove some of the motivation behind the continuing violence and popular support for the insurgency.

31. Senator MCCAIN. Secretary Rumsfeld, General Pace, and General Schoomaker, why would we not combine the growing size of the Iraqi National Army with coalition forces to combat the violence, working to make it subside, and only then look at possibly reducing our presence?

Secretary RUMSFELD. Iraqis are taking control of security for their country. They have asked us to assist them in securing Iraq and training and equipping their forces.

In some places, the Iraqi National Army is already capable of taking responsibility for its own battlespace. Other locations require the combined efforts of coali-

tion and ISF. As Iraqi units assume greater responsibilities, our commanders assess whether our forces are needed for other missions or whether they may return home.

General PACE and General SCHOOMAKER. We are conducting combined Iraqi Army and Coalition operations to combat the enemy. Since October 2005, over 50 percent of all combat operations conducted in Iraq have been combined. Enemy activity is mainly occurring in 4 of Iraq's 18 provinces. We conduct the majority of our operations to neutralize the insurgency in these areas. However, an increase in total number of combat forces will not directly translate into a reduction of violence or cause the insurgency to subside. In the areas where the levels of violence are negligible, we are reducing our presence without having an adverse effect on security and stability. These small reductions of our military presence may reduce the feelings of occupation that some Iraqis have, and thus remove the motivation for some of the Iraqis to continue the violence in their areas.

32. Senator MCCAIN. Secretary Rumsfeld, General Pace, and General Schoomaker, there have been reports that large numbers of Iraqi troops are deserting and that there is corruption among the troops. In one report, only half of an entire unit was actually present in an operation. In some places, Iraqi troops have gotten caught with bomb-making materials or allowed insurgents to attack U.S. convoys by looking the other way. These activities are fueling distrust for Iraqi soldiers. What is being done to fix these problems and how do we ensure that it will not happen in the future?

Secretary RUMSFELD. I have not heard reports of large-scale desertion among the ISF. We do observe low levels of absenteeism. General Pace and General Schoomaker are in a better position to discuss how we track the rate of absenteeism and the response to ISF absentees.

In general, our confidence in the ISF is increasing as the ISF become more capable of taking responsibility for Iraq's security. Nevertheless, fighting insurgent penetration and corruption will be a long-term effort. Coalition forces already partner with ISF units to provide expertise and leadership training. As these efforts continue at the unit level, it is also important that Iraq develop institutions capable of vetting and managing their security forces. We will continue to assist the Iraqi government in building effective Interior and Defense ministries to maintain loyal, professional forces that do not tolerate corruption.

General PACE and General SCHOOMAKER. I am not being told that large numbers of Iraqi army troops are in fact deserting. Absenteeism in the Iraqi military is dependent upon where a unit falls in its training and employment life cycle. During individual and collective training, some recruits determine that the life of a soldier is not for them and leave, while others fail to meet training course standards and are dismissed. Approximately 15 percent attrition is the norm for initial training. When a unit is fully trained and employed in combat operations, some soldiers find that they do not like the particular location, or they find that the danger of the counterinsurgency is too much for them. In either event, Iraqi army policy is that soldiers who leave are dropped from the rolls within a week and are prohibited from ever rejoining the ISF. What remains is a unit that is confident in its leaders and in its ability to fight. Although deployments to combat sometimes cause absentee spikes of 5–8 percent, soldiers in units in this final stage of development are unlikely to leave the service; absent without leave (AWOL) rates are typically about 1–4 percent for most divisions. As more and more ISF are generated, absenteeism has become less of a problem. Unit corruption is mitigated through the daily interaction provided by Coalition Military Transition Teams (MiTTs) embedded with every Iraqi battalion, brigade, and division, as well as partnership with coalition units. The MiTTs and partnership programs provide mentorship and expertise critical for development of Iraqi leadership that adheres to the rule of law and does not tolerate corruption in its ranks.

33. Senator MCCAIN. Secretary Rumsfeld, General Pace, and General Schoomaker, how is this going to affect transfer of command to the Iraqis and how do we guarantee that once the transfer occurs, they will be able to prevent corruption themselves?

Secretary RUMSFELD. In addition to training and equipping the ISF, we are working with the Iraqi government to build Defense and Interior ministries capable of taking responsibility for the substantial security forces now being created. Part of that responsibility involves investigating reports of corruption and taking appropriate steps to correct any problems that may be found. We and our coalition partners cannot guarantee an end to corruption, but we will continue to work with the Iraqis to develop the institutions capable of fighting corruption.

General PACE and General SCHOOMAKER. Unit absenteeism and corruption are not affecting the transfer of battle space responsibility to the Iraqi army. Forty-three Iraqi army battalions now control their own battle space. Generating operational units that can assume battle space is only part of the challenge facing the Iraqi MOD; it must also develop the ability to operate and sustain Iraqi forces independently. Efforts to build such capabilities within the MOD have been hampered by assassination or intimidation of employees, corruption, and the relative inexperience of key civilian leaders. In the face of such challenges, the MOD needs to strengthen its capabilities across the board—in areas such as payroll, material readiness, contracting, and construction. Multi-National Security Transition Command-Iraq is now expanding upon previous efforts to help the MOD implement the processes that will allow the ministry to sustain and support its fielded forces.

34. Senator MCCAIN. General Schoomaker, I understand there are small soldier-teams supervising and training Iraqi forces. What feedback do you have from them regarding the capabilities of Iraqi troops?

General SCHOOMAKER. Yes, there are military and police transition teams which focus on training, coaching, and mentoring the Iraqi MOD forces and the Iraqi MOI police forces. Feedback from the teams has been very positive. While challenges exist based on the rapid growth and deployment of these forces, the Iraqis have performed remarkably well in combat operations. There are numerous reports of successes in combat and counterinsurgency operations to capture key targets and terrorists including members of the leadership of Abu Al Zarqawi's al Qaeda in Iraq organization. Well planned and executed Iraqi-led raids have significantly contributed to the counterinsurgency fight. The Iraqi National Police have also undertaken numerous successful hostage rescue operations.

The Transition Team Headquarters elements report work remains to be done fostering improvements in the Iraqi MOD and MOI forces. The main effort continues on sustaining operations on a long-term basis. The MOI forces must also transition from military and counterinsurgency to civil law enforcement operations. Efforts must continue with the focus on leadership training of junior officers and the generation and training of noncommissioned officers. Training must continue with Iraqi forces emphasizing military and civil operations conducted in accordance with the appropriate rules of law.

35. Senator MCCAIN. General Schoomaker, how would you rate the success of these teams?

General SCHOOMAKER. The military and police transition teams have been the major factor improving the readiness and capabilities of ISF over the last 2 years. These improvements have transformed many Iraqi units from untrained forces into combat-capable units which are fighting and winning the counterinsurgency battle. The majority of units are able to perform operations alongside coalition forces. There are also a growing number of units capable of planning and conducting combat and counterinsurgency operations with limited or no coalition support. Efforts continue with the goal of moving the Iraqi forces toward more independent operations.

These transition teams must continue to expand on their successes to develop cohesive forces which can sustain themselves independently in combat, counter-insurgency, and civil policing operations.

COST OF OPERATIONS IN WAR ON TERROR

36. Senator MCCAIN. Secretary Rumsfeld, since September 11, the Congressional Research Service (CRS) estimates that the administration has allocated more than $360 billion for military operations and reconstruction in Iraq and Afghanistan, a number that includes "emergency" and "bridge" funding. DOD's currently spending about $7 billion per month in Iraq and Afghanistan. DOD has not provided an overall explanation of the administration of these funds by specific operation or by mission. Last year, the GAO found that DOD had "lost visibility" on more than $7 billion appropriated for the war on terror. Furthermore, it is clear that regular budget and war-related spending are not properly segregated. It would be an understatement to say that Congress's visibility into war spending has been obscured. How will you ensure accurate and transparent accounting in the future?

Secretary RUMSFELD. The DOD has a comprehensive and detailed cost reporting system that reports obligations by operation, by component, by month, and by fiscal year. The system is managed by the Defense Finance and Accounting Service (DFAS) and generates reports monthly.

The reporting system has captured the DOD costs of the war on terrorism going back to September 11, 2001, separately showing what was spent in Operation Iraqi Freedom, Operation Enduring Freedom (mostly Afghanistan), and Operation Noble Eagle to defend the United States. These costs are collected from DOD locations worldwide. Costs are structured in a commodity and functional categorization breakdown enabling insight into the activities being supported. Examples of the cost categories include: Reserve component mobilization, special pays, aircraft and vehicle procurement, etc.

The cost information is reported routinely to Congress, the GAO, the CBO, and the OMB.

There are ongoing efforts inside the Department to refine the systems and categories that we are using to track the cost of war. The GAO staff is aware that the Services are implementing improvements in the reporting of costs. We are committed to financial stewardship and are working tirelessly to perfect that task.

AFGHANISTAN

37. Senator MCCAIN. General Pace and General Schoomaker, there has been a spike in violence in Afghanistan in recent months, with insurgents there applying lessons learned from Iraq. What new steps are we taking to combat this threat?

General PACE and General SCHOOMAKER. Yes, there has been an increase in the use of IEDs and suicide bombers in Afghanistan. This trend may be attributable to a variety of reasons. First, coalition forces have had success in killing insurgents that fight with other weapons and methods. Second, IED and suicide attacks appear to demonstrate relevancy and momentum to the insurgency support network. For a low financial and manpower investment, anti-coalition forces use IEDs and suicide attacks to achieve highly visible, widely reported effects. Third, a very mild Afghan winter may be allowing greater activity than in past years.

Steps we are taking to combat these threats include:

- Creating the Joint IED Defeat organization that is focusing our counter-IED efforts in Afghanistan and Iraq. [Deleted.]
- Active patrolling of the border areas and interdiction of enablers coming from Pakistan.
- Engagement with Pakistan to increase pressure on the Pakistan side of the border. President Karzai's recent visit with President Musharraf included provision of information on Taliban operatives in Pakistan.
- Leveraging a tri-partite structure (U.S.-Afghanistan-Pakistan) to facilitate IED working group exchanges.
- Information operations to expose the atrocities against the Afghan people and encourage popular rejection of the insurgents. We are seeing an increase in IED reporting by locals and public pronouncements by mullahs and local leaders against the IED and suicide tactics.

[Deleted.]

FUTURE COMBAT SYSTEMS

38. Senator MCCAIN. General Pace and General Schoomaker, the DOD's Selected Acquisition Report (SAR), dated November 15, 2005, revised the Future Combat Systems (FCS) program costs from $98.9 billion to $161.4 billion. This increase is due to a "program restructure" and adds 4 years to the development schedule. Many of the technologies required to field FCS are not yet mature and I fully expect requirements creep to add more dollar signs to the program. What is the Army doing to rein in the runaway cost of this program?

General PACE. You are correct that program restructuring (in 2004) resulted in the November 2005 adjustment to the Acquisition Program Baseline. That change actually accelerated the delivery of selected FCS capabilities to our forces in "spin-outs" planned every 2 years from 2010–2014. The restructure also restored 4 deferred systems to the planned 18 core systems, delaying the first full FCS brigade by the 4 years as you indicated in your question. The growth in FCS program costs is directly attributable to the programmatic changes in the 2004 restructure and is not classified as a cost overrun as reviewed by the Department.

The JROC has reviewed the FCS program's ORD every year since May 2003. The result of all this activity validates that FCS Operational Requirements are stable, while refining the level of detail to assist the program as it translates requirements into engineering-level specifications. Of note, the program is presently undergoing a JROC review and the FCS program has added the congressionally-mandated key performance parameters for force protection and survivability.

The FCS program restructure took into consideration the maturity of critical technology development. Those technologies deemed mature were grouped into FCS Spin-Out 1, to be delivered in 2010. In total, the FCS program is tracking 49 critical technologies and is on schedule to mature all technologies by the System-of-Systems Preliminary Design Review scheduled for August 2008. The current FCS program has adequate risk management measures in place, and the technology development approach is consistent with DOD acquisition policy.

General SCHOOMAKER. The cost growth was directly attributable to the programmatic nature of the 2004 restructure decision. Most of the growth (except the "Revised/Updated Estimates") was externally driven and not within the PM's control. It was not classified as a cost overrun as reviewed by the OSD.

Acquisition programs are required to estimate their costs in base-year or constant dollars. Many individuals not associated with the program have misunderstood the comparative cost growth and the cost estimate conversion factors between the December 2004 SAR and the recently submitted November 2005 SAR.

By law, the FCS program submits its SAR annually (February). The recently submitted SAR was a quarterly exception SAR to comply with reporting requirements of 10 U.S.C., §2432. The reporting requirement was directed by the Office of the Secretary of Defense for Acquisition and Technology (OSD/AT&L) with concurrence from the Army on October 21, 2005. The December 2004 SAR discussed in text, the restructured FCS program, but the actual cost and schedule parameters were not changed because an approved Acquisition Program Baseline (APB) reflecting the restructured program had not yet been approved by the Milestone Decision Authority (reflected 2003 Milestone B Decision baseline data). This guidance from OSD was also noted in the December 2004 SAR. The current APB on which the 2005 SAR is based was approved by the Defense Acquisition Executive on November 2, 2005.

Cost growth occurs when a funded, definitized scope of work increases. Increases to costs can also occur when scope is added to provide more capability. The FCS program increases predominantly fell into the latter category. The program restructuring restored four deferred systems to the current 18 core systems and accelerated the delivery of selected FCS capabilities to the Current Force (spin outs), while delaying the first full FCS brigade by 4 years. The adding of capability resulted in RDTE growth of 48 percent (based on fiscal year 2003 constant dollars (C$)) broken down as follows:

- Previously Deferred Systems - 18 percent,
- Additional Technology/Reliability Maturation & Experimentation - 6 percent,
- Spin Out Requirements - 4 percent,
- Program Extension - 17 percent, and
- Revised/Updated Estimates - 3 percent.

Similarly, the procurement estimates also increased by 55 percent (based on fiscal year 2003 C$) as a result of the program restructuring as follows:

- Previously Deferred Systems - 18 percent,
- Platform Qty Adjustments - 17 percent,
- Platforms Content (Capability Enhancement, e.g. APS on all) - 11 percent,
- Updated Estimates - 7 percent, and
- Extended Production (1.5 vs. 2 BCTs per year) - 2 percent.

39. Senator MCCAIN. General Pace and General Schoomaker, has the FCS program made changes to reflect lessons learned in Iraq and Afghanistan?

General PACE. Yes, the FCS program has evolved to reflect lessons learned in Iraq and Afghanistan. In fact, the FCS program restructure in November 2005 was, in part, brought about because of the desire to get better technology into the hands of our forces engaged in the current fight.

The first FCS Spin-Out will field four different systems to the current force formations that, based on our experiences in Iraq and Afghanistan, will greatly enhance the combat effectiveness and force protection of our military. Those fielded systems include two different versions of unattended ground sensors and a non-line-of-sight launch system. In addition, FCS will deliver an intelligent munitions system that is compliant with the 2004 national land mine policy.

General SCHOOMAKER. Lessons learned in Iraq and Afghanistan are incorporated in the development of the FCS BCT. The most important lesson learned from Afghanistan and Iraq was the need to get emerging technology into the hands of our soldiers sooner and the Army is accomplishing this through the FCS Spin-Out Program. The program will spin-out unmanned systems, precision munitions, emerging network capabilities, and other technologies to support the force. Additionally, les-

sons from our Heavy and Stryker BCTs in Afghanistan and Iraq validated the requirement for a rapidly deployable, expeditionary force with a full spectrum capability, which the FCS BCT provides. These operations reinforce the criticality of: unmanned systems, like the PackBot and Unmanned Aerial Vehicles, to increase soldier survivability; improved countermine capabilities to counter IEDs; Active Protection Systems (APS) to counter a wide variety of threats including rocket propelled grenades; reconnaissance at all levels of command within the BCT; and a fully integrated network to provide increased battlefield awareness down to the platoon level.

40. Senator MCCAIN. General Schoomaker, the Department states that it is "refocusing America's forces and capabilities for the future," and that it must transition "from major conventional combat campaigns to multiple irregular warfare operations." How does FCS contribute to conducting irregular warfare operations?

General SCHOOMAKER. Irregular warfare is the broad spectrum of operations and activities conducted by military or paramilitary forces. It is normally of long duration, against adversaries who deliberately seek to avoid accepted rules in the conduct of war. It includes, but is not limited to, unconventional warfare, guerrilla warfare, counter-guerrilla warfare, subversion, sabotage, intelligence activities, and unconventional assisted recovery and normally requires the support of the population. FCS BCTs are optimally configured for irregular warfare where information is the premium asset. FCS BCTs provide the capability to conduct distributed operations to keep the enemy dispersed and unable to connect with population, monitor vast territory with aerial and ground sensors to deny irregular forces freedom of movement, employ distributed precision to minimize damage and limit support, employ unmanned air and ground sensors to increase soldier survivability and protect the force from ambushes and raids, and establish a smaller footprint that is less invasive to population and reduces the number of soft logistical targets.

ARMY FORCE STRUCTURE

41. Senator MCCAIN. Secretary Rumsfeld, General Pace, and General Schoomaker, the 2006 QDR directed that the Army continue to rebalance capabilities by creating modular brigades in all three Army components, including 42 BCTs in the Active component and 28 BCTs in the ARNG. This action represents a reduction of one Active component combat brigade and six ARNG brigades from last year's plan. At that time, the Army asserted that 43 Active component combat brigades and the 34 ARNG combat brigades would ensure the Army could maintain a 17 brigade force deployed with Active component brigades having 2 years between rotations and the ARNG combat brigades having 5 years between rotations. Has the QDR taken into consideration the ARNG's State mission, especially homeland defense and disaster relief?

Secretary RUMSFELD and General PACE. The QDR has taken into account the State missions of the National Guard, to include homeland defense and disaster relief. We are initially funding three key programs that enhance the National Guard's capabilities in these areas. First, the National Guard is fielding 55 WMD civil support teams, one in each State, territory, and the District of Columbia. These teams have 22 members each and will provide critical communications links, assessment of WMD attack damage, and consequence management support to local, State, and Federal agencies. Second, the National Guard is building 12 enhanced response force packages to respond to chemical, biological, radiological, nuclear, and high-yield explosive attacks. These units will be trained to find and evacuate victims in WMD-contaminated environments, decontaminate casualties and patients, and provide medical treatment. Finally, the National Guard is creating a Joint Force Headquarters in each State to improve command and control capabilities for emergencies and major public events.

Regarding combat brigades, the Army's programmed modular force is sufficient for the missions we will face. With a base force of 42 Active and 28 National Guard combat brigades, the Army will be able to maintain 18–19 BCTs available for mission requirements on a 6-in-3-year basis in the Active Army and on a 1-in-6-year basis in the National Guard. Additionally, these combat brigades will be bolstered by a more robust force of 75 Active, 78 National Guard, and 58 Army Reserve support brigades.

General SCHOOMAKER. Options to rebalance forces and capabilities in the QDR were assessed in light of State and territorial employment of the National Guard. As a result of the Review's recommendations, ARNG forces will be more ready and relevant for expeditionary operations overseas, and homeland defense and disaster relief at home. Specifically, ARNG forces will have more capabilities that are of im-

mediate value to Governors for operations at home, such as medical, transportation, and engineering.

DOD PRIORITIES

42. Senator MCCAIN. Secretary Rumsfeld, General Pace, and General Schoomaker, the President's budget request for fiscal year 2007 expands funding for new weapons systems like the F/A–22, which runs at a quarter billion dollars per copy, the DDX destroyer that, when the costs of R&D are factored in will cost $10 billion per ship, and the Army's FCS, recently been estimated to cost $160 billion. A recent briefing from Deputy Assistant Secretary of Defense Nadaner indicates that the DOD recognizes the challenges of nation building, which is now referred to as "stability operations." Individual servicemembers face the greatest challenges when conducting stability missions and are asked to engage in both combat and peacekeeping operations, sometime simultaneously. I would like to know whether the DOD's focus on technological improvement is having a detrimental effect on the improvement of human skills. In an environment where soldiers are being asked to find and kill the enemy without killing civilians, speak foreign languages, understand alien cultures, and build nations, I hazard that more emphasis should be directed at producing capable soldiers rather than visionary weapons. I invite your thoughts on this issue, and would like to know what specific actions the Army and Marine Corps have/are taking to improve the individual soldier/marine's skill set and capabilities.

Secretary RUMSFELD. The QDR establishes exactly the vector for the emphasis on producing capable soldiers that you describe. Operationalizing the Defense Strategy with the emphasis on defeating terrorist networks, preventing the acquisition or use of WMD, shaping the choices of countries at strategic crossroads, and defending the homeland defense requires continuation of many initiatives already underway that the Army and Marine Corps will address in greater detail. The QDR reorientation of the capabilities of ground forces and special operations forces highlights the need to understand foreign languages and cultures. Conducting counterinsurgency campaigns requires the continued rebalancing of all three components of the Army by creating modular brigades as well as the Marine Corps' increase in infantry and reconnaissance capacity. Technological improvement is not having a detrimental impact on the human skills and in fact the QDR specifically emphasizes the essential human skills you identify.

General PACE. Our primary focus today is to prevail in the war on terrorism. We will succeed while continuing to look toward future operational requirements vital to the defense of the United States. Our efforts to transform for future challenges, strengthen joint warfighting capabilities, and improve servicemember quality of life will improve our capacity to defend our Nation both today and in the future.

We are always cognizant of the fact that our soldiers, sailors, airmen, and marines are our most important, most valued assets. Success in today's irregular warfare arena requires us to gain and maintain new warfighting skills, including enhanced abilities to speak foreign languages, and understand and use knowledge of foreign cultures to our operational advantage. The focus of our efforts is to ensure that U.S. military personnel can navigate the human terrain as easily as they can navigate physical terrain.

Soldiers and marines are provided with home-station, pre-deployment, and in-theater training targeted to region, culture, language, and operational scenarios. To be better prepared for combat, soldiers and marines receive advanced training in marksmanship and live-fire convoy procedures. Current training draws from recent combat experience and emphasizes warrior tasks and battle drills to enhance survivability. Training exercises feature nongovernmental organizations, contractors, media, coalition role players, and hundreds of civilians on the battlefield. The successes of soldiers and marines to date include continuous pre-deployment training focused on OIF and OEF, training exercises, training of foreign military training units, curriculum development in training, and professional military education schools from entry-level through advanced PME, providing language familiarization and counterinsurgency training for operating forces deploying to OIF/OEF, advisor teams, and military transition teams.

Coordination to develop regionally focused programs continues among the U.S. Army TRADOC, U.S. Navy OPNAV, and CFFC, Marine Corps Combat Development Command, Air Force Air Combat Command, U.S. Naval Academy, and other military and civilian institutions.

General SCHOOMAKER. Army training has been redesigned to provide soldiers and units with increased capabilities and skills relevant to current and future operations. The Army focuses individual training on 39 Warrior Tasks, grouped into

Shoot, Move, Communicate, Fight, and Joint Urban Operations, and nine Battle Drills (39/9). To be combat ready, every soldier, regardless of specialty and experience, must be proficient in these skills. The Warrior Leader Course for junior Noncommissioned Officers (NCOs) has expanded its situational awareness training exercise to 96 hours, giving soldiers more field time to practice troop-leading procedures, work on mission planning, and execute the mission to standard, followed by a thorough after-action review. Basic and advanced NCO training in all of its progressive phases also builds on the 39/9 to teach leadership as it applies to current operating environments (COEs), including replicating forward operating bases, live-fire convoy exercises, and reaction to IEDs. The Sergeants Major Academy provides a common core built around the 39/9 with emphasis on convoy operations, detainee operations, cultural awareness, and joint operations.

The Officer Education System (OES) also focuses on the 39/9 and now includes a 6-week field leadership course attended by lieutenants from all branches followed by their functional courses. Another change is the resident intermediate level education for all Active-Duty majors that prepares them for a full spectrum operations in a joint, interagency, intergovernmental and multinational environment. Advanced civil schooling opportunities have expanded by 200 per year in disciplines such as cultural awareness, regional knowledge, foreign language, governance, diplomacy, national security, and social sciences. This program will develop critical intellectual skills while providing long-term retention of quality officers. Cultural awareness has been incorporated into every phase of the Army's professional military educational system. Formal language training has also been increased and modified to include languages relevant to current and potential operations. On-line language training (26 languages) is available to all Army personnel.

Our premier training facilities, two dirt Combat Training Centers that replicate the realistic operational environments of Iraq and Afghanistan, are where we blend our 39/9 and OES/NCOES changes together with unit/collective training at the brigade/battalion/company level with real-time challenges.

Simulators and other training devices such as the Engagement Skills Trainer, Laser Marksmanship Training System, and Visual Combat Convoy Trainer address soldier skills under situations and conditions relevant to today's combat. In addition, upgraded ranges help to improve soldier skills with advanced technologies (that help in evaluating and promoting soldier and unit weapons proficiency) and actual urban terrain that also reflects the COEs.

QUESTIONS SUBMITTED BY SENATOR JEFF SESSIONS

GLOBAL STRIKE

43. Senator SESSIONS. General Pace, on page 10 of your testimony, you note that "prompt global conventional strike capabilities are required in the war on terror as well as in future contingencies." What specific capabilities are needed?

General PACE. Modified (conventional) ballistic missiles are required to rapidly strike targets whose known locations change relatively quickly over time and/or are located in distant and limited access areas. The capability to prosecute such targets anywhere in the world, at any time, with conventional ballistic missiles in less than 1 hour will enhance our ability to most effectively fight the war on terrorism. The ability to strike these targets is also predicated on objective, accurate target aim point derivation provided by emerging, advanced ISR capabilities. Future contingencies will most likely involve disparate, small, highly lethal, and mobile targets. The need to rapidly deliver non-nuclear kinetic weapons to any location in the world where such a response is appropriate will become increasingly important.

44. Senator SESSIONS. General Pace, under what scenarios do you imagine their usefulness?

General PACE. Prompt global conventional strike capabilities will be useful in any scenario where a rapid, non-nuclear kinetic response is either the most appropriate and/or most tactically survivable option to strike a target. These targets may include, but are not limited to, WMD and their delivery systems, including mobile systems, hard and deeply buried facilities associated with WMD, strategic targets embedded in urban areas, and terrorist nodes or networks in any location. The only way to deliver a kinetic strike globally in less than an hour with current technology is to send it through space using a long-range ballistic missile. In the war on terrorism, and in potential future contingencies, critical targets may be fleeting or located in areas not readily accessible by current non-nuclear means. Conventional ballistic missiles will effectively address those targeting requirements.

45. Senator SESSIONS. General Pace, explain why existing weapons, such as air- and sea-launched cruise missiles and long-range bombers cannot accomplish the global strike mission.

General PACE. Existing weapons can and do accomplish a large portion of the current conventional global strike mission. However, long-range bombers and cruise missiles each have limitations.

The response time for bombers may be too long to adequately prosecute a target whose known location is fleeting. Also, long-range bombers may require extensive support, including air refueling en route to distant targets and suppression of enemy air defenses to effectively penetrate the most sophisticated enemy airspace.

Air- and sea-launched cruise missiles, while accurate and fairly prompt, may not have sufficient speed and range capabilities to successfully engage fleeting targets or targets in locations that preclude the use of long-range bombers.

The prompt global conventional strike capabilities afforded by development and fielding of conventional ballistic missiles will effectively address targeting requirements not readily satisfied by long-range bombers and air- and sea-launched cruise missiles.

QUESTIONS SUBMITTED BY SENATOR SAXBY CHAMBLISS

STATUS OF THE C/KC–130J CONTRACT

46. Senator CHAMBLISS. Secretary Rumsfeld, please provide the status of the conversion of the C/KC–130J multiyear contract from a FAR Part 12 to a FAR Part 15 contract.

Secretary RUMSFELD. The Air Force and Lockheed Martin executed an undefinitized contractual action (UCA) on February 10, 2006. The UCA continues the multiyear contract, subject to the standard terms and conditions for a traditional contract under Part 15 of the Federal Acquisition Regulation (FAR), including the clauses requiring compliance with the Truth in Negotiations Act. The UCA sets forth the Government's commitment to evaluate a FAR deviation to permit recoupment of deferred independent research and development costs for the C–130J aircraft. That evaluation is ongoing. The UCA is based on ceiling prices that are equal to the commercial contract prices, but are subject to downward or upward negotiation following submission of detailed cost or pricing data that will be certified when negotiations are completed. The Air Force avoided contract termination costs through use of the UCA. Final negotiations are scheduled to be completed by October 2006.

47. Senator CHAMBLISS. Secretary Rumsfeld, it is my understanding that OSD/AT&L is the proper authority within DOD to review and certify that a contract meets the requirements of a FAR Part 15 contract. Please provide OSD/AT&L's assessment of what the Department has done and is doing to convert the C/KC–130J multiyear contract to a FAR 15 compliant contract.

Secretary RUMSFELD. The Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD/AT&L)) is responsible for oversight of major defense acquisition programs. The Air Force is responsible for ensuring that the C–130J contract complies with statutory and policy direction, including the requirement, in section 135 of the National Defense Authorization Act for Fiscal Year 2006, that "C–130J and KC–130J aircraft procured after fiscal year 2005 be procured through a contract under Part 15 of the FAR." In his oversight role, the USD/AT&L has been kept informed of progress in meeting the requirements of section 135. Our assessment is that the Air Force has taken appropriate action to convert the C–130J multiyear contract from a commercial contract to a contract that includes the terms and conditions normally found in a contract negotiated under Part 15 of the FAR. Most importantly, the contractor must comply with the Truth in Negotiations Act in submitting certified cost or pricing data to support the Air Force's negotiation of the price of the contract.

48. Senator CHAMBLISS. Secretary Rumsfeld, please provide the DOD IG's assessment of what the Department has done and is doing to convert the C/KC–130J multiyear contract to a FAR 15 compliant contract.

Secretary RUMSFELD. The Air Force proceeded with the conversion of the C/KC–130J contract until November 2005 when my staff determined that the conversion would not result in a FAR Part 15 type contract for aircraft that were already under contract. The Air Force strategy called for adding FAR Part 15 terms and conditions to the existing contract that would apply to any future contract price adjustments.

On November 29, 2005, I notified staff of the Senate Armed Services Airland Subcommittee that the Air Force did not intend to obtain certified cost or pricing data for the aircraft under contract or negotiate new prices. On December 1, 2005, Kenneth Miller, Air Force Deputy Assistant Secretary for Acquisition Governance and Transparency, met with the subcommittee staff and agreed with this assessment. Subsequent to this meeting, the Air Force agreed that the restructure should include pricing as well as terms and conditions for all 37 aircraft on the existing contract that had not yet been delivered. On February 7, 2006, former Acting Secretary of the Air Force, Michael Dominguez, indicated to Senator McCain that his understanding of what it meant to convert the contract to FAR Part 15 had been significantly different than what Senator McCain expected. On February 10, 2006, the Air Force executed an undefinitized contract modification for fiscal years 2006 through 2008 aircraft procurements that will allow for repricing. The Air Force's current target date for completion of actions is October 2006.

The new contract modification signed by the Air Force puts in place a framework to make the conversion to FAR Part 15. We cannot make a final assessment of the success of the conversion to FAR Part 15 until the additional processes for the definitization of the contract have been completed.

49. Senator CHAMBLISS. Secretary Rumsfeld, please provide the DOD General Counsel's assessment regarding whether the Department's plan and actions to convert the C/KC–130J multiyear contract to a FAR 15 compliant contract meets the requirements of the National Defense Authorization Act for Fiscal Year 2006 (Public Law No: 109–163).

Secretary RUMSFELD. The Acting General Counsel of the DOD provides the following assessment:

> "I have determined that the Department has complied with section 135 of the National Defense Authorization Act for Fiscal Year 2006, which requires that C–130J and KC–130J aircraft procured after fiscal year 2005 . . . be procured through a contract under part 15 of the Federal Acquisition Regulation. . . The Air Force has informed me that it executed an UCA with Lockheed Martin on February 10, 2006. With respect to C–130J and KC–130J aircraft in program years 2006 through 2008 under the current multiyear contract, the UCA incorporates the standard terms and conditions applicable to a contract negotiated under Part 15 of the FAR. Among these are clauses that subject the contractor to the requirements of the Truth in Negotiations Act. The Air Force expects that the negotiation of final, revised prices for program years 2006 through 2008 under the multiyear contract will be complete by October 2006. I conclude that this arrangement satisfies the requirements of section 135."

H.R.1815

National Defense Authorization Act for Fiscal Year 2006 (Enrolled as Agreed to or Passed by Both House and Senate)

SEC. 135. PROCUREMENT OF C-130J/KC-130J AIRCRAFT AFTER FISCAL YEAR 2005.

Any C-130J/KC-130J aircraft procured after fiscal year 2005 (including C-130J/KC-130J aircraft procured through a multiyear contract continuing in force from a fiscal year before fiscal year 2006) shall be procured through a contract under part 15 of the Federal Acquisition Regulation (FAR), relating to acquisition of items by negotiated contract (48 CFR 15.000 et seq.), rather than through a contract under part 12 of the Federal Acquisition Regulation, relating to acquisition of commercial items (48 CFR 12.000 et seq.).

QUESTION SUBMITTED BY SENATOR ELIZABETH DOLE

COMBATING THE DRUG TRADE IN AFGHANISTAN

50. Senator DOLE. Secretary Rumsfeld, the drug trade in Afghanistan remains a serious concern. Heroin trafficking makes up a large portion of that country's GDP, and money from this illicit trade is falling into the hands of warlords and the Taliban, to the point that this drug trade is a profound threat to the survival of this new democracy. The Senate version of the Defense Authorization Bill contained a provision that would have authorized "the use of U.S. bases of operation or training facilities to facilitate the conduct of counterdrug activities in Afghanistan." However, the Conference Report did not contain this provision.

What is the DOD currently doing to help combat the drug trade in Afghanistan, and are additional authorities and monies needed? Some, for example, have proposed making counternarcotics a higher priority for CENTCOM's core mission in Afghanistan.

Secretary RUMSFELD. DOD is deeply committed to helping build Afghanistan's capacity to combat the drug trade. This capacity will allow the Afghans to conduct effective narcotics law enforcement operations, control their border, and reduce the illicit narcotics leaving and drug processing chemicals entering the country. With this increased security capacity, the Afghan government will control areas that are currently threatened by drug traffickers, insurgents, and the Taliban.

With the funds provided for drug interdiction and counterdrug activities, the Department pursues the programs below designed to complement the efforts of the Departments of State and Justice to provide for security and police forces throughout Afghanistan:

(1) Providing training, logistics support, infrastructure, and transportation for the Afghan National Interdiction Unit (NIU) and its associated Drug Enforcement Administration's (DEA) Foreign Deployed Advisory Support Team (FAST).

(a) The DOD has provided training for 128 NIU personnel and 5 DEA FAST teams and will provide additional training in 2006. On behalf of the NIU, the Department has procured weapons, ammunition, radios, and night vision devices and is constructing a base of operations and training facility.

(b) The Department is building a helicopter unit to support Afghan NIU and DEA FAST teams. Ten MI–17 helicopters have been acquired and equipped, and Afghan pilots and crews are training at Fort Bliss, Texas. 16 MI–17 pilots and crew have completed training at Fort Bliss. Another 12 MI–17 pilots are currently undergoing training. The Department is constructing a aviation facility at the Kabul International Airport for maintenance support functions and forward operating bases at key points within Afghanistan to support NIU and the Counternarcotics Police of Afghanistan field operations.

(2) Information sharing. The Department established a Counternarcotics Intelligence Fusion Center (IFC) in Kabul to support Afghan, U.S., and U.K. narcotics enforcement operations. The Department also built the U.K. and U.S. Interagency Operations Coordination Center (IOCC) in Kabul and is participating in development of a U.K. and U.S. Joint Narcotics Analysis Center (JNAC) in London that will be responsible for establishing a strategic picture of drug trafficking operations and flow in and out of Afghanistan. These centers provide the capability to coordinate all counternarcotics operations within Afghanistan while feeding and benefiting from a strategic approach to counternarcotics.

(3) Helping build Afghan border control capacity. The Department is helping to train and equip Afghan border police and providing infrastructure from which countersmuggling operations can be based. The Department is constructing several border crossing points in Afghanistan and refurbished several border strong points along the Afghan/Pakistan border. The Department is providing scanners to assist searches at border crossing points and random checkpoints throughout the country.

(4) The Department is currently on a joint DOD, DEA, and State plan to expand the Counternarcotics Police of Afghanistan. This will build a greater capacity to the Afghan forces to counter narcoterrorism forces. The Department is fielding a complete communications system for the Afghan Border Police to facilitate command and control of the outlying stations by the main headquarters. Additionally, the Department provided more than 12,000 9mm pistols and associated ammunition to the Afghan Border Police.

(5) Supporting the Afghan Special Narcotics Force (ASNF). The Department has supported the ASNF, an interdiction force, with a refurbished MI–17 helicopter, pilot and crew training, and specialized equipment. The Department is also constructing a forward operating base for the ASNF at Kandahar.

(6) Regional counternarcotics support. The Department operates CN support programs involving Uzbekistan, Pakistan, Tajikistan, Turkmenistan, Oman, Kyrgyzstan, Kazakhstan, and the Horn of Africa. All will receive some DOD counternarcotics support in the form of communications systems, patrol boats, sensors, vehicles, training, equipment, and related infrastructure.

The authorities and monies to sustain these programs have been included in the DOD fiscal year 2006 Emergency Supplemental Request.

QUESTIONS SUBMITTED BY SENATOR JOHN CORNYN

INFORMATION ASSURANCE

51. Senator CORNYN. Secretary Rumsfeld, protection of military networks, information, and communications is critical to our safety and operations. The DOD IG noted in a recent report that the Department does not yet have a comprehensive enterprise-wide inventory of information systems and that "Without a complete inventory of DOD major information systems, answers to questions from OMB or Congress on major information systems may not be accurate and information assurance is at risk because there is little assurance that all systems are adequately protected." What is the status of the Department's efforts to inventory information systems?

Secretary RUMSFELD. The inventory of major information systems under the control of the Department is as accurate as possible considering the dynamic environment and sheer number of systems deployed across the DOD enterprise. The Department is continuing the effort to complete a comprehensive enterprise-wide inventory, including mission support systems.

52. Senator CORNYN. Secretary Rumsfeld, what is your guidance to commanders on the importance of protecting information and networks?

Secretary RUMSFELD. The protection of information and networks is fundamental to ensuring the success of our network-centric, distributed forces. As the DOD transforms its people, processes, and military forces towards a network-centric environment, the protection of the information and networks that support that transformation becomes increasingly important. Most cyber attacks are used by the adversary as an inexpensive means of leveling the battlefield. The Department has issued the Transformation Planning Guidance that states:

> "Assuring information systems in the face of attack and conducting effective and discriminate offensive information operations will deny the adversary hope of exploiting a new dimension of the battlespace as a low-cost and powerful asymmetric option while providing us an unwarned strike capability that contributes to a broad, simultaneous, and overwhelming range of effects that increases the likelihood of rapid collapse of an adversary's will to fight."

The protection of our information and networks and an interoperable force are critical to information assurance. Both issues are addressed in a variety of initiatives set out under the QDR. As part of the initiatives, the DOD Chief Information Officer (CIO) has undertaken an effort to train and certify all key DOD personnel who manage and operate our networks.

The Department's Information Assurance (IA) policy framework provides overarching guidance for protecting information and networks. The capstone DODD 8500.1, Information Assurance, was issued in October 2002. DODI 8500.2, Information Assurance Implementation, was issued in February 2003. Additional directives include guidance on computer network defense, certification, and accreditation of all DOD systems, and training and certification of the IA workforce. The DOD IA Strategic Plan serves as an IA planning and management guide for the combatant commands, Services, and defense agencies. It establishes the Department's IA goals, sets out strategic objectives for IA, and provides a consistent approach to assuring information across the DOD enterprise.

For day-to-day operations, the Commander, U.S. Strategic Command, is charged with assessing and responding to cyber threats through the subordinate Commander Joint Task Force-Global Network Operations (JTF–GNO). JTF–GNO provides guidance to all commanders on the current cyber threat and directs actions to counter the threat.

53. Senator CORNYN. Secretary Rumsfeld, what ongoing activities are you pursuing to ensure that information security practices are followed throughout the Department?

Secretary RUMSFELD. The DOD has developed an IA policy framework that provides overarching IA guidance for protecting information and networks. The capstone DODD 8500.1, Information Assurance, was issued in October 2002. DODI 8500.2, Information Assurance Implementation, was issued in February 2003. Additional subordinate directives include guidance on computer network defense, certification, and accreditation of all DOD systems, and training and certification of the IA workforce. These policies and instructions are continually reviewed, updated, and promulgated to the DOD components.

As part of the Federal Information Security Management Act (FISMA) reporting requirements, DOD Component CIOs annually verify the certification and accreditation status of their information systems. Those systems with security deficiencies must have an IT Security Plan of Action and Milestones (POA&M) to track and correct deficiencies. Also, as part of the FISMA process, the DOD IG conducts an independent audit of a subset of the DOD information systems.

Each year the Department conducts a Computer Network Defense (CND) assessment and shares the assessment results with the components to highlight where progress has been made from year to year and to identify areas that need attention. Also, in conjunction with the Director, Operational Test and Evaluation, IA is integrated into DOD exercises. Further, the National Security Agency and the Defense Information Systems Agency (DISA) perform network penetration and readiness assessments.

To mitigate the effects of network vulnerabilities and ensure DOD has an effective defensive posture against cyber attacks, the Department established the DOD IA and CND Enterprise Solutions Steering Group. Under the leadership of U.S. Strategic Command (STRATCOM), the steering group plans, coordinates, acquires, and implements enterprise CND solutions designed to stop, contain, and/or mitigate the effects of system and network attacks and vulnerabilities. Actions include a combination of procedural and technical capabilities implemented across the enterprise. Some examples of enterprise-wide solutions include automated vulnerability scanning and remediation tools that permit system administrators to scan and report compliance with DOD vulnerability patch policies and push patches to remote machines.

The Department is committed to implementing a robust Public-Key Infrastructure (PKI). In December 2005, the Joint Task Force-Global Network Operations (JTF–GNO) directed the DOD components to implement and report on the status of the use of PKI for system logon. The use of PKI cryptographic logon inhibits adversaries from remotely accessing Department systems.

Another ongoing activity being taken by the CIO and the JTF–GNO is the implementation of Ports, Protocols, and Services management and port closures. These efforts close unused ports, stop the use of vulnerable computer communication protocols that could easily allow hackers to access our systems, and to reduce the risk of potentially malicious traffic entering and leaving the Global Information Grid (GIG).

For day-to-day operations, the Commander, STRATCOM, is charged with assessing and responding to cyber threats through the JTF–GNO. JTF–GNO provides guidance to all commanders on the current cyber threat and actions to counter the threat. Recent JTF–GNO actions include the following:

- In November 2005, the JTF–GNO directed a DOD-wide Network Stand-Down Day to conduct computer network defense refresher training to all DOD users. JTF–GNO required DOD elements to confirm all accounts and users were required to change passwords or their accounts were locked.
- Under the Enhanced Inspection Program, DOD scans DOD networks to discover networks in violation of DOD policies and then directs actions to mitigate any problems.

Lastly, the Department has made IA a key component of our acquisition review process to ensure the integration of IA activities in systems development.

QUESTION SUBMITTED BY SENATOR CARL LEVIN

QDR RISK ASSESSMENT

54. Senator LEVIN. General Pace, the law requires the QDR to identify "(A) the budget plan that would be required to provide sufficient resources to execute successfully the full range of missions called for in that National Defense Strategy at a low to medium risk," and "(B) any additional resources (beyond those programmed in the current Future Years Defense Program) required to achieve such a level of risk." The law also requires the Secretary in consultation with the Chairman to as-

sess the risk and to define the nature and magnitude of the political, strategic, and military risks associated with executing the missions called for under the National Defense Strategy. Finally, the law requires the Chairman to prepare and submit to the Secretary the Chairman's assessment of the review, including the Chairman's assessment of risk.

Your assessment of the risk states that "this review has carefully balanced those areas where risk might best be taken in order to provide the needed resources for areas requiring new or additional investment" but it does not state what the level of risk is, nor does it identify the nature and magnitude of the political, strategic, and military risks associated with executing the missions called for under the National Defense Strategy.

Please provide your assessment of the level of risk, and identify the nature and magnitude of the political, strategic, and military risks involved.

General PACE. As title 10 requires, the QDR identifies a plan that will allow us to accomplish the full range of missions called for in the National Defense Strategy at a "low-to-moderate" level of risk.

As I mention in my assessment of the QDR, any attempt to predict the nature of the future security environment is difficult. Therefore, the QDR recommends investing toward a fully transformed force that will be best prepared to meet the political, strategic, and military challenges we may face over the next 20 years.

Today, the Armed Forces of the United States stand fully capable of accomplishing all the objectives of the National Defense Strategy. We must prevail now in the war on terrorism while we also prepare for the future. The recommendations of the QDR will allow us to accomplish these vital goals.

QUESTIONS SUBMITTED BY SENATOR EDWARD M. KENNEDY

UNIVERSITY RESEARCH INITIATIVE PROGRAMS

55. Senator KENNEDY. Secretary Rumsfeld, the fiscal year 2007 budget request calls for a combined $249.4 million in the Service University Research Initiatives (URI) programs. This program invests in university research projects in areas such as nanotechnology, robotics, and artificial intelligence that create the transformational technologies and military capabilities, and train the next generation of scientists, engineers, and technology entrepreneurs in defense technology disciplines.

In constant dollars, this is below the total fiscal year 2004 request for this important program. As a result, you are required to submit a report to Congress on the effect of this funding reduction on defense technology and research capabilities, as described in the National Defense Authorization Act for Fiscal Year 2004 Conference Report. This requirement was developed by Congress for fear that this program—which had been managed directly by the Office of the Secretary—would lose its funding support when it was transferred to the individual Services and had to compete with their priorities. Apparently this has occurred, since even though the DOD topline continues to increase—the important URI program loses ground to inflation.

What is the reason for the reduced request relative to 2004 in URI?

Secretary RUMSFELD. While it is true that the fiscal year 2007 budget request for the URI program is less than that requested in fiscal year 2004, the Department's request seeks a total of $249.4 million for URI, evidencing continued support for this program. The funding level requested for this program is the result of the very difficult choices that the Department must make in order to balance total program priorities.

56. Senator KENNEDY. Secretary Rumsfeld, what is the status of the development of the required report to Congress on this issue?

Secretary RUMSFELD. The required report is being finalized and should be provided to Congress in April 2006.

COUNTERTERRORISM STUDY

57. Senator KENNEDY. General Pace, on February 5, The New York Times reported that your staff has completed a counterterrorism study. According to the Times, the report orders the DOD to undertake a broad campaign to find and attack or neutralize terrorist leaders, their havens, financial networks, methods of communication, and ability to move around the globe, but to be mindful that their military

actions can have a negative impact on the fight against terror. Will you provide a copy of this report to the SASC?

General PACE. The study referred to in the Times is actually the National Military Strategic Plan for the war on terrorism (NMSP–WOT). We have provided copies of the NMSP–WOT to the SASC.

58. Senator KENNEDY. General Pace, what are military actions that can have a negative attack on terror operations?

General PACE. While any military actions can have negative effects, our offensive operations against terrorists present the greatest risk. For example, any time we use lethal force, enter private residences, or detain enemy combatants there is a risk of negative effects. Prior to conducting these operations, commanders balance the gains they intend to achieve with potentially negative second order effects and then determine if the mission is worth conducting. I continue to be impressed by our leaders and servicemembers who routinely show patience and ingenuity in their approach to operations to minimize collateral effects yet still accomplish their mission.

59. Senator KENNEDY. General Pace, how does the report recommend that our government balance the line between fighting terrorism and undertaking military operations that back fire and contribute to more terrorism?

General PACE. This is an excellent question and strikes at the very heart of the complex nature of the war on terrorism. To address this challenge, the NMSP–WOT gives clear direction to our commanders:

> "The way we conduct operations—choosing whether, when, where, and how—can affect ideological support for terrorism. Knowledge of indigenous population's culture and religious sensitivities and understanding of how the enemy uses the U.S. military's actions against us should inform the way the U.S. military operates. The U.S. military prefers to work in a supporting role where indigenous forces are capable of leading operations. Where effects can be achieved by means other than direct U.S. military actions, the U.S. Government may seek to do so. Where U.S. military involvement is necessary, military planners should build efforts into the operation to reduce potential negative effects. At the same time, we must, by our military actions, convey the sense that our power cannot be defeated and that, under the right circumstances, we are willing to use it. This will require careful balancing. The conduct of military operations should avoid undercutting the credibility and legitimacy of moderate authorities opposed to the extremists, while defeating extremists' ability to spread their ideology."

PROTECTION OF THE UNITED NATIONS

60. Senator KENNEDY. General Pace, in December 2005 the United States and the United Nations (U.N.) signed an agreement concerning the protection of the U.N. presence in Iraq by the Multinational Force. Obviously, we all have an interest in a robust international presence in Iraq. The Secretary General of the U.N. has said that expansion of the U.N. presence into places like Basra or Irbil depends on obtaining dedicated air support. I understand, however, that we will not provide it. Why not? Shouldn't we be facilitating the U.N.'s efforts to expand its presence into Basra or Irbil?

General PACE. U.N. mission requirements have been and will continue to be met in Iraq. Dedicating aircraft would be an inefficient use of resources and would likely result in less actual support to the U.N. All U.N. missions are prioritized as either elevated or high (rather than medium or routine). Between February and October 2005, the U.N. requested 73 UH–60 helicopter missions, none of which were refused. U.N. mission support rates (MSR) are consistently higher than other requests (100 percent vs. 92 percent average MSR for elevated requests, and 80 percent vs. 75 percent average MSR for high priority requests). Some missions are delayed due to inclement weather or aircraft maintenance issues, but these situations would be the same (weather) or exacerbated (maintenance, due to a significantly smaller aircraft pool) with dedicated aircraft. The Joint Staff, through the interagency Coalition Working Group, has worked diligently to facilitate the U.N.'s expansion in Iraq. We have equipped Fijian Personnel Security Details for U.N. principals. We have recruited coalition partners (Georgia in Baghdad, Romania in Basra, and Korea in Irbil) specifically to provide security for the U.N., and have provided equipment enhancements as needed to best accomplish this mission. Understanding the U.N.'s preference for dedicated aircraft, we are working to identify another nation willing

to fill this request, while Multi-National Force-Iraq continues to provide airlift support.

GULF WAR PRISONERS OF WAR

61. Senator KENNEDY. General Pace, Business Week has recently reported that Iraqi debts with foreign commercial corporations are being settled by issuance of new Iraqi bonds secured by Iraqi oil revenues. ["A Landmark Debt Deal for Iraq," Business Week online Jan. 12, 2006.] Do you believe that the commercial debts of French and Korean corporations should be put ahead of the debt of honor owed to American prisoners of war (POWs) brutally tortured by Iraq during the 1991 Gulf War?

General PACE. Iraq is a sovereign country. As Chairman of the Joint Chiefs of Staff, I do not have a lot of visibility into bond issues and Iraqi foreign debt. I was appalled upon hearing about the brutal treatment of our prisoners of war during Operation Desert Storm.

62. Senator KENNEDY. General Pace, why is the administration encouraging settlement of these debts through issuance of Iraqi bonds while it is continuing in court on the side of Saddam Hussein and Iraq to absolve them of liability for the torture of our American POWs?

General PACE. As mentioned in a previous answer, I find Iraq's treatment of our POWs deployable, but policy associated with the assurance of Iraq's bonds is well outside of my lane.

63. Senator KENNEDY. General Pace, twice during the period of ongoing torture of American POWs by Iraq during the Gulf War the Senate of the United States unanimously put Iraq on notice that it would be held accountable for the torture of American POWs. (See the Senate Resolutions of January 23 and January 31 of 1991.) More recently, on three occasions in reference to the case brought by American Gulf War POWs brutally tortured by Iraq during that war, the Senate unanimously accepted resolutions of support for the legal rights of these tortured American POWs against Iraq. (See S. Amdt. 1836 of Oct. 14, 2003; S. Amdt. 2194 of Nov. 17, 2003, and S. Amdt. 3307 of June 7, 2004.) These resolutions were passed by a unanimous Senate to ensure that United States actions will in every way seek to deter the torture of American POWs. Will you work to ensure that the DOD supports the efforts of the American Gulf War POWs and urge the Justice Department to end their litigation in court against our own POWs which is being pursued in order to effectively absolve Iraq of liability for their torture?

General PACE. As the Chairman, I will provide my best military advice in all matters relating to the safety and welfare of American servicemembers, to include those who were or may be held as POWs or listed as MIAs.

64. Senator KENNEDY. General Pace, Article 131 of the Third Geneva Convention [the POW Convention] mandates that no party may "absolve" a torturing state of "any liability" for the torture of POWs. In the aftermath of the Abu Ghraib affair the President said that the United States will fully adhere to the Geneva Conventions. Further, at the urging of the Joint Chiefs, and for the purpose of protecting future American POWs held by the enemy, the President, in his February 7, 2002, Executive order, directed that the "United States will hold states . . . who gain control of United States personnel responsible for treating such personnel humanely and consistent with applicable law." In light of this Article 131 Treaty obligation and repeated Presidential statements indicating support for it, by what legal authority are officials in the DOD encouraging the DOJ to spend taxpayer dollars to litigate in court against American POWs brutally tortured by Iraq during the Gulf War to seek to effectively absolve Iraq of liability for their torture?

General PACE. DOD relationships with the DOJ regarding pending litigation are more appropriately addressed by the Departments of Defense and Justice.

65. Senator KENNEDY. General Pace, will you intervene to ensure that henceforth the DOD will support the POWs effort to hold Iraq accountable?

General PACE. I remain committed to ensuring that all U.S. POWs from all past, present, and future conflicts are treated humanely and in accordance with relevant international law. As the Chairman, I will provide my best military advice in all matters relating to the safety and welfare of American servicemembers to include those who were or may be held as POWs or listed as MIAs.

JOINT STRIKE FIGHTER

66. Senator KENNEDY. Secretary Rumsfeld, during your testimony you implied that the cancellation of the Joint Strike Fighter (JSF) alternative engine had been addressed with the partner nations. In view of the importance of our international partners to this program, as well as the larger war on terrorism, can you clarify which partner nations were consulted on the alternate engine cancellation and what position they took regarding the cancellations.

Secretary RUMSFELD. First, let me clarify that we did not consult with the JSF partners during our budget deliberations. As a rule, we do not discuss predecisional information outside of the DOD until we have submitted a President's budget. The JSF partners realize that program decisions must be weighed against what is best for the Department as a whole. As I mentioned in my testimony, the Department's senior leadership looked at many aspects of the JSF alternate engine, and their recommendation was that further investment in the alternate engine was not in the best interests of the JSF program, nor the larger defense budget. All of the partner nations are aware of the decision to cancel the alternate engine program and most view this as a U.S. decision. The partners are as interested as we are in doing the right thing from a cost perspective. Industrial participation among the partner countries is an important part of the program, and something that we are continually addressing as the program matures.

67. Senator KENNEDY. Secretary Rumsfeld, in addition, can you provide the committee with the analysis that was conducted to justify the cancellation of the alternate engine program, including the risks and cost/benefit analysis?

Secretary RUMSFELD. The DOD has concluded that maintaining a second engine supplier for the JSF would not be cost-effective. This conclusion is based on data on engine cost and reliability, which show that:

- Maintaining two engine suppliers would not reduce overall procurement costs.
- Jet engine reliability has improved significantly over the past 30 years, and introducing a second supplier would not lead to dramatic improvements in reliability.
- Maintaining two engine suppliers would not significantly reduce operations and support (O&S) costs and could actually increase those costs over the life of the program when compared to costs with a single supplier.

Maintaining a second engine supplier for the JSF would incur additional development costs (at least $2 billion from fiscal year 2007 to fiscal year 2014), while potentially increasing the costs of procurement and future maintenance. Procurement costs could increase because, with two suppliers, each firm would produce a smaller number of engines. Smaller production runs can increase procurement costs because they reduce the advantages of "learning curve" effects (whereby costs decrease as a company produces more units) and of "rate effects" (whereby fixed costs are spread over the total number of units produced). Historical evidence from the Air Force "Great Engine War" and the Navy F404 engine program shows that competitions have tended to increase engine procurement costs.

Supporters of the alternate JSF engine have asserted that competition would generate significant long-term O&S cost savings, and that these savings would outweigh the higher development and procurement costs. However, O&S costs would likely be higher in several areas with two engine suppliers. For example, most of the parts of the JSF engines—produced by Pratt & Whitney (P&W) and General Electric (GE)—are not interchangeable; the fans, turbines, combustors, and compressors are unique. Maintaining two types of engines would require the establishment of two separate pipelines in the fleet and at the depots for spares, training, maintenance, repairs, and enhancements.

The debate on an alternative engine for the JSF is often viewed through the prism of the Great Engine War of the 1970s and 1980s, during which the establishment of a second engine supplier markedly improved engine reliability. Engine technology and testing techniques in use today are substantially different from those of the early 1970s. Fighter engines are now designed, manufactured, and tested to be reliable from the start. In particular, the number of test hours and cycles logged in engine development programs have increased markedly since the 1970s, and safety and reliability metrics are much improved as well. Reliability and cost have been key factors throughout the JSF's development. In fact, in the early days of the JSF program, all participants in the competition selected the P&W engine—a derivative of the P&W F119 engine used in the F–22—because they deemed it to have the lowest technical and cost risk.

In summary, historical cost comparisons and current analyses indicate that savings in life-cycle costs would not offset the investment cost of developing two engine suppliers for the JSF.

Background

The original JSF program did not make provision for a second engine supplier, consistent with the F–22 and F/A–18E/F programs. There was opportunity for competition between engine suppliers early on in the JSF program (in the concept development and risk reduction phase), but all three competitors (Boeing, Lockheed Martin, and McDonnell Douglas) selected the P&W F119. The competitors selected the P&W engine over the GE engine because it appeared to be the better option for minimizing technical and cost risk.

After a few years of supplemental funding from Congress for the alternate engine program, the National Defense Authorization Act for Fiscal Year 1998 called for the development of a second engine for the JSF. In August 2005, a $2.4 billion contract was officially awarded to GE to complete the development of the engine. Including the $336 million in PB06 for 2006, approximately $1.2 billion has been invested in the alternate engine program to date.

The Difficulty in Recouping Investment Costs

To achieve a net cost savings, competition between two engine suppliers must generate cost savings that exceed the investment needed to establish a second engine supplier. Excluding the sunk costs of developing the JSF second engine, competition would have to reduce procurement and/or operations and support (O&S) costs by $2 billion in order to generate net savings. At issue is whether—given all the factors that drive costs up or down—splitting the buy between two suppliers will reduce costs by such a large amount.

While competition can provide some production cost benefit, splitting a given production quantity between two contractors can have the net effect of increasing production costs. This is due to a reduced advantage from "learning curve" effects (whereby costs decrease as a company produces more units) and from "rate effects" (whereby fixed costs are spread over production units). The discussion below on the Air Force's Great Engine War and the Navy's F/A–18 engine competition experience indicates that competition does not, on balance, lower production costs.

DOD did two major studies on engine competition in 1998 and 2002 that assessed the percentage reduction in procurement costs needed to recoup the cost of developing an alternate engine for JSF. The study indicated at least 16–22 percent procurement savings from competition would be necessary to recover the development cost and make up for the cost penalty in the production learning curve from having two suppliers. Excluding sunk development costs to date, DOD would have to achieve procurement savings on the order of 10–12 percent to recover the remaining $2.0 billion in development costs for the GE engine.

Some advocates of the alternative engine indicate that competition would mainly generate savings in the O&S accounts over the long term. O&S savings are much more difficult to assess than production savings; however, we know several areas where O&S costs will be higher with two engine suppliers than with one. Most of the parts in the GE and P&W engines are unique, including the fans, turbines, combustors, and compressors. Supporting two types of engines would involve establishing two separate spares pipelines in the fleet and at the depots, providing additional training and tools for fleet maintainers, creating two separate depot capabilities (thereby increasing non-recurring costs and recurring unit repair costs since each repair line would handle fewer units) and making future modifications for growth, reliability improvements, safety enhancements, and obsolescence management on two different engines.

The main way to drive down O&S costs via competition is to significantly increase engine reliability. A key issue is whether we expect the primary engine, the P&W F135, to have reliability problems. The other issue is whether DOD could achieve reliability improvements at less cost by paying for reliability improvements in the P&W engine compared to establishing a second supplier. These issues are addressed in the paper below.

Empirical Record

This section will address our historical experience with engine competition since the 1970s. The section will discuss the two most widely known examples—the competition between P&W and GE for Air Force F–15 and F–16 engines and for Navy F/A–18 engines. This review will look at the extent to which we achieved savings in procurement and O&S and, in the case of the Air Force example, the similarities and differences in engine technology/reliability two or three decades ago compared to today.

The Great Engine War

The most well known example of competition in aircraft engine procurement is the Great Engine War, which began in the 1970s as the Air Force and Navy were searching for more reliable power plants for the F–15, F–16, and F–14 aircraft. There have been numerous comparisons of JSF engine competition to the Great Engine War; at issue is whether these comparisons are appropriate.

There is little disagreement that the competition created by the Great Engine War resulted in critical improvements in engine performance and reliability; however, there are significant differences between the circumstances of the Great Engine War and where we are today. In order to make accurate comparisons, it is first necessary to understand the context of the Great Engine War and how the lessons learned from that era may or may not apply to current issues.

In the early 1970s the Services were eager to field the next generation of fighter aircraft to counter the Soviet air threat. In their rush to outperform the Soviets, a premium was placed on performance and power requirements (thrust to weight) rather than reliability and durability metrics. The Air Force's stated order of priority in fielding the new engine was: "thrust, weight, everything else." The P&W F100 was selected for the F–15 and the F–16 based on considerable advances P&W had achieved in thrust and weight. Although this engine was initially well received by the Air Force, it soon developed stall problems and turbine failures due to the extreme maneuvering levels achieved by these new air frames.

In the rush to field new engines, P&W powerplants for the F–15 and F–16 were only tested for 150 hours on the test-stand and 50 hours in the aircraft before going into production. Although these early tests extensively stressed time at high Mach numbers to guard against stress failures, they did not address the significant factors related to throttle movement. Gradually engineers began to better understand the durability issues associated with engine cycles, which are defined as the movement from the idle position to maximum power and then to an idle or intermediate position. They discovered that engine cycles are profoundly more important than just the accumulation of hours in evaluating engine life.

When the P&W F100 engine performance problems became apparent, the Air Force believed P&W was financially responsible for fixing them. P&W thought the Air Force should pay, since Pratt had provided the Air Force with the engine it requested. In his book "The Air Force and the Great Engine War," Robert Drewes writes:

> "Pratt was right in arguing the Air Force got what it asked for. The F100 was a superb propulsion system when it worked. All the concerns about durability to withstand thermal cycles, for example, were unspecified in the original F100 contract. Furthermore, incessant pressure to meet the IOC allowed little or no time to perfect the engine. Strictly speaking, Pratt was justified to some extent in holding out for more money before acting on various improvement programs." [1]

The Air Force redirected government funds to improve the P&W engine while pursuing an alternate engine source with GE, thereby kicking off the Great Engine War.

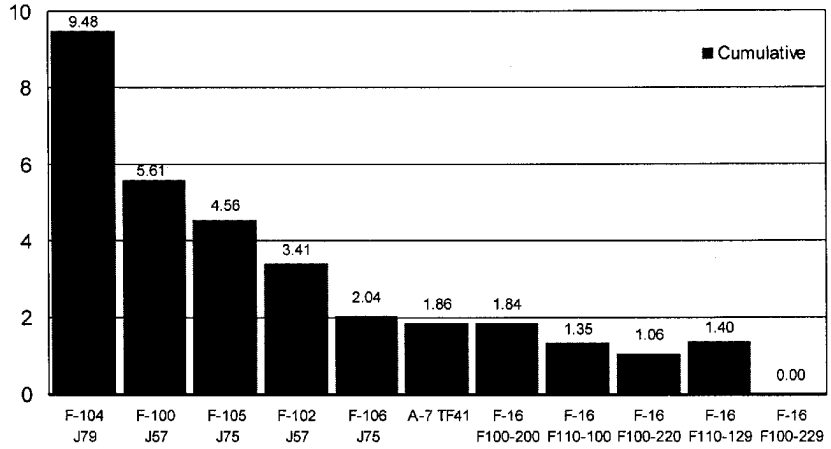
To avoid a repeat of the reliability issues experienced with the P&W F100, the Air Force Scientific Advisory Board proposed that engine usage be carefully defined at the beginning of engine development, thereby increasing the importance of reliability relative to thrust and weight. GE used a combination of corporate, Air Force, and congressional funds to develop a derivative of their F101 engine used to power the B–1. In contrast to P&W, GE designed their new engine, which eventually became the F110, to stringent durability and reliability specifications. These design criteria gave GE a distinct reliability advantage over P&W as the competition commenced.

As indicated above, at the time of the Great Engine War DOD's emphasis was not on reliability and testing. However, despite the initial concerns with the F100, it was still more reliable than engines developed for the 1950s and 1960s vintage aircraft such as the F–104 and F–100. Figure 1–1 addresses the trend in engine safety and reliability over the past several decades. With more stringent design specifications and expanded durability testing, DOD has achieved impressive improvements in engine reliability.

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[1] Robert W. Drewes, "The Air Force and The Great Engine War," National Defense University Press, Washington, DC, March 1987, p. 99.

Figure 1-1. Single Engine Safety and Reliability (Class A engine related flight mishaps per 100k engine flight hours in single engine aircraft)



Source: US Air Force

In contrast to the focus on thrust and weight in 1970s fighter engines, reliability was a major factor in the selection of the P&W engine for JSF and continues to be a critical factor in the test program. Compared to the 200 engine test hours of the 1970s, the P&W engine in the JSF program has already amassed nearly 5,000 test-stand hours incorporating Accelerated Mission Test (AMT) profiles. These AMT profiles are designed to stress the engine cycles rather than just log operating time. This topic will be discussed in more detail later in this paper.

Another important point about the Great Engine War is the nature of anticipated savings from competition. The Air Force never estimated any procurement cost benefit from competition. In fact, the Air Force Analysis of Alternative Procurements for Fighter Engines assessed that a split buy would actually cost the government more than a single supplier (Table 1–1).

Table 1-1. Air Force Analysis of Alternative Procurements for Fighter Engines

Contract Award	Cost to Government $B(83)	Savings relative to a split award	
		Amount	Percent
		Six annual purchases	
Split	17.32	....	....
All to PW	16.39	0.93	5.3
All to GE	16.25	1.07	6.2
		One purchase followed by five annual purchases	
Split	16.90	....	....
All to PW	15.99	0.91	5.4
All to GE	15.74	1.16	6.9

Source: Defense Department Authorization and Oversight, Hearings on H.R. 5167 before the Committee on Armed Services, 98 Cong. 2 sess. (GPO, 1984),pt. 2, p. 255.

The Air Force did not expect to achieve procurement savings from competition but did anticipate large savings in maintenance costs. With more reliable engines they estimated they could save $1 billion by reducing one maintenance man-hour per flying hour. In testimony to Congress, the Air Force stated "we have verified our pro-

jection of $2 billion to $3 billion savings," over the estimated cost of $19.4 billion for the unimproved F100.[2] This projection amounts to a 10–15 percent savings over the life of the program.

The above figures are Air Force estimates prior to the competition. We do not have empirical data on the actual savings the Air Force achieved through improved engine reliability, but we do know that one key assumption underlying the estimate was not realized. The Air Force projected a buy of 2,942 engines for the F–15 and F–16 aircraft, but actually only purchased about half that many engines, thus reducing the cost benefit (the Air Force never purchased the GE engine for the twin-engine F–15 and purchased only 1,560 aircraft/spares for the single-engine F–16). Furthermore, these Air Force estimates did not account for the GE F110 development costs.

Finally, while it is clear that competition resulted in more reliable engines from both the P&W and GE in the Great Engine War, it is possible that the same maintenance savings could have been achieved with less up front investment by simply fixing the original P&W F100 engine.

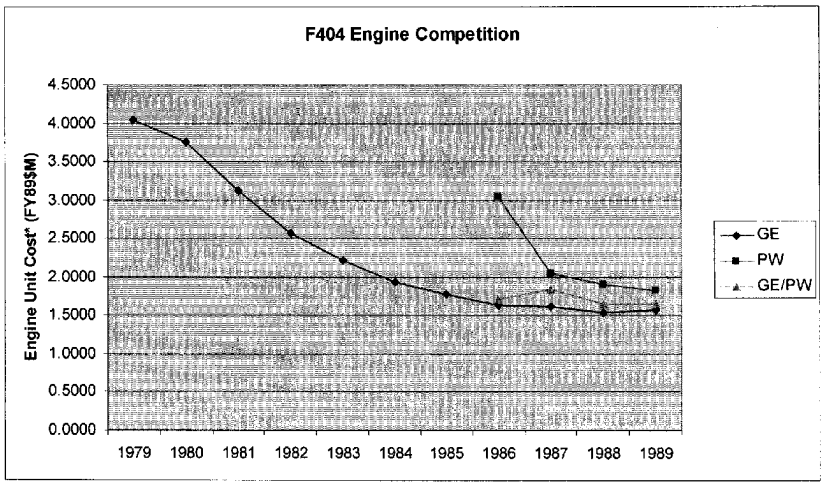
USN F/A–18 F404 Competition

In the 1980s Navy Secretary John Lehman was a big proponent of competition. Secretary Lehman introduced the Second Source Program to reduce procurement costs through competition. One of the programs selected for competition was the F/A–18 F404 engine. The Navy wanted to drive down the cost of the engine, improve contractor responsiveness, and allay concerns over a single supplier for their new strike fighter aircraft. Similar to the Air Force in the Great Engine War, the Navy anticipated a very large engine buy.

The Navy chose P&W to develop a copy of GE's F404 engine in a "Leader-Follower" arrangement. Once the program started, however, it became apparent that relying on one manufacturer was less costly than a split-buy agreement between P&W and GE. Figure 1–2 shows actual engine procurement costs before and during the competition.

In 1989, the new Secretary of the Navy, Lawrence Garrett, canceled the competition under the belief that eliminating P&W as a second supplier and relying solely on GE would save the government $176 million over the remaining 6 years of F404 procurement. The program did not in fact realize this savings because the U.S. Government had to pay P&W $156 million for a contract settlement.

Figure 1-2. F404 Engine Unit Cost comparison. Average unit cost increased with second supplier. Competition cancelled in 1989.



[2] Defense Department Authorization and Oversight, Hearings on H.R. 5167, pt. 2, pp. 255, 225.

Reliability and the Impact on O&S Costs

Engine reliability improvements can reduce O&S costs by reducing maintenance hours and decreasing the frequency of replacing parts and subsystems. At issue is whether we expect engine competition to achieve significant reliability improvements beyond the gains already realized from technology and testing advancements over the past several decades. Also unclear is whether we could achieve greater reliability at lower cost by investing in the primary engine rather than creating a second engine supplier.

Over the past 30 years, engine testing and design validation philosophy have evolved to the point that the Services have changed their key engine metric from hours to Total Accumulated Cycles (TACs). Thus, engine removals and maintenance actions are now often triggered on TACs, as opposed to hours. In addition to AMT mission execution, which primarily tests for Low Cycle Fatigue (LCF) effects, High Cycle Fatigue (HCF) testing has been incorporated to expose failure modes associated with high frequency/low amplitude effects. The combination of AMT and HCF testing has become the standard for testing propulsion systems to their limits to ensure a safe and reliable product.

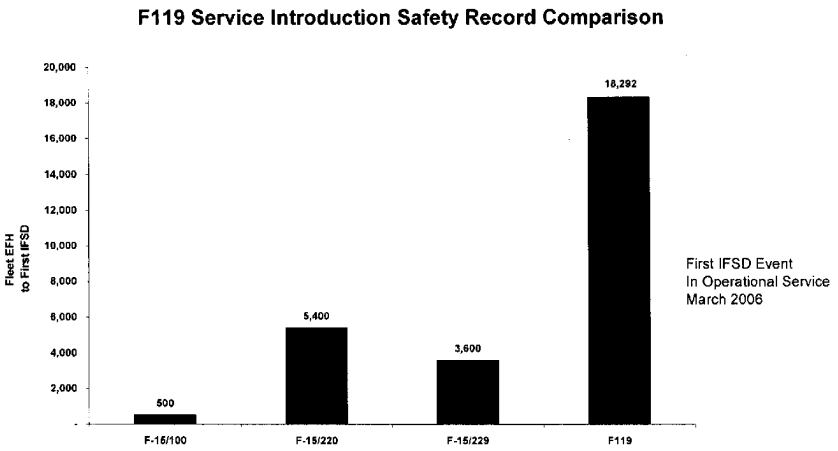
Some have argued that the twin-engine F–22's fighter mission and high-altitude flight regimes are significantly different than the single-engine strike-fighter mission and low-altitude flight regimes of the JSF and therefore should not be used as a reference to compare engine performance and reliability. Actually, the AMT profiles used on both these engines account for differences in operating regimes and altitudes, to include circumstances above and beyond the normal operating limits. These ground test AMT profiles now include conditions that simulate RAM air, low altitude/high mach number, and high altitude flight regimes.

We expect the JSF's P&W F135 engine to achieve comparable reliability performance as the F–22 F119 engine because they have a similar core and were developed using similar techniques. The engine core is the power module containing the high pressure compressor, the combustor, and the high pressure turbine. The core represents about 50 percent of the overall engine, but it is typically one of the most expensive parts to design due to the stresses placed on critical elements operating at extreme temperatures and pressures.

By most any measure, the P&W F135 engine and its predecessor, the Fl19 in the F–22, are performing very well so far. A key safety metric pertinent to twin engine fighters, such as the F–22, is measured by in-flight shut downs (IFSD). As shown in Figure 1–3, the F119 fares considerably better than all models of the F100, the safest fighter engine in the USAF inventory today, by achieving over 18,000 engine flight hours (EFH) before experiencing an in-flight shut down. This is nearly six times greater than the most recent F100 model (F100–PW–229).

The predecessor to the P&W F135 engine also fares well using other reliability metrics. Shop visit rate is the number of times the engine must be removed for maintenance over a given interval (a lower shop visit rate results in a higher number of flight hours between engine removal). Since becoming operational, the F119 shop visit rate has decreased to 1.4 visits per 1,000 engine flight hours (EFH)—a 67-percent improvement when compared to the F–16's F100–PW–229 engine at the same time in its life cycle. The F119 is currently demonstrating a mean time between engine removal of nearly 740 hours versus a goal of around 400 hours.

Figure 1-3. Number of Fleet Engine Flight Hours (EFH) prior to First In-Flight Shut Down (IFSD)



We recognize that fighter aircraft can develop engine related problems later in their service life. For example, the durability problems discovered in the F/A–18's GE F404 engine did not emerge until the aircraft had been in service for over a decade. This was well past the operational engine maturity milestone of 200,000 engine flight hours and several years after P&W had ceased production as a second supplier of F404 engines. Although this was a serious issue at the time, it neither grounded the fleet nor required a second supplier to rectify the problem.

If DOD is faced with engine reliability problems in the future, the most practical option will likely be to fix or improve the capability of the primary engine rather than incurring the high investment cost of creating a second supplier of engines. Considering the current proven reliability, fixing any problems with the original engine may cost far less than developing and producing a second engine—which might develop its own unique problems.

Other Factors Affecting Savings from Competition

There were several misconceptions about cost savings achieved through competition in recent Senate hearings and in the GAO report, "Tactical Aircraft: DOD's Cancellation of the Joint Strike Fighter Alternate Engine Program Was Not Based on a Comprehensive Analysis." One inaccuracy is that competition would drive down the price of spare engines and engine replacement parts. As mentioned earlier, although both the P&W and GE engines are designed to have identical external interfaces to the aircraft, the two internal designs are significantly different. These two different sets of engine spares and replacement parts are not purchased in a competitive environment, since, for example, DOD would not buy spares made by P&W to support the GE engine nor buy GE spares for P&W engines. Therefore, we do not expect competition to appreciably affect the price of engine spare parts or follow-on engine equivalents.

Another factor that would further reduce competition savings is the possibility that one or more Services would opt for a single supplier rather than two. For example, due to the relatively small quantity of JSF engines required by the Navy, it would likely be more cost effective to buy from a single source than support duplicate efforts for two engines. In addition to a more costly shore establishment of two support and maintenance infrastructures, there is little space available on an aircraft carrier to support an additional engine shop.

Also, aircraft weight tends to grow over time due to modifications and upgraded systems. Any increase in aircraft weight requires increased thrust (or "growth"). At this time, neither engine has room for additional growth without a significant investment. The JSF Program Office has estimated that if standard aircraft weight growth is applied to the short take-off and vertical landing variant, it will cost approximately $1.4 billion to increase the thrust in the engine and lift system ($700 million for the F135 engine/$700 million for lift system). If the JSF program had

two engine suppliers, any future engine growth investments must be doubled, thereby increasing cost and further offsetting any savings achieved through reliability improvements.

Conclusion

In summary, the question of whether to fund a second supplier for JSF engines is a difficult decision, but the Department believes the facts and the logic of the case weigh towards a single supplier—especially given the range of risks we must mitigate across the entire DOD program. Investing substantial amounts of money to create JSF engine competition that is unlikely to result in net cost savings is not an effective use of taxpayer dollars.

QUESTIONS SUBMITTED BY SENATOR JOSEPH I. LIEBERMAN

EDUCATION IN A CONFLICT ENVIRONMENT

68. Senator LIEBERMAN. Secretary Rumsfeld, we often talk about military transformation in terms of equipment and technology. In addition to these areas, I am also concerned about whether the military is keeping up with the more demanding educational requirements of an increasingly complicated combat environment. From our experiences in Iraq and Afghanistan, we know that our military must be more analytical, adept, and intuitive. They must have cultural training which enables them to interact on the ground to control the populations in question. This training must go beyond linguistics instruction, and help prepare our soldiers for interacting with indigenous populations. The QDR states that the military must create a "new breed of warrior" that can take on the responsibilities of a special operations commando in fighting terrorists and insurgents. However, it is unclear how the military is planning to achieve this additional capability beyond more language training. In the Services today, there is less time given to officers for graduate study, and military fellowships have been cut. The importance of learning has increased, but I fear we've become a military that is too busy to learn because we have fewer people doing more. I am particularly concerned that people and time devoted to training and education have been reduced in order to add more people to combat units and still reduce end strength. This should not be an "either/or" decision. Furthermore, offering more opportunities for education can also help sustain the volunteer force. Do you agree with my assessment of this problem?

Secretary RUMSFELD. We agree with your assessment that we need to provide increased opportunities for training and education in order to provide the warrior who can operate effectively in the asymmetric and complex battlefield. We have made the necessary policy changes at the Department and Service level to ensure that we offer training and educational learning opportunities for cultural and regional awareness not only for our language specialists but also the entire force.

One example of this effort is the Defense Language Transformation Roadmap which outlines 43 action items that upon completion will ensure that foreign language capabilities and regional expertise are developed, maintained, and employed as strategic assets in current and future military operations.

The Roadmap, which was published in February 2005, specifically requires the incorporation of regional area content in language training, professional military education and development, and pre-deployment training. The Services are moving forward in this area.

A second example is in DOD Directive 3000.05 "Military Support for Stability, Security, Transition, and Reconstruction Operations." This Directive establishes guidance on stability operations and addresses the need for skills such as regional area expertise. The Roadmap directs this courseware be developed and incorporated into Professional Military Education (PME) at all levels.

DOD views cultural and regional awareness education and training as a part of Irregular Warfare. We are in the process of publishing a roadmap to implement the changes proposed in the QDR. We are continuing to gather lessons learned from current operations and incorporate them into new joint doctrine.

Doctrine drives PME curriculum. Prior to doctrine being published, new and emerging operational concepts are incorporated so that our education and training programs are timely and relevant. We have increased education at our major level, so that 100 percent of Army majors must attend Command and General Staff College. The Army is also increasing by 200 per year the advanced civil degree program opportunities for company grade officers so that 1,000 officers at a time are in the program.

We have also, through the QDR process, increased the emphasis on language programs at the military academies—which include regional studies. The QDR also has

provided a mechanism for funding scholarships so that cadets/midshipmen can acquire language skills prior to commissioning.

Across the board, the Services support education at all levels. To this end, the Services have not decreased any graduate education or military fellowship opportunities. In fact, the Air Force and Navy have increased their programs. The Air Force currently has 51 personnel participating in a fellowship program; an increase from 44 in 2002–2003. The graduate study programs increased from 672 quotas in 2002 to 1,000 in 2007. The Navy has also increased graduate education opportunities and within the 2007 President's budget provided for further growth of about 44 quotas for resident study at the Naval Postgraduate School and about 21 quotas at the Senior War Colleges.

69. Senator LIEBERMAN. Secretary Rumsfeld, in what ways are the "educational deficits" addressed in the current QDR and the fiscal year 2007 budget?

Secretary RUMSFELD. We don't believe we have "educational deficits" but are planning, organizing, and training in response to the type of irregular warfare that we expect to face this century. The fiscal year 2007 budget provides us with substantial funding to enhance our efforts to focus on language training prior to accession and to ensure that funding necessary to ensure current and relevant pre-deployment training is provided to all members prior to deployment. Specifically, the QDR provides education and training in the following areas:

- National Security Education Program: Funding will create three magnet K–12 pipelines, establish five new university programs, and enhance immersion opportunities in immediate investment and strategic languages as part of the National Language Initiative.
- Service Academy Language Training: Funding enhancements to the Service Academy (USMA, USNA, and USAFA) programs. The funding redirects the Service Academies language programs to focus on immediate investment and strategic stronghold languages and to enhance immersion programs, semester abroad opportunities, and interacademy foreign exchanges.
- Reserve Officer Training Corps (ROTC) Language Training: Allows us to award 3-year grants to 50 ROTC schools to promote the development of language programs in languages of strategic importance to DOD.
- Pre-deployment Training: Supports Defense Language Institute Foreign Language Center (DLIFLC) development of country/language familiarization packages and operationally focused language instruction modules to build distance learning capability and off-the-shelf modules.
- DLIFLC Technology Enhancements: DLIFLC will provide and manage contracts for satellite communications for distance learning and associate technology.

SCIENCE AND TECHNOLOGY

70. Senator LIEBERMAN. Secretary Rumsfeld, DOD's request for innovative science and technology (S&T) programs that will shape our future military is $11.1 billion. This is a decrease of $2.3 billion from the 2006 appropriated level. It also represents 2.5 percent of the total defense budget, falling short of the 3 percent goal for S&T investment set by the Defense Science Board. Do you feel like you are investing enough in S&T programs to support the development of the new capabilities that we need to meet future threats?

Secretary RUMSFELD. The S&T funding in the fiscal year 2007 President's budget reflects a robust program that continues to explore new technologies and applications while conducting current military operations and the global war on terrorism. This request begins funding away from traditional into transformational technologies to address future threats, consistent with the QDR and National Security Strategy.

The fiscal year 2007 S&T budget request is 3 percent higher than last year's request, in real terms, and our S&T investment has grown over 23 percent—almost $2.5 billion—over the past 6 years. In addition, the fiscal year 2007 S&T budget represents the largest request, in constant dollars, since the initiation of the current budget process in 1962.

FORCE TRANSFORMATION

71. Senator LIEBERMAN. Secretary Rumsfeld, the DOD created the Office of Force Transformation (OFT) to help evaluate and implement proposals for military transformation. Currently, OFT reports directly to you. A replacement for the former di-

rector, retired Navy Vice Admiral Arthur Cebrowksi, has not been named. A report conducted by the Defense Science Board (DSB) suggested in 2005 that OFT might not prove necessary in the future. Can you provide us with an update on the status of OFT and tell us about its short- and long-term objectives?

Secretary RUMSFELD. First, the DSB Summer Study "Transformation: A Progress Assessment," contains no recommendation concerning OFT and certainly makes no judgment regarding its future. OFT continues to do the kind of work it was established to undertake, and that is to operate ahead of Department policy, identifying areas or gaps in emerging capabilities that the Department will not get to on its own, and creating new knowledge. The office operates at the intersection of unarticulated needs and non-consensual change, and remains committed to doing so, even in the absence of a follow-on director. Unlike most organizations that focus exclusively on either research or technology, OFT is unique in that it is both a THINK and a DO tank.

OFT has experienced much success in its brief existence, catalyzing Department efforts in such diverse areas as Operationally Responsive Space with its TACSAT initiative; exploring new ground with the innovative suite of lethal and non-lethal capabilities integrated into the Sheriff vehicle; and OFT's Stiletto boat is pushing new boundaries in hydrodynamics understanding and shipbuilding business models. These concept-technology pairings, tied to robust operational experimentation, are critical enablers for acquisition in the Information Age.

In addition, the office has launched nearly two dozen analytically rigorous case studies across the spectrum of Network Centric operations, providing Department leaders with hard evidence on the battlefield value derived from investments in information technology. Since cultural change is a critical element of transformation, OFT has created a series of "Transformation Chairs" at major institutions engaged in professional military education like the Army War College, U.S. Naval Academy, and Air University. These chairs constitute a distributed network and forum for championing new research ideas across the Services education system.

For the future, OFT is investigating new concepts in directed and redirected energy, which the office firmly believes will fundamentally change the character of warfare; is exploring the national security implications and departmental impact of emerging pandemic diseases; and is launching an in-depth seminar series on energy to identify alternative paths the Department can take regarding conservation, efficiencies, and reuse.

72. Senator LIEBERMAN. Secretary Rumsfeld, does OFT have the appropriate level of funding and staffing to adequately promote transformation in the military?

Secretary RUMSFELD. Yes. With a staff of never more than 17 action officers, OFT has worked with other elements within the DOD to produce or achieve the following:

1. A new concept of "operationally responsive space" that promises to make rapidly deployable satellites with tailored payloads (TACSATs) an organic capability for Joint Force Commanders. Working with PACOM, the Naval Research Laboratory, and private industry, OFT has created a new "paradigm" for the military use of space.

2. A DOD-wide architecture for the development of a range of small satellites for use by future Joint Force Commanders. Central to this architecture is a modular bus that will allow satellite developers to combine standard components to create "tailored" satellites. The development of the modular bus is essential to the effort to make space assets and forces operationally responsive.

3. An experimental M-hull warship ("Stiletto") that has proven it can: (a) move at high speeds without subjecting its crew and passengers to the shock of plowing through waves and surf; (b) carry a high payload for its size and weight; and (c) fit easily into the sort of network of sensors and platforms that is the basis of distributed military operations.

4. A prototype urban warfare vehicle (the Full-Spectrum Effects Platform (F–SEP)) that successfully integrates lethal and non-lethal technologies to broaden the range of options available to a commander in an urban environment. The ability of OFT and its development partners to create the concept for this vehicle and then rapidly turn the concept into an effective system has demonstrated the potential of a new and innovative approach to defense acquisition.

5. A conceptual framework for network centric warfare that has been adopted throughout DOD.

6. A network of "transformation chairs" established in professional military schools to promote the cultural change that is at the heart of trans-

formation. These chairs are supported by carefully crafted case studies, simulations, and other academic materials.

7. Participation as the only regular representatives of the Secretary of Defense in joint concept development and experimentation (JCD&E). OFT has worked persistently and successfully with JFCOM, for example, to involve the staffs of the COCOMs in joint wargames.

8. A Naval Force Structure study requested by Congress. The strategic and operational implications of that study will be explored in a series of exercises with the Navy starting this April.

OFT has achieved these and other goals within its total budget.

SUBMARINE PRODUCTION

73. Senator LIEBERMAN. General Pace, the QDR recommends that submarine production remain at one boat a year until 2012, when production will accelerate to two boats a year. At this point, China's submarine force is on the road to matching the United States in size and capability. But their building rate is exceeding ours. Furthermore, the Chinese are building submarines that are quieter and more elusive. The latest Navy force structure plan calls for maintaining approximately 50 attack submarines. But if we wait until 2012 to accelerate to two ships a year, we will fall below the force structure level of 50 boats. It seems that our plans for submarines are determined by a constrained Navy ship building plan instead of the strategic requirements we are facing. Why is procurement for submarines remaining at the one boat per year level?

General PACE. The QDR involved a thorough review of our submarine force structure requirements and determined that a production rate of one boat per year through 2012 is an acceptable level of risk. We understand the QDR is a point-in-time document in a very dynamic process, so we will continually assess our total force capabilities against both the current and future threats to our national interests. While submarines remain a key element of the total force, they are not the only component of our anti-submarine warfare (ASW) capabilities. With the help of Congress, the Department has invested significant resources in ASW platforms, sensors, and training so our overall capability in this challenging warfighting area continues to keep pace with the threat.

74. Senator LIEBERMAN. General Pace, what is the strategic impact if we fall below 50 submarines?

General PACE. The QDR looked at shipbuilding programs, taking into account both quantity and quality in assessing overall capability and strategic risk. The multi-mission *Virginia* class submarines being built today provide significantly improved capabilities in littoral warfare and special operations over previous fast attack submarines. Balancing these improved capabilities against the Navy's submarine force structure requirements, the QDR determined that future force structure from the proposed building rates resulted in an acceptable level of risk. The Department will continually assess our total force capabilities against both the current and future threats to our national interests.

75. Senator LIEBERMAN. General Pace, if we wait until 2012 to increase production, can our industrial base in submarine production sustain itself?

General PACE. The Department continues to closely monitor the health of the entire shipbuilding industry and we are confident that the industrial base can continue to function effectively at the programmed submarine construction rates. The support of Congress for the *Virginia* class multiyear procurements, for example, allowed the Navy and submarine builders to achieve efficiencies in current submarine production that would not otherwise be possible. These efficiencies keep the submarine industrial base healthy and able to flex to increased production in the future.

JOINT EXPERIMENTATION

76. Senator LIEBERMAN. General Pace, joint experimentation is an integral part of the military transformation effort. We need scientific experimentation of joint warfighting to determine the effectiveness of the endeavors. The 2002 joint exercise, the Millennium Challenge, helped determine the military's progress in joint tactics and technologies. Joint experimentation promotes efficiency and ultimately saves us resources in the future. I am concerned that the funding for joint experimentation has been reduced in the fiscal year 2007 budget. In particular, the Navy has suf-

fered large cuts in advanced technology development and joint experimentation. Can you provide me with the rationale for this reduction?

General PACE. USJFCOM's joint experimentation funding in the past has been provided through the U.S. Navy. The joint experimentation funding has not been reduced but, per the guidance from the National Defense Authorization Act for Fiscal Year 2005, the funding line has been shifted from a Navy account to a Defense-wide account with Office of the Secretary of Defense for Acquisition, Technology, and Logistics providing oversight.

77. Senator LIEBERMAN. General Pace, why was the Navy targeted for this budget decision?

General PACE. The Navy was not targeted for a budget cut in this area; rather USJFCOM funding was simply relocated. Beginning in fiscal year 2007, the funding for USJFCOM joint experimentation will no longer reside under the Navy's research, development, testing, and evaluation accounts. The funding line will be shifted to a Defense-wide account instead.

QUESTIONS SUBMITTED BY SENATOR JACK REED

SCIENCE AND TECHNOLOGY AND DEFENSE LABS IN THE QDR

78. Senator REED. Secretary Rumsfeld, I note that the QDR generally discusses the role that technology has played in transforming our military and creating new capabilities—for example in the ability to rapidly share information on the battlefield. However, I am disappointed that the document does not provide any specific guidance for the Department to shape its investments in this critical area—either in terms of funding targets, areas of emphasis, strategies for future investments, or new roles for our defense laboratories in accelerating the technological transformation of the Department. Why weren't any of these areas, or related research and technology issues, discussed in more detail in the QDR?

Secretary RUMSFELD. The QDR reaffirms the vector for rapidly sharing information on the battlefield. The details of funding targets, specific areas of emphasis, and roles and responsibilities for accelerating technological transformation are more appropriately found in the Strategic Planning Guide and the Joint Program Guidance that will be published this spring. These documents will provide the guidance and detail you highlight.

SPECIAL OPERATIONS SCIENCE AND TECHNOLOGY BUDGET

79. Senator REED. Secretary Rumsfeld, the 2007 budget you are proposing reduces Special Operations Command's (SOCOM) S&T program by nearly 50 percent relative to 2006 appropriated levels, down to $95 million. The 2007 request is also below the original 2006 budget request. Given the important role that SOCOM is playing in current operations and the expanded capabilities that our special operators are deriving from new technologies, what was the justification for this reduction?

Secretary RUMSFELD. Given the competing demands across the Department, the fiscal year 2007 President's budget request represents a balance among near- and long-term priorities. The SOCOM S&T request is properly prioritized and represents a balanced investment among near-term requirements and planning to meet future threats.

80. Senator REED. Secretary Rumsfeld, what areas of research and technology development of particular interest to SOCOM are underfunded due to this decrease?

Secretary RUMSFELD. There are no underfunded efforts. The budget is properly balanced and prioritized.

BIOMETRICS

81. Senator REED. Secretary Rumsfeld, I understand that the Army is acting as the Executive Agent for DOD biometrics, in regard to biometric technologies being used to fight the war on terror. I also understand that other efforts are being undertaken by the Intelligence Community, defense agencies, and the other Services. What are we doing to ensure our biometric efforts are not overlapping, are not disconnected, and are not falling into confusion of where the responsibility rests?

Secretary RUMSFELD. DOD biometrics participates in national-level forums for information sharing and interoperability and is the recognized leader in the formula-

tion of national and international biometrics standards. The Biometrics Community of Interest (COI), composed of representatives from across the government, meets quarterly to deal with biometric issues and requirements. The COI is supported by Standards, Requirements, Policy, and Information Sharing Working Groups. A Biometrics Advisory Council (BAC) is being established with senior members from across the government. The BAC will provide a forum to bring the right people and perspectives together to provide insight and assist the Executive Agent in making decisions regarding biometric issues. We have conducted data calls throughout DOD to ensure that we are aware of current biometric capabilities and requirements. DOD biometrics is also drafting policy that will specify and document responsibilities regarding biometrics throughout the DOD. Finally, we are undertaking several short-duration studies to develop a vision for DOD biometrics and assess how best to organize the DOD to support United States Government identity management efforts and DOD global war on terror missions.

82. Senator REED. Secretary Rumsfeld, what is the total investment being requested in this budget for biometrics technology development, procurement, and operation?

Secretary RUMSFELD. The total Executive Agent investment for biometrics in fiscal year 2007 is $14.5 million (Research, Development, Test, and Evaluation Appropriation), $1.4 million (Other Procurement, Army Appropriation) and $11.8 million (Operations and Maintenance, Army Appropriation). The Army Intelligence investment for intelligence related R&D is $4 million, $13 million for Operations Maintenance, Army and $8 million for Other Procurement, Army. The U.S. Army Intelligence and Security Command has requested $80 million (Operations and Maintenance, Army Appropriation) for Contractor Analysis ($50 million), Contractor Forensics ($10 million), and Software and Equipment ($20 million).

83. Senator REED. Secretary Rumsfeld, the Chief of Staff of the Army is the Executive Agent for DOD biometrics with responsibility delegated to the Army Chief Information Officer (G–6). What are the relative investments being made by Army Intelligence (G–2) and the Army CIO (G–6) on the biometric programs and how are their efforts coordinated?

Secretary RUMSFELD. The Secretary of the Army is the Executive Agent for DOD. The Army Chief Information Officer (G–6) is closely partnered with Army Intelligence (G–2) in order to share biometric match results and subsequently perform intelligence analysis and exploitation. The G–2 provides leadership on in-theater biometric collection and matching, and synchronizes these capability developments with the G–6 and its biometric futures capability.

The DOD ABIS is the central DOD repository for detainee biometric data. ABIS also receives latent fingerprint files derived from forensic investigations through various sources. The ABIS is modeled after the highly successful FBI system, the IAFIS. Within the Department, ABIS shares match results with the original source and with relevant entities from the Intelligence Community, detainee operations, and interagency partners.

The Army NGIC is developing the Biometrics Intelligence Resource (BIR), which will be an automated system that ingests biometric signatures and associated intelligence collected from DOD biometric sensors for the purpose of positive identification and tracking of individuals. The BIR will serve as a central repository for biometric information and related intelligence collected by DOD sensor systems. Army G–2, in conjunction with the U.S. Army Intelligence Center and Fort Huachuca Language and Technology Office fielded the Biometrics Automated Toolset (BAT), which was initially developed under the Human Intelligence and Counterintelligence Support Tools Advanced Concept Technology Demonstration. BAT is a multimodal biometric system that collects fingerprints, iris images, and facial photos. It is a self-contained biometrics searching/matching tool which enrolls, identifies, and tracks persons of interest, and builds "digital dossiers" including interrogation reports, intelligence reports, related records, incident reports, and relationships.

The Biometric Identification System for Access (BISA) system is installed at 10 sites in Iraq. BISA is a nonportable system designed to enhance force protection by establishing a biometric identity record and issuing an access credential for the non-U.S. workforce at U.S. military facilities in Iraq. BISA enrollments are transmitted to the DOD ABIS, located in Clarksburg, West Virginia, where they are compared to previously collected biometric records and other name-based data. After this comparison, if no disqualifying information is discovered, a biometric access card is issued and used to verify that the person presenting it for access to U.S. facilities in Iraq is entitled to access.

The Army Office of the Provost Marshal General (OPMG) is the DOD statutory and regulatory official responsible for administering and operating programs related to enemy prisoners of war (EPW), civilian internees (CI), and detained persons (DP). The OPMG is the sponsor of the Detainee Reporting System (DRS), which enrolls EPW, CI, and DP and assigns them with the official Internment Serial Number (ISN). DRS transmits enrollment data (ISN, biographic data, and fingerprints) through the National Detainee Reporting Center for inclusion in the DOD ABIS.

As we continue to improve and expand our collection capabilities overseas, we are also working to enhance our ability to store and exploit the collected data within an enterprise environment that includes other government entities, such as the FBI. Innovative new enhancements to the DOD ABIS are being developed to promote government interoperability, increase throughput, and expand the capacity of the system. In the future, the ABIS will be able to conduct searches on individuals through the combined use of fingerprints, photographs, and iris information. The BFC continues to search for viable commercial products to provide the DOD with the most advanced and capable systems available.

ROBUST NUCLEAR EARTH PENETRATOR STUDY

84. Senator REED. Secretary Rumsfeld, Congress moved the $4.0 million in Department of Energy (DOE) funds that had been requested for fiscal year 2006 for the Robust Nuclear Earth Penetrator (RNEP) to DOD to conduct a penetrator study that could support either a conventional or a nuclear earth penetrator. It is important that DOD clearly identify its plan for the $4.0 million available in fiscal year 2006 and any additional funds requested for fiscal year 2007. The concern is that the DOD funds will be used to support the RNEP feasibility study. DOE has no funds for the RNEP in either the fiscal year 2006 appropriation or the fiscal year 2007 request. DOD has no funds specifically designated for the RNEP in its fiscal year 2007 budget request. Will any DOD fiscal year 2006 funds or fiscal year 2007 funds be used to support the feasibility study for the RNEP?

Secretary RUMSFELD. No. The RNEP study was terminated. While the Department supported the completion of this joint DOD-DOE study, Congress did not support it. We will use the fiscal year 2006 funds provided by Congress to conduct a penetrator sled test experiment in fiscal year 2006 at Holloman Air Force Base, New Mexico.

CONVENTIONAL WARHEADS ON THE TRIDENT D–5 SEA-LAUNCHED BALLISTIC MISSILE

85. Senator REED. Secretary Rumsfeld, as part of the effort to achieve a prompt global strike capability within 24 months, the Navy has proposed to put conventional warheads on some Trident D–5 sea-launched ballistic missiles (D–5 SLBM) on Trident submarines. There are many issues associated with this plan including serious concerns about distinguishing between a nuclear D–5 and a conventional D–5, command and control issues, treaty issues, and cost. In addition, a U.S. decision to use ballistic missiles to deliver non-nuclear warheads could provide countries of concern a cover story for suspect nuclear weapons and ballistic missile programs. A debate on the issue with you would probably not be productive, but it would be useful to highlight concerns about the proposal and obtain all analysis conducted to address the issues.

The Department has proposed putting conventional warheads on Trident D–5 sea-launched ballistic missiles. This is a troubling proposal that has numerous associated issues. Could you please provide all studies and analyses that have been conducted addressing or discussing the issues associated with this proposal?

Secretary RUMSFELD. The following studies and analyses are related to conventional warheads on some Trident D–5 sea-launched ballistic missiles:

(1) The Quadrennial Defense Review Report, February 2006

(2) The Strategic Capabilities Assessment, April 2005

(3) U.S. Strategic Command, Conventional Kinetic Options for Global Deterrence, September 2005

(4) Ballistic Missile "Overflight"—An Assessment of the Issues, Prepared for U.S. Space Command, December 2004

86. Senator REED. Secretary Rumsfeld, could you also provide a list of ongoing, not yet completed, studies and any additional studies that are planned or will have to be completed?

Secretary RUMSFELD. A prompt global strike analysis of alternatives is ongoing under the leadership of U.S. Air Force Space Command.

87. Senator REED. Secretary Rumsfeld, will Congress be receiving a reprogramming request to begin work on conventionally armed D–5 missiles in fiscal year 2006?

Secretary RUMSFELD. At this time the Department has not initiated a reprogramming of funds for fiscal year 2006 funds to support work on conventionally armed D–5 missiles.

88. Senator REED. Secretary Rumsfeld, has any money already been spent in support of conventionally armed D–5 missiles, and if yes, on what specific activities was the money spent?

Secretary RUMSFELD. The Department is using funds appropriated for studies and concept development to explore a range of prompt global strike options, including the Conventional Trident Modification (CTM). However, there has not been any expenditure of funds for CTM-unique development, hardware, or software.

STRATEGIC ARMS REDUCTION TREATY

89. Senator REED. Secretary Rumsfeld and General Pace, the Strategic Arms Reduction Treaty (START) I will expire in 2009. In order to extend the treaty a party to the treaty must notify the other in 2008. There is debate in the administration as to whether the treaty should be extended. The Intelligence Community is interested in seeing this treaty extended as it provides a wealth of knowledge into the Russian strategic forces, but DOD may not be as enthusiastic about extending the treaty. At a minimum the administration should begin to study the pros and cons of extending the treaty. Has the DOD initiated or are there any plans to initiate any studies to assess the benefits of extending the START I, which expires in 2009?

Secretary RUMSFELD. START provisions require the parties to meet no later than 4 December 2008 to consider whether the treaty will be extended. Extension of START in accordance with its terms requires the agreement of all five parties to the treaty (Russian Federation, Ukraine, Belarus, Kazakhstan, and the United States). The administration is considering possible options, but has not yet reached a decision on how to proceed with respect to START.

General PACE. The Cold War era START, with its many intrusive inspections and verifications measures, is outdated. The United States needs forces posture flexibility to meet emerging threats and to execute the war on terrorism. START provisions require the parties to meet no later than 4 December 2008 to consider whether the treaty will be extended. Extension of START in accordance with its own terms would require the agreement of all five parties to the treaty (Russia, Ukraine, Belarus, Kazakhstan, and the United States). The DOD is engaged in a review process concerning the direction for the post-START dialogue with the Parties to the START. A post-START dialogue should more closely match the security needs of the United States in the 21st century and be based upon trust and transparency.

NUCLEAR WEAPONS

90. Senator REED. Secretary Rumsfeld and General Pace, will any nuclear warheads be retired in fiscal year 2007?

Secretary RUMSFELD and General PACE. Yes. The Joint DOD and DOE Requirements and Planning Document, approved by the Nuclear Weapons Council, includes warhead retirements in fiscal year 2007.

91. Senator REED. Secretary Rumsfeld and General Pace, will the W–62 warhead be dismantled, and if so, when will the process begin?

Secretary RUMSFELD and General PACE. Yes. The Defense Threat Reduction Agency's Stockpile Executive Summary shows that W–62 warheads were dismantled in the third and fourth quarter of fiscal year 2005. The National Nuclear Security Administration's Nuclear Weapons Production and Planning Directive 2006–0 indicates that W–62 warheads are scheduled for dismantlement from fiscal year 2006 through fiscal year 2010.

92. Senator REED. Secretary Rumsfeld and General Pace, will the last phase of the W–76 life extension program transition to a Reliable Replacement Warhead (RRW)?

Secretary RUMSFELD. The goal of the RRW program is to assure, over the long term, the Nation's ability to sustain the nuclear stockpile with replacement warheads that provide the same military capabilities as the warheads they replace. RRW will serve as a complement to, and potentially a more cost effective and reli-

able long-term replacement for, the current Stockpile Life Extension Programs. As part of a larger transformation strategy, all existing legacy warheads will be studied for the feasibility of their replacement over the next 25 to 30 years in lieu of life extension. The ongoing RRW program is specifically examining the potential to replace a portion of W–76 warheads on Submarine Launched Ballistic Missiles. Since the RRW feasibility study is ongoing and scheduled to be completed in November 2006, it is too early to decide on the exact impact that a RRW will have on the W–76 life extension program.

General PACE. It is too early to decide the exact impact that a RRW will have on the W–76 life extension program. The Nuclear Weapons Council formed a joint Project Officers Group, co-chaired by the Navy and the Air Force, to study the feasibility of a RRW. This study is scheduled to be completed in November 2006.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. AKAKA

FORCE TRANSFORMATION

93. Senator AKAKA. Secretary Rumsfeld, in its December 2004 report, the GAO reported that key practices for successful transformation of the Armed Forces include leadership that sets the direction and assigns accountability for results. Can you tell me what, if any, formal mechanisms have been, or will be, put into place to ensure that clear and consistent priorities are set amongst the key organizations involved in the transformation and that the appropriate resources are allocated to these priorities?

Secretary RUMSFELD. There are several formal mechanisms for making sure that there are clear and consistent priorities and that appropriate resources are allocated to them. First among them is the "Transformation Planning Guidance" (TPG) promulgated by myself in April 2003. The TPG set out a number of transformation goals and assigned responsibilities to elements of the DOD for the attainment of those goals.

For example, the TPG directed OFT to prepare a Strategic Transformation Appraisal (STA) annually for myself based upon information provided by the Services and JFCOM in their "transformation roadmaps." OFT has completed three Strategic Transformation Appraisals. More importantly, the Services have responded to the requirement that they prepare "transformation roadmaps" by creating documents that have strengthened their own planning processes. In addition, the new Business Transformation Agency (BTA) is now working closely with OFT on the next iterations of the TPG and STA in order to show I have the connections between business transformation and force transformation.

I have also directed the Services, the Joint Staff, Joint Forces Command, the combatant commands, and the OSD staff to cooperate in the development of a "family" of operating and functional concepts that will place planning for the future on a strong conceptual foundation. This is part of my effort to move away from "threat-based" planning and toward "capabilities-based" planning. It has not been easy for DOD's components to agree on the specifics of several of the more challenging joint operating concepts, but the effort by all those involved to fulfill my guidance has produced a vigorous ongoing discussion that has highlighted operational-level risks and opportunities that would otherwise have been neglected.

Once concepts have been approved, they are "tested" in wargames, simulations, and exercises, some of which are joint and the rest of which are paid for and managed by the separate Services. These JFCOM-sponsored and Service-sponsored "experiments" have already helped significantly to clarify the challenges that will face U.S. forces in the future. Recent "experiments" have influenced both the revision of warfighting concepts and plans for future "experiments." The goal of OFT is to support an ongoing cycle of concept development and experimentation that will keep the armed services ahead conceptually of any likely opponent.

The concepts, once validated through exercises and the analysis of "lessons learned" from actual operations, will lead logically to clusters of capabilities that the Services will convert into programs and budgets. Last May, I directed DOD's components to use the Joint Capability Area categories and terminology approved by the Joint Staff in force planning and budgeting for the next FYDP (fiscal year 2008–fiscal year 2013). OSD/PA&E will work with the Service staffs to make sure that their POMs use this terminology and reflect the capabilities needed for "transformation."

NAVY QDR PLANS

94. Senator AKAKA. General Pace, according to the recently released 2006 QDR, the Navy plans to adjust its force posture and basing to provide at least six operationally available and sustainable carriers and 60 percent of its submarines in the Pacific to support engagement, presence, and deterrence. With this in mind, what are the DOD's plans regarding future forward homeporting in Hawaii?

General PACE. The Navy continues to review current and alternate carrier ports. The existing nuclear-powered carrier capable homeports—Norfolk, San Diego, Bremerton/Everett—will continue to have carriers commensurate with existing support infrastructure. In addition, Yokosuka, Japan, will transition to a nuclear-powered capable homeport when *George Washington* replaces *Kitty Hawk* in 2008. The Navy has been examining the role that Mayport, Pearl Harbor, and Guam will play with the all-nuclear carrier fleet. Pearl Harbor and Guam are both currently capable of hosting nuclear-powered carriers; these ports will continue to play a vital role in Pacific Theater strategic objectives. However, significant unfunded investment is necessary ($3.12 billion estimate), including basing an air wing in Hawaii to enable homeporting a carrier in Pearl Harbor.

As for submarines in the Pacific, the Navy currently utilizes support facilities and infrastructure in San Diego, Pearl Harbor, and Guam. Currently, there are 17 attack submarines homeported in Hawaii. Over the next few years, Navy's force posture will include several submarine decommissionings, commissionings, and fleet transfers that will affect ships homeported in Pearl Harbor. By 2020, there will be 15 *Los Angeles* class and 3 *Virginia* class submarines stationed in Hawaii out of an overall force structure of 48 attack submarines (37 percent).

ARMY NATIONAL GUARD REDUCTION

95. Senator AKAKA. General Schoomaker, the President's budget proposal for fiscal year 2007 reduced the ARNG's combat brigade structure by 18 percent. This reduction will affect brigades in every State including the 29th BCT in Hawaii which recently returned from a year tour in Iraq. While I have received assurances from you and Secretary Rumsfeld that the ARNG will not be reduced, is it not a reduction if the ARNG, which I have been informed has 34 BCTs, is restructured to have 28 BCTs? If not, please explain why it is not a reduction.

General SCHOOMAKER. Army is not reducing the size of the ARNG; the total number of brigades remains at 106. The Army will fund the ARNG up to its authorized end strength of 350,000. Prior to the 2005 QDR, the Army had developed a plan for 34 combat brigades and 72 support brigades in the ARNG and 43 combat brigades and 75 support brigades in the Active component. This provided up to 20 combat brigades for steady state operations. The QDR showed a lower requirement for combat brigades but a greater requirement for brigades able to respond more immediately to meet homeland defense/civil support. Therefore, we elected to increase the ARNG domestic capability by rebalancing six BCTs and one Combat Aviation Brigade to seven support brigades, four multi-functional brigades, and three engineer brigades. These seven brigades provide engineer, communications, transportation, logistical, chemical, and medical capabilities critical to homeland defense and civil support.

QUESTIONS SUBMITTED BY SENATOR BILL NELSON

FUNDING OF NAVY FLEET

96. Senator BILL NELSON. Secretary Rumsfeld, last year, the Commander of U.S. Pacific Command, Admiral William Fallon, told Congress that China's military buildup is "unprecedented and proceeding quite rapidly." More recently, the QDR directs the Navy to assume a "greater presence" in the western Pacific by adding at least one aircraft carrier and five nuclear submarines over the next decade. Given the current and potential growth of tension in the Pacific, and our continuing commitments in Central Asia, the geo-strategic risk associated with a reduction in the size of our carrier fleet is unjustified and unacceptable. DOD and Navy leadership argue that new operating practices in the Fleet Response Plan (FRP) mitigate the risks. However, a recent RAND study (American Carrier Airpower at the Dawn of a New Century, RAND, 2005) for the Navy notes that, "FRP was conceived and formulated on the core premise that the Service would retain its longstanding post-Cold-War force structure of 12 deployable carriers and 10 active air wings."

Consistent with this assessment of current and future threats and requirements, Congress enacted legislation signed by the President that requires a minimum 12-carrier naval force structure in law. The Defense Department's budget request for fiscal year 2007 does not include funding necessary to meet this requirement. We appreciate that the law may have been enacted so late in your budget estimate process that the fiscal year 2007 budget request does not fully fund this requirement. What is the funding shortfall in your fiscal year 2007 budget request that will be necessary to ensure that the Nation has the 12 operational carriers required in law?

Secretary RUMSFELD. The Department is asking Congress to amend the law so that the carrier fleet can be sized to the QDR's recommendation for 11 operational aircraft carriers. Therefore, the President's budget for fiscal year 2007 reflects the operation of 11 carriers.

The Department has not determined what funding would be needed to maintain and operate the U.S.S. *John F. Kennedy* beyond fiscal year 2006. The Department is submitting legislation to ask Congress to amend the law to allow the Department to operate 11 operational carriers as recommended by the recently completed QDR.

97. Senator BILL NELSON. Secretary Rumsfeld, what is your plan to find or request the funds necessary to meet this requirement?

Secretary RUMSFELD. We are asking Congress to amend the law so that the Department can reduce the fleet to the recently validated carrier fleet of 11.

98. Senator BILL NELSON. Secretary Rumsfeld, will you include the necessary funding to sustain a 12-carrier fleet in either a budget amendment and/or a supplemental appropriations request?

Secretary RUMSFELD. We are asking Congress to amend the law and allow the Department to retain 11 carriers as recommended by the QDR.

QUESTIONS SUBMITTED BY SENATOR E. BENJAMIN NELSON

GLOBAL INFORMATION GRID BANDWIDTH EXPANSION

99. Senator BEN NELSON. Secretary Rumsfeld, it is my understanding that the Global Information Grid Bandwidth Expansion (GIG–BE) program was initiated prior to the war on terror, the establishment of Northern Command (NORTHCOM), and the 2005 BRAC recommendations. Does the current selection of sites currently connected to the GIG–BE provide for all the current and emerging needs of the DOD or was the total number of sites controlled by available funding?

Secretary RUMSFELD. The GIG–BE sites were prioritized and validated by the Joint Staff. The GIG–BE sites were updated after the global war on terror began and NORTHCOM was established. New network requirements to expand the number of GIG–BE sites will be met by connecting key Defense Information System Network (DISN) nodes to GIG–BE nodes using leased telecommunication services. Forums exist for Services and agencies to submit their requests to the Capabilities Validation Working Group (CVWG), a subgroup that supports the DISN Customer Forum.

100. Senator BEN NELSON. Secretary Rumsfeld, are there additional sites needing connection to the GIG–BE, as an outcome of the establishment of NORTHCOM?

Secretary RUMSFELD. At present, we are not aware of additional sites needing connection to the Global Information Grid (GIG) as a result of the establishment of U.S. NORTHCOM. There are processes in place that allow Services and agencies to submit requests for connection to the GIG. Services and agencies may submit their requests to the CVWG, a subgroup that supports the DISN Customer Forum (DCF) requests that are validated by the CVWG are then submitted to the DISN Rates Management Council, which is made up of flag officers from each of the Services and meets semi-annually.

101. Senator BEN NELSON. Secretary Rumsfeld, are there additional sites, as a result of base realignment (or other developments), which are now becoming critical, and which should be connected to the GIG–BE?

Secretary RUMSFELD. At present, we are not aware of additional sites needing connection to the GIG as a result of the BRAC process. There are processes in place for Services and agencies to submit requests for connection to the GIG. Services and agencies may submit their requests to the CVWG, a subgroup that supports the DISN DCF. Requests that are validated by the CVWG are then submitted to the DISN Rates Management Council, which is made up of flag officers from each of

the Services and meets semi-annually. Additional sites will be considered as part of ongoing reviews and incorporated into DISN expansion efforts.

102. Senator BEN NELSON. Secretary Rumsfeld, some sites, originally identified and planned for connection to the GIG–BE, for reasons of budget or mission have not yet been connected to the GIG–BE. Should those sites be reviewed for connection in the future to the GIG–BE? If not, how will they be served and how will missions be affected?

Secretary RUMSFELD. For those sites that were not included in the original GIG–BE upgrade, there will be ongoing reviews, within the DOD process, to determine future capability needs. All sites that did not receive GIG–BE upgrades will continue to use DISN services to fulfill mission requirements.

103. Senator BEN NELSON. Secretary Rumsfeld, the QDR identifies the need for DOD to assist domestic agencies in the event of disaster, such as the Hurricanes Katrina and Rita disasters of last year. Does the GIG–BE have connectivity to necessary civilian agencies, such as the DHS?

Secretary RUMSFELD. The GIG–BE program was intended and designed for DOD installations requiring long-term and continuous high bandwidth communications; the program also was to provide enhanced senior leader command and control, decisionmaking, and operations and intelligence capabilities. The GIG–BE provides the DOD with the capability to connect with necessary civilian agencies, such as the DHS.

104. Senator BEN NELSON. Secretary Rumsfeld, is there sufficient diversification in the network to ensure reliable backup connectivity?

Secretary RUMSFELD. Yes, there is sufficient diversification for the overall network.

105. Senator BEN NELSON. Secretary Rumsfeld, is there funding in the 2007 budget request for additional GIG–BE sites?

Secretary RUMSFELD. No. The fiscal year 2007 budget request reflects the sustainment of the entire DISN to include the GIG–BE segments, and the leased connection of key DISN nodes to GIG–BE.

SERVICE GOALS FOR GIG–BE CONNECTIVITY

106. Senator BEN NELSON. Secretary Rumsfeld, there are indications that the individual Services have additional sites which they would like to have connected to the GIG–BE. Please describe the process by which Services or COCOMs can requisition and establish such connections.

Secretary RUMSFELD. A process has been developed for Services and COCOMs to submit requests for connection to the GIG–BE network. Services and agencies may submit their requests to the CVWG, a subgroup that supports the DISN Customer Forum. Requests that are validated by the Working Group are then submitted to the DISN Rates Management Council, which is comprised of flag officers from each of the Services for final approval. Using this process, the approved list of key DISN bases is updated annually.

107. Senator BEN NELSON. Secretary Rumsfeld, does DOD regard this as a matter for the individual Services or will there be a Department-wide directive?

Secretary RUMSFELD. A Department-wide process has been established with the full participation of the Services, to oversee GIG connectivity implementation. Services and agencies may submit their requests to the CVWG, a subgroup that supports the DISN Customer Forum. Requests that are validated by the working group are then submitted to the DISN Rates Management Council, which is comprised of flag officers from each of the Services for final approval. Using this process, the approved list of key DISN bases is updated annually.

QUESTIONS SUBMITTED BY SENATOR EVAN BAYH

JOINT STRIKE FIGHTER

108. Senator BAYH. Secretary Rumsfeld, with respect to the F–136 alternate engine program for the JSF, do you think it's a good idea for us to be dependent on sole source suppliers for critical future technologies in a program this large and with so many international partners?

Secretary RUMSFELD. The concepts of sole source suppliers has been applied over many product lines. The Department depends on sole suppliers for several large programs and understands the risks involved with sole-source dependence. Both the F/A–18E/F and the F–22 depend on sole engines sources. The Department regards this sole source dependency as an acceptable risk for both us and our international partners.

109. Senator BAYH. Secretary Rumsfeld, has not the history of U.S. systems and weapons development and procurement since the mid-1970s demonstrated the importance of competition in terms of cost and supply?

Secretary RUMSFELD. Please see the answer to question 67 for this response.

110. Senator BAYH. Secretary Rumsfeld, do you expect the British Government to react negatively to the decision to terminate the F–136 alternative engine program?

Secretary RUMSFELD. It is reasonable to expect the British Government to express their concern over the decision to terminate the F–136 alternative engine program and possible reduction of industrial participation by Rolls-Royce. The Department is confident that the British Government will also recognize that this decision is important in keeping affordability a corner stone of the JSF program and is the right decision for all of the JSF partners. Rolls-Royce remains an integral and critical element of the JSF program, fully responsible for delivering the lift fan assembly for all Short Take Off and Vertical Landing engines. The Department continues to focus on JSF best-value industrial participation with all international partners.

111. Senator BAYH. Secretary Rumsfeld, do you believe this may impact the number of British-procured JSFs?

Secretary RUMSFELD. The Department does not believe the decision to cancel the F136 engine will have any impact on the number of JSFs the British Government procures. We are confident that canceling the F136 engine is an important step in ensuring the affordability of the aircraft the British Government is scheduled to buy. From an industrial perspective, Rolls-Royce remains an integral and critical element of the JSF program, fully responsible for delivering the lift fan assembly for all short take-off and vertical landing engines.

112. Senator BAYH. Secretary Rumsfeld, will a lower overall number of aircraft purchased drive up the cost-per-unit of the JSF?

Secretary RUMSFELD. If fewer JSF are purchased, the smaller production runs can increase procurement costs because they reduce the advantages of "learning curve" effects (whereby costs decrease as a company produces more units) and of "rate effects" (whereby fixed costs are spread over the total number of units produced).

QUESTIONS SUBMITTED BY SENATOR HILLARY RODHAM CLINTON

SMALL BUSINESS INNOVATIVE RESEARCH

113. Senator CLINTON. Secretary Rumsfeld, are you requesting any funds to establish a formal Small Business Innovative Research (SBIR) Phase III program which would serve to transition successful programs out of Phase II SBIR programs into formal acquisition programs?

Secretary RUMSFELD. The fiscal year 2007 budget does not contain a specific request for funds to aid in the transition of SBIR Phase II projects to Phase III and into formal acquisition programs. Title 15, section 638, specifically calls for SBIR Phase III, in which applications of SBIR-funded research are further developed, to be funded by non-SBIR funds. It is the administration's position that beyond Phase II, firms funded via SBIR must compete with the broader supply markets—including large and small firms—to win business. The reason for this is simple: the Department wants the very best equipment and materiel resources for our warfighter, regardless of the source, to maximize the benefits from full and open competition.

Nevertheless, it is important that our early-stage investments, such as SBIR which funds technical feasibility and prototype demonstration of new technologies, are targeted to maximize the potential to transition to meet a technology need. To do this, we ensure that all SBIR projects are fully integrated into the DOD R&D investment strategy and roadmaps to acquisition, as documented in the DOD Basic Research Plan, Defense Technology Area Plan, and Joint Warfighting Science and Technology Plan.

114. Senator CLINTON. Secretary Rumsfeld, what programs exist in this request to help small businesses transition their technologies out of the SBIR program?

Secretary RUMSFELD. The fiscal year 2007 budget does not contain a specific request for programs to aid in the transition of SBIR-funded projects exclusively. However, the budget contains several programs designed to facilitate the transition of technology—both SBIR-funded and non-SBIR-funded—through further development, testing, or evaluation:

- The Technology Transition Initiative (TTI) accelerates the transition of mature technologies from DOD Science and Technology (S&T) into DOD acquisition programs of record. This year, approximately 20 percent of the TTI projects selected for funding leveraged SBIR efforts.
- The Defense Acquisition Challenge Program (DACP) increases the introduction of innovative and cost-saving technologies into DOD acquisition programs. From fiscal year 2003–2005, approximately 70 percent of the DACP projects were awarded to small and medium enterprises.
- Section 108(b)(2) of the Defense Production Act stipulates that the President shall accord a strong preference for small businesses in providing any assistance under the act. To better position small businesses to receive title III projects, the title III program has begun a process whereby SBIR Phase II topics are developed that directly correspond to future planned title III activities.
- An essential part of each Advanced Concept Technology Demonstration (ACTD) and Joint Capabilities Technology Demonstration (JCTD) is identifying the best-of-breed technologies that will contribute to solution of the warfighting problem or need. This best-of-breed analysis of alternatives reviews SBIR solutions that may support the desired capability. In addition, capability needs for which no acceptable technical solution exists are often submitted as SBIR topic areas.

FUEL CELLS AND ALTERNATIVE ENERGY TECHNOLOGIES

115. Senator CLINTON. Secretary Rumsfeld, a few years ago, the Department established energy and power technologies, including fuel cells, batteries, hybrid engines, and other research initiatives as one of its three major S&T thrust areas. Unfortunately, this emphasis was not matched by significant funding increases for these types of efforts, which could serve to improve the efficiency of military vehicles or develop new systems to power the many information technologies, computer networks, sensors, and radios we plan to deploy with our next generation defense systems. What is your planned investment in 2007 for research on energy and power technologies?

Secretary RUMSFELD. The Energy and Power Technology Initiative (EPTI) focuses on electric power component technologies in the areas of power generation, energy storage and power control and distribution which includes many technologies in support of hybrid electric vehicles. Since fiscal year 2003, the Department's investment in applied research and advanced technology has grown from approximately $90 million to more than $240 million in fiscal year 2006. The fiscal year 2007 budget request includes more than $270 million for energy and power technologies within the Department. The fiscal year 2007 investment is predominately in the areas of power generation (fuel cells, superconductivity technology, and other novel power technology) and control and distribution (silicon carbide materials, power electronics, and thermal management).

116. Senator CLINTON. Secretary Rumsfeld, how are these investments coordinated among the Services and defense agencies?

Secretary RUMSFELD. The Department's investments in fuel cells, batteries, hybrids, and other alternative energy technologies are coordinated at several levels. First, there is the EPTI which is managed by the Office of the Director, Defense Research and Engineering. The EPTI provides oversight and coordination across the Services in three major electric power component technology areas: (generation, storage and distribution, and control). Next, there is the Interagency Advanced Power Group (IAPG) which includes NASA and the DOE. The IAPG is a venue for free information exchange among government researchers and program managers. There are also numerous technology specific work groups and technical conferences. Some of the work groups include the Tri-Service Capacitor Technologies Working Group, the Interagency Hydrogen and Fuel Cell R&D Work Group, and the Power Sources Work Group of the DOD Fuze Integrated Product Team. There are also recurring technical meetings including the Army-led Power Sources Conference, the

Navy-led Electrochemical Power Sources R&D Symposium, and the DOD Logistics Fuel Processing Conference.

[Whereupon, at 1:13 p.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2007

TUESDAY, FEBRUARY 14, 2006

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

ARMY POSTURE

The committee met, pursuant to notice, at 2:40 p.m. in room SR–325, the Caucus Room, Russell Senate Office Building, Senator John Warner (chairman) presiding.

Committee members present: Senators Warner, Inhofe, Thune, Levin, Kennedy, Lieberman, Reed, Akaka, Dayton, and Clinton.

Committee staff members present: Charles S. Abell, staff director; Leah C. Brewer, nominations and hearings clerk; and John H. Quirk V, security clerk.

Majority staff members present: William M. Caniano, professional staff member; Regina A. Dubey, professional staff member; Ambrose R. Hock, professional staff member; Gregory T. Kiley, professional staff member; Sandra E. Luff, professional staff member; Derek J. Maurer, professional staff member; David M. Morriss, counsel; Lucian L. Niemeyer, professional staff member; Stanley R. O'Connor, Jr., professional staff member; Sean G. Stackley, professional staff member; Scott W. Stucky, general counsel; Diana G. Tabler, professional staff member; and Richard F. Walsh, counsel.

Minority staff members present: Richard D. DeBobes, Democratic staff director; Jonathan D. Clark, minority counsel; Daniel J. Cox, Jr., professional staff member; Gabriella Eisen, research assistant; Evelyn N. Farkas, professional staff member; Bridget W. Higgins, research assistant; Gerald J. Leeling, minority counsel; Peter K. Levine, minority counsel; and Michael J. McCord, professional staff member.

Staff assistants present: Micah H. Harris, Jill L. Simodejka, and Pendred K. Wilson.

Committee members' assistants present: Christopher J. Paul, assistant to Senator McCain; John A. Bonsell, assistant to Senator Inhofe; Arch Galloway II, assistant to Senator Sessions; Mackenzie M. Eaglen, assistant to Senator Collins; Stuart C. Mallory, assistant to Senator Thune; Mieke Y. Eoyang, assistant to Senator Kennedy; Frederick M. Downey, assistant to Senator Lieberman; Elizabeth King, assistant to Senator Reed; Darcie Tokioka, assistant to

Senator Akaka; and Kimberly Jackson, assistant to Senator Dayton.

OPENING STATEMENT OF SENATOR JOHN WARNER, CHAIRMAN

Chairman WARNER. Good afternoon. Mr. Secretary, General Schoomaker, we welcome you and your associates here today. We tender our apologies for the quick cancellation this morning. We were in through the evening. I had actually made other arrangements to try and continue this hearing through the morning session, but in consultations with my colleague here, Senator Levin, we thought it would serve the purposes best if we pull together and give the Army a full court press here this afternoon, and we are going to do that.

Given that we have a number of members here and we want to get underway, and I gave a very complete opening statement in connection with the appearance of the Secretary of Defense, at which time General Schoomaker was present, I will forgo my opening statement at this time such that we can get right into the purpose for your being here.

We always—and it is not just a matter of rote; it is a matter of utmost sincerity—open all of our hearings of this committee with a very special recognition to the men and women of the Armed Forces, wherever they are serving in the world, and most particularly those who are serving in Iraq and Afghanistan, and the families who have lost their loved ones and are caring for those that somehow have survived the battles and are home in rehabilitation. We are very proud of them, and this Nation stands steadfast behind the men and women of the Armed Forces.

We also recognize that the United States Army is bearing a major, if not the principal, responsibility in this conflict, together with the Marine Corps, and that you have some very special needs, Secretary Harvey, and we are prepared to entertain those special requirements and needs. You have made considerable progress in the goals that you set forth together with the Chief of Staff for reorganization in the Army. We want to be supportive of that.

We are happy to recognize General Blum of the National Guard, who is here today. Again, the Guard, acting with our Reserve Forces, did a magnificent job in the Katrina operation. All through the hearings I have been present and I have purposely asked time and time again the questions about that problem, and the troops that came out. Everybody acknowledged appreciation for what they did, Guard, Reserve, and Active-Duty troops.

[The prepared statement of Senator Warner follows:]

PREPARED STATEMENT BY SENATOR JOHN WARNER

The committee meets today to receive the testimony of the Secretary of the Army and the Chief of the Army on the posture of the U.S. Armed Forces and President Bush's defense budget request for the Army for fiscal year 2007.

We welcome Secretary Harvey and General Schoomaker and we extend our profound respect to those who serve. Our thoughts and prayers are with their families, and particularly those families who are experiencing the loss or the wounding of one of their beloved members.

I stated at last year's posture hearing with the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, that the next 6 months would be the most critical period of the conflict in Iraq. I must say again, the key to success in Iraq

and the eventual phase-out in an orderly way, depending on the ground situation and that of our commanders, of the United States troops and those of the coalition forces—that is dependent upon the training and the equipping and the advising of Iraqi security forces to a level of military proficiency and courage and dependability such that they can continue assuming a greater and greater responsibility for defending their nation's sovereignty and freedom.

The President's budget request delivered to Congress on 6 February included a request of $111.8 billion for the Department of the Army, an increase of almost $12.0 billion over the fiscal year 2006 level. These figures do not include the $32.3 billion appropriated for the Army in the fiscal year 2006 bridge supplemental. By way of comparison, the Army requested $70.8 billion in fiscal year 2001. The $111.8 billion represents an increase of 56 percent over the fiscal year 2001 request. I commend the President for his continuing commitment to improving our defense capabilities and providing our forces with the resources and capabilities they need to successfully fulfill their missions. The budget priorities of supporting the global war on terror, restructuring our forces and our global posture, building joint capabilities for future threats, and taking care of our troops and their families are clearly the right emphasis.

I applaud the Army's initiative to provide the necessary resources to fully man, equip, and train the Army National Guard so that they can transition from a strategic reserve to an operational reserve. Over the past weeks, we have heard varying accounts regarding the changes the Army has made to their plan to restructure the Guard. I share my colleagues' concern that we may not be providing the forces necessary for the Guard to accomplish their State missions.

This committee is committed to doing all we can to ensure the safety of our soldiers. Taking lessons from recent operations in the war on terrorism, two specific areas bear mentioning. The area of counter improvised explosive devices (IEDs) has and will continue to command our attention. I am disappointed to note that your department did not specifically identify funding for research and development of IED countermeasures in the fiscal year 2007 request. While I recognize that overall responsibility for the Joint IED Defeat Office has transitioned to the Department of Defense, I still think it's important that the military Services program for the long term research and development of measures to defeat IEDs. This is not a problem that will go away once we leave Iraq.

While I commend the Army's decision to robustly fund the Future Combat Systems (FCS) program—$3.7 billion in fiscal year 2007—I challenge the Army to explain why this program cannot "spin out" FCS technologies to Army forces deployed in Iraq and Afghanistan sooner. The unmanned systems under development in the FCS program could provide immediate capabilities to our deployed forces.

Secretary Harvey and General Schoomaker, again let me thank you for appearing before this committee today and we look forward to your testimony.

Senator Levin.

Chairman WARNER. So with that, Senator Levin, if you have a few comments, we will then go to our witnesses.

STATEMENT OF SENATOR CARL LEVIN

Senator LEVIN. Mr. Chairman, I will follow your lead and put my statement in the record, just to have a very few moments of comments at the beginning. Also, immediately following my prepared statement, I will insert the prepared statement of Senator Daniel K. Akaka.

First let me welcome Secretary Harvey and General Schoomaker and your colleagues, your guests, our guests to this hearing this afternoon. We want to thank you for your service to our Nation, to our soldiers, to the families that support them and us.

Five years ago, there were many critics who were questioning the role of the ground combat power and the relevance of the Army for the 21st century. It is safe to say that the events of the last 5 years have put to rest any such questions. The ability to directly confront and defeat an enemy ground force, to seize and hold ground, and then to restore peace and stability can only be done by putting boots on the ground, as the Army has so ably demonstrated.

The Army has shouldered the bulk of the responsibilities in Iraq and Afghanistan, has suffered by far the greatest number of killed and wounded. The soldiers of the Army, volunteers all, have served unselfishly and with great bravery, dedication, and distinction. All Americans, no matter what their opinions as to whether or how the war in Iraq should have been waged, are unified in their gratitude to the soldiers of the Army and their families and are committed to see that they are supported in all respects.

So, Secretary Harvey and General Schoomaker, please pass on to the officers, enlisted men and women, civilians, and family members of the Army the great regard in which they are held by all of us in Congress and the reassurance from all of us that, working with you and the rest of the Army, we are determined to give them the training, the equipment, the quality of life, and the support of the families to allow them to continue to serve this Nation so well.

Mr. Chairman, I will put the balance of my statement in the record.

[The prepared statement of Senator Levin follows:]

PREPARED STATEMENT BY SENATOR CARL LEVIN

Thank you, Mr. Chairman. I too would like to welcome Secretary Harvey and General Schoomaker and to thank them for their service to the Nation and to our soldiers and their families.

Five years ago there were many critics who were questioning the role of ground combat power and the relevance of the Army for the 21st century. It is safe to say that the events of the last 5 years have put to rest any such questions. The ability to directly confront and defeat an enemy ground force, to seize and hold ground, and then to restore peace and stability can only be done by "putting boots on the ground," as the Army has so ably demonstrated. The Army has shouldered the bulk of the responsibilities in Iraq and Afghanistan, and has suffered by far the greatest number killed and wounded. The soldiers of the Army—volunteers all—have served unselfishly with great bravery, dedication, and distinction. All Americans, no matter what their opinions as to whether or how the war on Iraq should have been waged, are unified in their gratitude to the soldiers of the Army and their families, and are committed to see that they are supported in all respects.

Secretary Harvey, General Schoomaker, please pass on to the officers, enlisted men, civilians, and family members of the Army the great regard in which they are held by the Congress of the United States, and the reassurance from the Congress of the United States that, working with you and the rest of the Army leadership, we are determined to give them the training, the equipment, and the quality of life to allow them to continue to serve this Nation so well.

Hearings are essential elements in Congress' exercise of its oversight responsibilities toward the Department of Defense (DOD) and the Services. Sometimes it might seem that only the negative is stressed and seldom the positive. The story of the Army over the last 5 years is, on the whole, a positive one. Where there are negatives, they are more likely to be sins of omission rather than sins of commission. There is no doubt that the Army failed early on to adequately prioritize the allocation of resources toward force protection measures. Our troops paid heavily because of the lack of sufficient body armor, truck armor, and aviation survivability equipment. In retrospect, we all should have recognized and acted to address the shortfalls before our troops went into harm's way. But all of us since have spared no effort, and no amount of resources, to correct early failures. Not only have we addressed, and continue to address the armor issue, but DOD, the Army, and Congress are doing the same to combat the ever-increasing lethality of the improvised explosive device (IED) threat. We in Congress stand ready to provide you whatever you need to address that problem.

I continue to believe that maintaining current troop levels in Iraq is simply not sustainable over the long term. The grueling operational tempo is wearing down people and wearing out equipment. Equipment usage rates, with consequent wear and tear, are in some cases 10 times that of planned peacetime usage. While reenlistment rates in the Army are strong—and are a credit to the dedication and devotion to duty of our soldiers—some indicators, such as increasing strains on military families, are indicative of a force under stress and give rise to concerns that those

reenlistment rates cannot be maintained. There is certainly clear evidence that the Army is having difficulty in recruiting new first-term soldiers who are critical to a balanced force across all ranks and grades, and if reenlistment rates fall, to replacing those veterans who will be leaving. History also gives one pause. Although the majority of the enlisted soldiers who served in Vietnam were draftees who served one tour and returned to civilian life, the officers and noncommissioned officers (NCO) were professionals who, in many cases, served multiple tours. This was particularly true of the NCO corps, which after several years of multiple tours came close to disintegrating. It took at least a decade to rebuild the NCO "backbone" of the Army. We cannot afford to let that happen again.

While the overall relevance of the Army in the 21st century should no longer be in question, there are still serious questions that must be addressed. At our hearing last week, General Schoomaker testified adamantly that the Army was not broken. I agree, but such respected organizations as RAND and the Center for Strategic and Budgetary Assessment (CSBA) have sounded the alarm that the Army is what RAND called "stretched thin," or what CSBA called " the thin green line." Both analyses question whether the Army is large enough and properly organized to sustain such high levels of deployments while maintaining ready units for other possible contingencies. The Army has acknowledged that its Active-Duty units have had less than 2 years, and in some cases less than a year, between Iraq or Afghanistan rotations.

Under Secretary Harvey's and General Schoomaker's leadership, the Army has been addressing the stress of frequent unit rotations by restructuring its brigades in the Active and Reserve components to make them more "modular" (with more standardized organizational designs and fewer number of different designs) and therefore more readily able to be mixed and matched as the situation would dictate, and at the same time, increasing the number of brigade combat in the Active Army.

When the Army began its modularity program, it made a strong argument that additional brigades were necessary for its force generation process to ensure that it could maintain an 18-brigade force deployed—the size of the current Iraq and Afghanistan commitment—and still ensure that Active brigades would only be deployed 1 year in 3, and Guard and Reserve brigades would only be deployed 1 year in 6. Now we now learn that the Active Army will only grow by nine brigade combat teams, one less than planned, and six less than tentatively considered. The Army National Guard will be manned, trained, and equipped for six less brigade combat teams.

I believe that the Army has made the right decision with respect to its decision to fully man, train, and equip these units to the higher states of readiness required of an expeditionary Army and an operational vice strategic Reserve. I support reasonable reductions in unnecessary force structure to apply freed-up resources to that task. However, I am concerned that this new force structure may make it more difficult for the Army to meet its force generation goals and, barring a more rapid draw down from Iraq, may not be sufficient to significantly reduce the stress on deployed and deploying forces. It would also seem to increase the risk that the Army may not be able to respond as needed to other contingencies in support of the national military strategy.

I am also concerned about the apparent failure of the Army leadership to consult with the leaders of the Reserve components prior to this new restructure decision. We cannot afford to once again experience the rancor and mistrust between the Army and the Army National Guard that flourished so vehemently 9 years ago, and which was largely overcome by the close cooperation between the components as both recognized and respected the contributions of each other to fighting the current war. I urge, and expect, the leaders of both components to work together to do what is best for the Army, and for the Nation.

There is still much confusion as to what each side has agreed to, and committed to, with respect to Reserve component force structure allocations and end strength. There is even more confusion as to what this current budget funds, what the Future Years Defense Program provides, and what shortfalls and unfunded requirements still exist in that regard. I hope that this hearing will clear up that confusion.

The President's budget request for the Army is 12 percent higher than last year's. That is good news. Some of that increase is a result of including the cost of the Army modularity program in the base budget where it belongs vice the supplemental appropriations request of past years. I hope this hearing addresses any known shortfalls in resources for modularity and for reset. With the details of the administration's expected supplemental budget request unknown, it is not clear whether it will cover the Army's estimated fiscal year 2006 $13.5 billion requirement for reset—the repair, recapitalization, and replacement of equipment of units redeploying from Iraq and Afghanistan. Also, the Army's estimate of an additional

$20 billion requirement for reset in fiscal years 2007–2011 assumes that units begin withdrawing in the summer of 2006 and complete that withdrawal within 2 years, and it includes no projected battle losses. Surely there will be more battle losses, and should the withdrawal assumption prove wrong, the programmed cost of reset will certainly have to be adjusted upwards.

The continued high operational tempo may ultimately put the modernization of our military forces at risk. General Schoomaker has consistently said that the Army will need supplemental funding for at least 2 years after "the end of the current emergency" to reset its units in order to be ready for subsequent deployments. Last year, this committee was able to protect the Army's top modernization priority—the Future Combat Systems—from potentially damaging legislation. But should supplemental funding levels remain at such high levels, that program, as well as the modernization priorities of the other Services, will undoubtedly come under increased funding pressure. We do not want to be forced to choose current readiness at the expense of future readiness.

I look forward to the testimony of our witnesses.

[The prepared statement of Senator Akaka follows:]

PREPARED STATEMENT BY SENATOR DANIEL K. AKAKA

I wish to thank Chairman Warner for holding this important hearing. I also thank Secretary Harvey and General Schoomaker for your leadership and for being here with us today. I want to begin by acknowledging the brave men and women currently serving in the Army, Army Reserve, and Army National Guard and those veterans who have served in the past. We thank you for your dedication and service to your country. I would also like to thank the families of our Nation's soldiers both past and present for the many daily sacrifices they make. I am committed to ensuring that the members of our armed services receive the best training, equipment, and support that our Government can provide. I am also committed to ensuring that their families are assured a good quality of life by our Government and look forward to hearing the testimony of our witnesses.

Chairman WARNER. I thank my colleague.

All right, Secretary Harvey.

STATEMENT OF HON. FRANCES J. HARVEY, SECRETARY OF THE ARMY; ACCOMPANIED BY GEN PETER J. SCHOOMAKER, USA, CHIEF OF STAFF, UNITED STATES ARMY; AND LTG STEVEN BLUM, U.S. ARMY NATIONAL GUARD

Secretary HARVEY. Good afternoon, Mr. Chairman, Senator Levin, distinguished members of the committee. General Schoomaker and I appreciate this opportunity to be here this afternoon and to offer testimony on the posture of the United States Army.

America's Army is the world's preeminent land power, with a quality force of over 1 million soldiers, supported by nearly 240,000 Department of Army civilians, an Army of Active, Guard, and Reserve soldiers, deployed, forward stationed overseas or securing the homeland, soldiers from every State, soldiers from every corner of this country, serving the people of the United States with incredible honor and distinction.

We provided the committee the 2006 Army Posture Statement as our written statement and I would like to take this opportunity to briefly highlight some of the Army's key initiatives and programs. General Schoomaker will also make an oral statement at the conclusion of my remarks.

I know that this committee, like me, appreciates the insight and unique perspective that General Schoomaker provides from his distinguished career of service to our Nation as a soldier. The soldier remains the centerpiece of America's Army. General Schoomaker

will introduce to you three of those soldiers here with us today during his remarks.

The 2006 Army Posture Statement is a succinct summary of the Army plan which addresses the challenges of today while preparing us for those we will face tomorrow. The Army plan is a comprehensive, fully integrated strategic and operational plan which provides the road map to first build a more capable and relevant Army for the 21st century through transformation and modernization and, second, sustain the full range of Army's current commitments, particularly fighting and winning the global war on terror.

On September 11, the Army's operational capabilities lacked the breadth and depth for the long war. We appreciate the continuing support of Congress as the Army shifts its center of gravity to provide a broader portfolio of operational capabilities to meet the complex challenges of the 21st century security environment, particularly irregular, asymmetric warfare.

For example, we have already completed the first 2 years of converting the operational Army to a modular, brigade-based combat force. Our objective is 70 brigade combat teams (BCTs) and 211 support brigades. This is an increase of 46 percent in the number of BCTs over the current force. To date we have completed the conversion or activation of 19 BCTs to the modular design, or approximately 27 percent towards the objective of 70 BCTs. In addition, we have started the conversion or activation of another 18.

Even though the modular force effort is not complete, it has already increased our operational capabilities and established the foundation for a rotational force generation model which is structured, predictable, and provides more combat-ready units while reducing stress on the force.

In order to sustain the current missions and continue to posture for future commitments, the Army needs the full support of Congress for the Army plan and the Army's request for the 2007 Presidential budget. Additionally, beyond the importance of maintaining full funding for the modular force transformation, the chief and I also want to emphasize the importance of fully funding the Future Combat Systems (FCS) program. This is a key modernization program for the Army and is really the first major modernization effort in over 4 decades.

Although the word "future" is in the program title, this is not a program that only exists on Powerpoint slides. FCS is becoming a reality today and spinouts of FCS technology into our current modular force will begin in 2008. Simply put, the FCS program is the fastest and surest way to modernize the Army. Furthermore, it is the only way to effectively modernize the Army in an integrated manner.

The FCS program and the modular force initiative, in conjunction with the full spectrum of other programs in the areas of research and development (R&D), acquisition, training, advanced techniques, tactics and procedures, leadership development, business transformation, as well as the growth of the operational Army, will ensure that our overall capability to conduct both traditional and nontraditional operations, including the global war on terror, will continuously and methodically increase and improve as we go forward in the uncertain and unpredictable 21st century.

We also need to draw your attention to the importance of our efforts with your support to sustain the All-Volunteer Force, including recruiting, retention, and providing a quality of life for our soldiers and their families that match the quality of their service. This is the first time in our modern history that the Nation has tested the concept of an All-Volunteer Force in a prolonged war. Full funding and support of Army programs in this way is critical to sustain the finest Army in the world.

Finally, I want to emphasize that the Army plan is a total plan to transform the entire Army, Active, Guard, and Reserve. 2005 reaffirmed to the people of the United States that we are truly an Army of One. Simply put, the Army could not perform full-spectrum operations without the tremendous contribution of the Army Guard and Reserve.

For example, last year the Army National Guard had 10 BCTs and a division headquarters serving in Iraq, Afghanistan, and the Balkans for at least a portion of the year. Despite this overseas commitment, the National Guard was still capable of responding with 42,000 soldiers in little over a week to support Hurricane Katrina relief operations. I might add that there were still tens of thousands more National Guard and Army Reserve soldiers available if needed.

Based on the insights of September 11, homeland defense operations, hurricane recovery operations, and lessons learned from the global war on terror, the Army plan shifts the focus of the Reserve component from a strategic Reserve to an operational force and rebalances the Reserve component's force structure to the operational skills they need for the 21st century security environment.

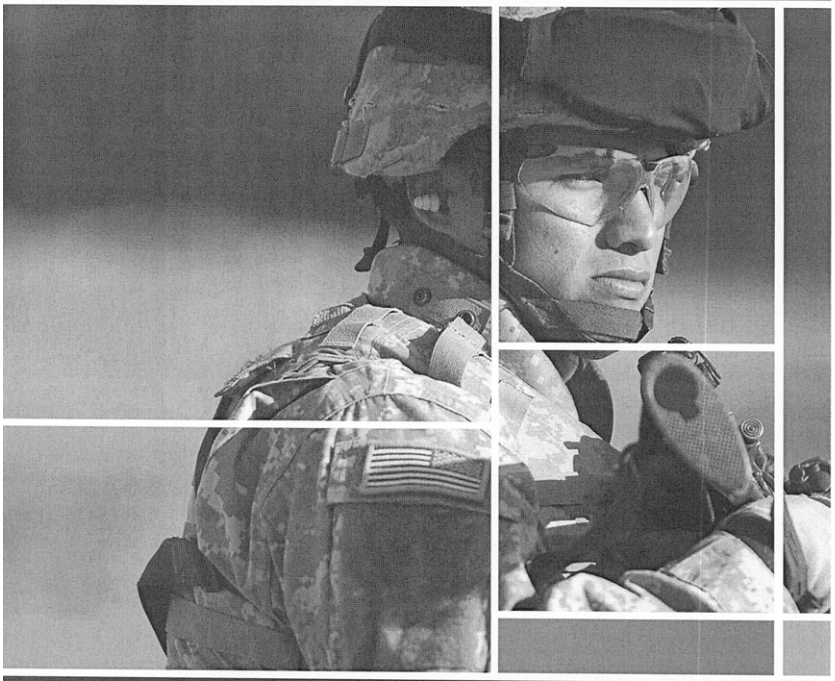
For example, in the current plan the Army National Guard will continue to maintain a total of 106 brigades, which are beginning to be transformed to the same modular design as the active Army. However, we are changing the organizational mix of BCTs and support brigades based on the capabilities needed to conduct both their national defense as well as their State missions. In essence, the Army National Guard and the Army Reserve are transforming and modernizing from an underresourced standby force to fully equipped, manned, and trained operational ready units.

Let me close and give General Schoomaker an opportunity to address the committee by saying that I remain confident that, with the continued strong support of Congress, America's Army can accomplish its mission and reach our strategic goal of being relevant and ready both today and tomorrow. Thank you, Mr. Chairman.

[The prepared statement of Secretary Harvey follows:]

2006 POSTURE STATEMENT

A CAMPAIGN QUALITY ARMY WITH JOINT AND EXPEDITIONARY CAPABILITIES



UNITED STATES ARMY

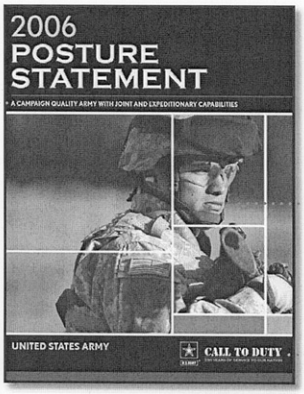
U.S.ARMY

CALL TO DUTY

230 YEARS OF SERVICE TO OUR NATION

About the Cover

Soldiers are the Army. This idea is foremost in our thinking. It is the Soldier – well trained, equipped, and led – who serves as the ultimate expression of the capabilities the Army provides to the Joint Force and the Nation. Living and personifying the ideals of the Warrior Ethos, our Soldiers are on duty, around the world and at home, to protect the Nation and the society they serve. For these reasons, Soldiers are our Centerpiece. *This is why we proudly feature a Soldier on this cover.*



Our Army is organized, manned, trained, and equipped to conduct sustained campaigns on land, as part of joint, interagency, and coalition formations, to achieve national strategic objectives. We are also uniquely suited to conduct expeditionary operations – requiring rapid deployment of our forces to remote, austere theaters of war and conduct operations immediately upon arrival. Our transformation and modernization efforts are focused to improve our capabilities in each of these settings. To meet the needs of the Nation and adapt to the challenges our Soldiers will face, we must continue to improve these capabilities. *This is why we feature this statement on this cover.*

Our Soldiers continue to answer the ***Call to Duty***, as they have done for over 230 years. The most potent weapon in the long struggle against terror will be our brave men and women in uniform. These Americans represent the finest the Nation has to offer. Those who honor and assist our Soldiers also answer the ***Call to Duty***. To recognize the importance of service to the Nation, Call to Duty is the theme of this year's Posture Statement. *This is why we feature* ***Call to Duty*** *on this cover.*

A Statement on the Posture of the United States Army 2006

by

The Honorable Francis J. Harvey and **General Peter J. Schoomaker**

Presented to

The Committees and Subcommittees of the

UNITED STATES SENATE and the **HOUSE OF REPRESENTATIVES**

2nd SESSION, 109th CONGRESS

The annual Army Posture Statement is an unclassified summary of Army roles, missions, accomplishments, plans, and programs.

The Posture Statement is designed to reinforce the testimony presented by the Secretary of the Army and the Chief of Staff, Army, that addresses the resources and support required by the Department of the Army to accomplish its mission during Fiscal Year 2007.

This Posture Statement serves a broad audience as a basic reference on the state of the Army.

This document is available on the Army website at *http://www.army.mil/aps/06*.

The Posture Statement is a product of the Office of the Chief of Staff, U.S. Army, Executive Office of the Headquarters Staff Group.

Email: EOHStaffGroup@hqda.army.mil

February 10, 2006

We have the confidence of the Nation as we continue to engage in a long struggle against global terrorism and the conditions that give it life and sustain it. Over a half-million active and reserve Soldiers have served overseas in the war on terrorism. More than 600,000 Soldiers are on active duty today. Almost half of them are deployed, serving in 120 countries worldwide in defense of U.S. interests.

While fighting, we are preparing Soldiers and leaders for the challenges that they will face. We continue to transform, to modernize, and to realign our global force posture. Our Army continues to evolve from a force dependent on divisions to deter and to wage war against traditional adversaries, to a force dependent on modular brigades, specially designed for the full range of non-traditional adversaries and challenges it will face.

With the support of the President, the Congress, and the Secretary of Defense, we have developed and resourced a fully integrated plan to best serve the Nation, to deal with the challenges we will face today and tomorrow, and to sustain our volunteer Soldiers in this time of war.

To execute this plan, we are depending upon continued Congressional leadership in three areas:

- Obtaining legislative authorities to assure predictable access to our Army National Guard and Army Reserve Soldiers who have become, by necessity, our operational rather than our strategic reserve;
- Expediting wartime acquisition processes needed to equip and protect our Soldiers; and
- Of greatest importance, maintaining the support of the American people whom we serve.

To continue to meet the needs of the Combatant Commanders and the Nation, the Army will require the full support of the resources requested in the base budget and in supplemental appropriations.

Peter J. Schoomaker
General, United States Army
Chief of Staff

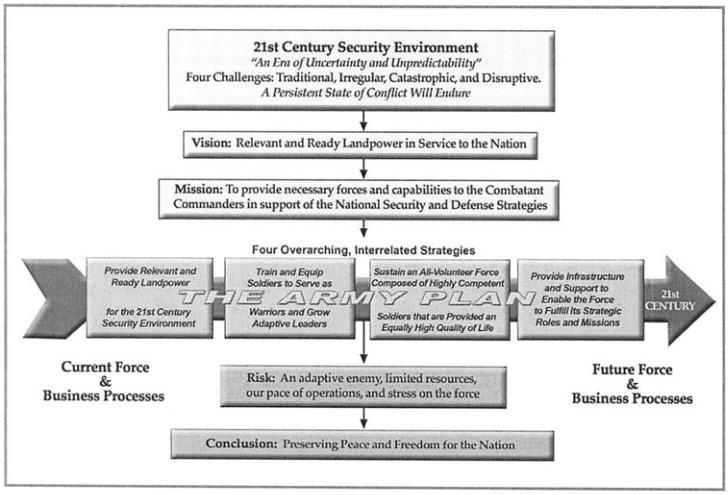
Francis J. Harvey
Secretary of the Army

Purpose and Organization of the 2006 Army Posture Statement

The 2006 Army Posture Statement describes how the Army is executing The Army Plan to meet the challenges of today and to be better prepared for those we will face tomorrow. Focusing on the Soldier, our centerpiece, the Posture Statement summarizes key implications of the 21st century security environment. This discussion provides the context to examine the Army Vision to accomplish our enduring, constitutionally-derived mission.

The Army Plan consists of four overarching, interrelated strategies, focusing on people, forces, training and infrastructure. We explain our initiatives, accomplishments, and compelling needs as they relate to each of these strategies. We describe transformation, not as an end in itself; but rather, how it has helped us to accomplish our mission and to realize our vision.

We conclude with a discussion of risk to underscore our compelling needs.



This Posture Statement is designed to serve as a primary portal to learn about the Army. A listing of helpful Army-related websites and a glossary of acronyms are also provided.

The Army Posture Statement can also be found on the Web at http://www.army.mil/aps/06. The electronic version of the document provides a series of addenda and hyperlinked boxes addressing key items of interest to enhance readability and to make additional information available to support diverse user interests. These items of interest are indicated in blue type throughout the document.

2006 Army Posture Statement Executive Summary

Soldiers are making enormous contributions and sacrifices while serving at the forefront of a long struggle of continuous, evolving conflict. Their presence has enabled historic elections in Afghanistan and Iraq, and is setting the conditions for democratic institutions to take hold. Our Soldiers are also preventing attacks on our Nation and responding to natural disasters at home and abroad, while sustaining the full range of America's global commitments. At the same time, to be ready for the challenges we face today and tomorrow, we are accelerating our plan to transform and modernize.

We are executing The Army Plan to accomplish our mission and to realize our vision: *to remain the preeminent landpower on Earth – the ultimate instrument of national resolve – that is both ready to meet and relevant to the challenges of the dangerous and complex 21st century security environment.* Our plan consists of four overarching, interrelated strategies (Figure 1).

This fully integrated plan is driving change at an unprecedented pace. We are becoming a more powerful, more flexible, and more deployable force with a broad set of capabilities to deal with the full spectrum of challenges we will face. Our improvements will enable our Soldiers to sustain the full range of global commitments which extend beyond today's current theaters of war. We are improving our ability to operate with joint and coalition partners and to perform nontraditional operations. We are also developing better ways to manage increasing demands for forces and relieve stress on Soldiers, their families, and civilian workers to sustain our All-Volunteer force.

Four key ideas underpin our planning:

- First, we remain committed to producing units that are ready for the challenges they will face and to overcoming years of underfunding prior to the events of 9-11. We have received unprecedented support to "buy back" much needed capability. We cannot, however, fool ourselves by maintaining large numbers of forces on paper that, in reality, lack the people, equipment, training, and support needed to accomplish the missions that they will be assigned. We are determined to support our Soldiers and their families with an improved quality of life that matches the high quality of service they perform for America.
- Second, we recognize that intellectual change precedes physical change. For this reason, we are developing qualities in our leaders, our people, and our forces to enable them to respond effectively to what they will face. We describe the leaders we are creating as "pentathletes," whose versatility and athleticism – qualities that reflect the essence of our Army – will enable them to learn and adapt in ambiguous situations in a constantly evolving environment. We have undertaken a major review of how we train, educate, assign, and develop our military and civilian leaders to ensure that our Soldiers are well-led and well-supported as they deal with complexity and uncertainty for the foreseeable future.
- Third, reinforced by the American military experience of the 20th century, we believe that our Soldiers' effectiveness depends upon a national commitment to recruit, train, and support them properly. This commitment must be underwritten by consistent investment in their equipment and infrastructure. We remain acutely aware of fiscal constraints; however, our duty to do what is right for our Soldiers, their families, and the Nation remains firm and unwavering.
- Fourth, we remember our position at the start of the long struggle in which we are engaged. After years of insufficient modernization investments, many of our units were under-equipped and not immediately ready for deployment, especially in our reserve units. To meet Combatant Commanders' wartime needs, we pooled equipment from across the force to equip those Soldiers deploying into harm's way. This increased risk in other capabilities, as seen in the Army National Guard during our national response to Hurricanes Katrina and Rita. With help from the President, the Congress, and the Department of Defense through supplemental appropriations, we have addressed many of our equipment shortfalls. We still have much to accomplish to ensure force readiness and to mitigate risk.



To sustain the current mission, posture for future commitments, and maintain risk at acceptable wartime levels, the Army needs:

- Full funding of the Army request in the 2007 President's Budget and special consideration, in light of wartime demands, for avoiding any reductions to the Army's budget and program. In addition, supplemental funding is required for combat and contingency operations and to continue to reset, repair, recapitalize, and replace battle losses of equipment for several years beyond major deployments. Supplemental funding is needed to overcome the stress on equipment resulting from sustained combat operations in harsh environments. These resources will ensure that the Army is fully manned, trained, and equipped to achieve victory in the war on terrorism. These resources will also enable the Army to maintain the momentum of key programs, while accelerating transformation.
- Funding to increase Army capabilities and overall capacity as well as support for the legislative authorities and programs needed to assure access to our reserve components – who, by necessity, have become an operational vice a strategic reserve. We must achieve a proper balance of capabilities and skills among our active and reserve forces and continue to build high-quality units to increase capability and ease the strain on our deployed Soldiers.
- Support and funding to achieve critical recruiting and retention goals needed to grow operational forces. Meeting these goals for our active and reserve Soldiers sustains the quality and effectiveness of our All-Volunteer force.
- Funding for the Future Combat Systems (FCS) program – to enhance current force capabilities today with "spin outs" of available technology – and accelerate more than 300 other modernization programs. Our most critical investment program, FCS will be the Army's first major modernization in over 30 years and will better prepare and protect Soldiers for current and future threats. These capabilities will directly benefit our active and reserve components, all U.S. ground forces, and our allies that support ground campaigns.
- Full funding to maintain momentum in building a rotational pool of 70 Brigade Combat Teams (BCTs) and more than 200 modular Support Brigades and headquarters. Already well under way, our transformation to become a fully modular force is preparing our Soldiers to conduct sustained operations of the type we see today. In addition, our transformation is increasing the depth and breadth of our capabilities to prepare our Soldiers for tomorrow's challenges, particularly as we evolve to maintain overseas presence with rotational units.



- Full funding for Army installations and support to execute a carefully synchronized plan to achieve a new global basing posture, while fulfilling the requirements of the National Military Strategy. This plan will make full use of the resources currently apportioned and projected to be recouped through consolidation and closings. Unanticipated costs associated with environmental remediation, renovation, construction, and other areas, may require additional resources in future years (a situation that will require continuous reevaluation). Full funding and continued support for Army installations and quality-of-life programs is required to sustain the All-Volunteer force, now being tested for the first time in a prolonged war.
- Support for funding and authorities for Army Business Transformation initiatives to achieve targeted efficiencies through management reform, Institutional Army adaptation, and reengineered business practices. These initiatives will free human and financial resources for more compelling operational needs and accelerate other aspects of our transformation.

A complete, detailed list of our Compelling Needs for 2007 is provided in Figure 2.

2007 will be a pivotal year for the Army. We will continue to conduct operations while transforming the force, its global infrastructure, and all of our supporting business processes. The resources provided to the Army in 2007 and beyond will enable the Army to maintain the momentum of key programs, while accelerating aspects of our transformation. Moreover, this funding will determine our ability to continue to accomplish our mission and to be postured to meet future commitments.

UNITED STATES ARMY

Four Overarching, Interrelated Strategies

Provide Relevant and Ready Landpower

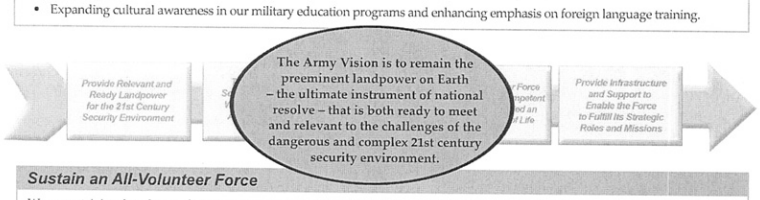
We are improving our capabilities to prevail in the war on terrorism and sustain all of our global commitments. While fighting, we are:

- Maintaining the momentum of our transformation and modernization.
  - Transforming to create an active and reserve component pool of 70 modular Brigade Combat Teams, reinforced by over 200 modular Support Brigades.
  - Modernizing – for the first time in decades – to field Future Combat Systems and other advanced technologies.
- Building a modular force in which brigades – not divisions – can "plug into" joint and coalition task forces in expeditionary and campaign settings.
- Improving readiness to deal with irregular, catastrophic, disruptive, and traditional challenges.
- Building depth (*more*) and breadth (*more kinds*) of capability to ensure Soldiers and units can adapt to these challenges.
  - Building *more* brigades to increase strategic flexibility and relieve stress on Soldiers and equipment.
  - Developing *more kinds* of capability by making our brigades more powerful, versatile, deployable, and relevant to new challenges.
- Creating improvements in: Sustaining the Force, Actionable Intelligence, Stability Operations, Homeland Defense, Operating in Complex Environments, Facing Irregular Challenges, Battle Command, and more.
- Ensuring that every investment in our current force benefits our future force.

Train and Equip Soldiers and Grow Adaptive Leaders

We are preparing our Soldiers for the rigors of war and leaders to serve as multi-skilled pentathletes amidst complexity and uncertainty. We are:

- Producing Soldiers armed with the values, skills, and mindset to serve as competent, resilient warriors.
- Reinforcing our commitment to our shared Warrior Ethos among all of our Soldiers and civilians.
- Enhancing our education and training programs – at our home stations, our Combat Training Centers, and across our institutional training base.
- Leveraging lessons learned in combat, countering insurgents, promoting stability, and supporting reconstruction.
- Continuing to build the best capabilities possible – by providing the best possible weapons, sensors, and protection for our Soldiers.
- Expanding cultural awareness in our military education programs and enhancing emphasis on foreign language training.



Sustain an All-Volunteer Force

We are sustaining the volunteer force now being tested for the first time in modern history in a long war. We are:

- Honoring our commitment to the versatile young Americans that we depend on by caring for them and their families.
- Enhancing numerous programs – housing, education, health care, and more – to improve how we support our Soldiers and their families.
- Promoting a sense of belonging – to units and communities – that builds readiness, cohesion, and reduces uncertainty.
- Executing a full range of initiatives and incentives to recruit and retain Soldiers with the right aptitude and attitude.
- Working to match the quality of life that our Soldiers enjoy to the quality of service they provide to the Nation.

Provide Infrastructure and Support

We are providing infrastructure and support to ensure the Army is able to execute its mission. We are:

- Investing in our bases that house and deploy our Soldiers, depots, arsenals, and the information network that connects them.
- Adjusting our global footprint to be better positioned for the challenges of the 21st century and the long war on terrorism.
- Consolidating our activities to become more effective (to do our job better) and more efficient (with best use of resources).
- Reengineering the Army's business processes to free human and financial resources for more compelling operational needs.
- Reducing cycle time, overhead, and cost in every aspect of what we do.

FIGURE 1

Compelling Needs

Provide Relevant and Ready Landpower

- Resource the Army's requirements for resetting more than 50 brigades consisting of over 350,000 pieces of equipment, including: 615 aircraft; 7,000 combat vehicles; and 30,000 wheeled vehicles.
- Support the Army's effort in 2007 to grow our operational forces to 355,000 Soldiers (increase of 40,000 Soldiers), and restructure both the Institutional and Operational Army to achieve a proper balance of capabilities across our active and reserve components to meet global commitments now and in the future.
- Fully fund continuous modernization of the current force through the Future Combat Systems program and key supporting programs, including increasing Soldier protection, sustaining development of advanced technologies, and developing the Joint Network Node and LandWarNet to ensure the Army remains the preeminent landpower on earth.
- Sustain momentum in force transformation through modular conversions planned in 2007 – three active component and seven reserve component Brigade Combat Teams, 13 active component and five reserve component Support Brigades, headquarters, and theater commands – to increase the depth and breadth of our capabilities to ensure the Army has relevant combat power for the 21st century.

Train and Equip Soldiers and Grow Adaptive Leaders

- Support and funding to implement the findings of the Review of Education, Training, and Assignments for Leaders, examining all pertinent policies and programs with a view to creating military and civilian "pentathletes" able to lead effectively amidst the complexity and uncertainty of the 21st century security environment.
- Continue to support Army initiatives to sustain Soldier, leader, and unit training development and improve stability for Soldiers and their families.
- Continue to support the Rapid Fielding Initiative to complete the goal of equipping all operational forces (active and reserve component) by September 2007.
- Maintain funding support for equipment modernization programs that speed state-of-the-art force protection systems and weapons to our Soldiers in the field.

Full funding of the Army request in the 2007 President's Budget and special consideration, in light of wartime demands, for avoiding any reductions to the Army's budget and program. In addition, supplemental funding is required for combat and contingency operations and to continue to reset, repair, recapitalize and replace battle losses of equipment for several years beyond major deployments. These resources will ensure that the Army is fully staffed, trained, and equipped to achieve victory in the war on terrorism. These resources will also enable the Army to maintain the momentum of key programs, while accelerating transformation.

Sustain an All-Volunteer Force

- Support and funding to achieve critical recruiting and retention goals. Meeting these goals for all components will ensure the quality of our All-Volunteer force:
  - Achieve an active component recruiting goal of 80,000 and retention goal of 64,200; an Army National Guard recruiting goal of 70,000 and retention goal of 34,900; and an Army Reserve recruiting goal of 36,500 and retention goal of 16,900.
  - Continue support of Army initiatives to improve predictability and stability for Soldiers and their families in both the active and reserve components.
- Full funding and support for quality-of-life programs to sustain the All-Volunteer force, now being tested for the first time in a prolonged war.
  - Support housing initiatives to provide quality housing for Soldiers and families at installations impacted by Base Realignment and Closure and the Integrated Global Presence and Basing Strategy.
  - Support the transformation of family programs to benefit families in all components regardless of physical location, leveraging resources available in local communities.

Provide Infrastructure and Support

- Full funding for Army installations and support to execute a carefully synchronized plan to achieve a new global basing posture, while fulfilling the requirements of the National Military Strategy. This plan will make full use of the resources currently apportioned and projected to be recouped through consolidation and closings. Unanticipated costs associated with environmental remediation, renovation, construction, and other areas, may require additional resources in future years (a situation that will require continuous reevaluation).
  - Support Army efforts to synchronize Integrated Global Presence and Basing Strategy, Base Realignment and Closure, and stationing of modular forces.
  - Support funding to achieve a 67-year facilities recapitalization rate.
  - Maintain support for 2007 military construction requirements in accordance with the Army modular force initiative, Base Realignment and Closure, Integrated Global Presence and Basing Strategy, and other Department of Defense guidance.
- Support for funding and authorities for Army Business Transformation initiatives to achieve targeted efficiencies through management reform, Institutional Army adaptation, and reengineered business practices. These initiatives will free human and financial resources for more compelling operational needs.

FIGURE 2

UNITED STATES ARMY

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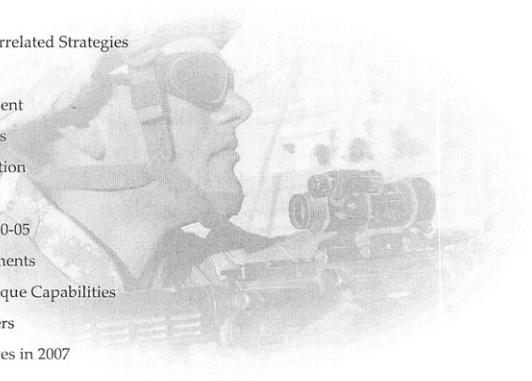
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21st Century Security Environment: An Era of Uncertainty and Unpredictability

In the four years since the terrorist attacks on the Nation, the international security environment has changed dramatically. As a result, military commitments and especially the demand for Soldiers have increased both at home and abroad. With the support of the President, the Congress, and the Secretary of Defense, we have increased our capabilities to deal with the challenges we are facing today and accelerated our preparation for those we will face tomorrow.

Complex Security Challenges

The National Defense Strategy identifies an array of traditional, irregular, catastrophic, and disruptive challenges that pose threats to the Nation (Figure 3). These threats are becoming increasingly complex. We no longer face only conventional armies who operate within clearly established political boundaries. In addition, we will face enemies that employ irregular tactics, terror, and asymmetric warfare. These enemies will be increasingly transnational and dispersed.

Fueled by ideologies that oppose our Nation's bedrock values, al-Qaeda and other enemies are committed to reducing American global presence and to destroying our society. They have publicly stated their goal: to gain control in the Islamic world by establishing a unified caliphate, stretching from North Africa to Indonesia.

We are engaged in a long struggle against adversaries who are ruthless and unconstrained in achieving their ends. Our previous conceptions of security, deterrence, intelligence, and warning do not adequately address the threats we now face. To defeat our adversaries, who will be neither deterred by nuclear or conventional weapons nor defeated in battles with decisive outcomes, we must remain vigilant in employing all forms of national and international power – diplomatic, informational, military, and economic – in a concerted, integrated manner.

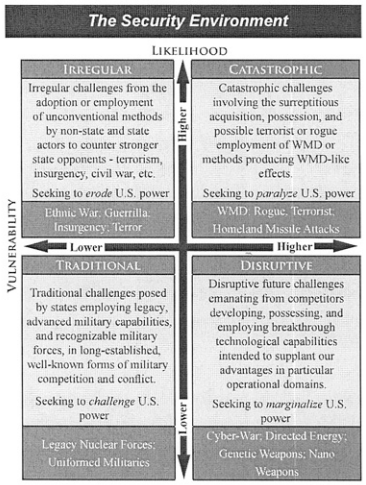


FIGURE 3

Increasing Complexity

The security environment in which our Soldiers will operate is characterized by challenges and uncertainties, including:

- Progress in the war on terrorism;
- The pace of democratic reform in the Middle East and elsewhere, especially in fledgling democracies such as Iraq, Afghanistan and the emerging Palestinian State;
- The ability of existing governments to perform traditional state functions and deny safe haven to terrorist groups;
- Progress in controlling the proliferation of weapons of mass destruction to state and non-state actors; and
- Decisions in four major areas:
  - Defense priorities amidst growing fiscal pressures;

- Roles and missions of the Armed Forces as defined in the Quadrennial Defense Review;
- Role of the Armed Forces in defense support to civil authorities; and
- Pace of implementation of Base Realignment and Closure (BRAC) legislation and Integrated Global Presence and Basing Strategy (IGPBS) plans.

Competing Fiscal Priorities

The Army will remain engaged around the globe, while operating in a constrained fiscal environment. This will continue to limit the resources available to accomplish our missions.

National Budget Trends

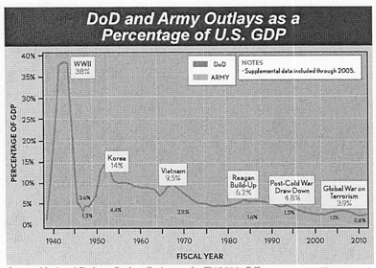
The Office of the Secretary of Defense, Comptroller, projects 2007 Defense spending will be 3.9 percent of Gross Domestic Product (GDP), continuing a downward trend (Figure 4). Defense resources have not kept pace with growth in GDP.

Defense Budget Trends

The allocation of Defense resources has changed over time (Figure 5) in response to the focus and demands of the National Military Strategy. Today, despite providing the bulk of the forces for the war on terrorism, the Army receives the smallest share of programmed resources. Increasing pressure to reduce the federal deficit, coupled with rising fuel, health care, and other costs, may impact the resources appropriated to accomplish Army missions.

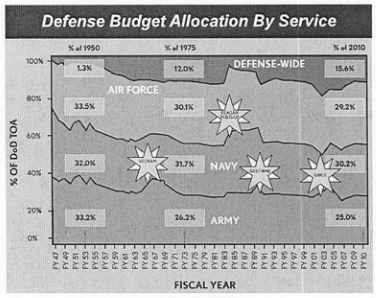
Army Budget Trends

The bulk of the Army's funds are committed to sustaining people, maintaining vital infrastructure, and preparing equipment for combat deployment. As a result, our ability to fund investment accounts is extremely limited (Figure 6). This creates a perennial tension between current and future demands.



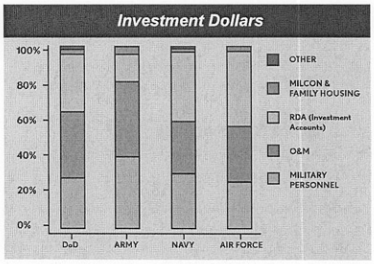
Source: National Defense Budget Estimates for FY 2006, Office of the Under Secretary of Defense (Comptroller), April 2005.

FIGURE 4



Source: National Defense Budget Estimates for FY 2006, Office of the Under Secretary of Defense (Comptroller), April 2005.

FIGURE 5

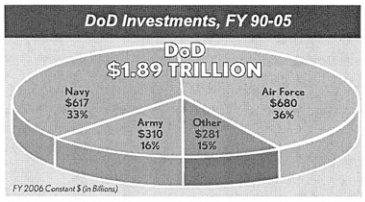


Source: National Defense Budget Estimates for FY 2006, Office of the Under Secretary of Defense (Comptroller), April 2005.

FIGURE 6

Investment Trends

Since 1990, the Army's share of investment dollars has been considerably smaller than that of the other Departments (Figure 7). Consequently, the Army has been unable to invest in the capabilities to sustain a rising operational tempo and to prepare for emerging threats. Supplemental authority has enabled the Army to "buy back" crucial capability to meet the operational demands of the war on terrorism and to improve our ability to sustain the full scope of our global commitments.



Source: National Defense Budget Estimates for FY 2006, Office of the Under Secretary of Defense (Comptroller), April 2005. FIGURE 7

Implications for the Army

The implications of the evolving security environment are clear.

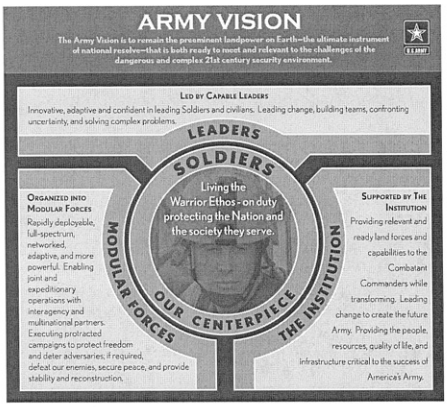
- The Nation will continue to be engaged in a long struggle of continuous, evolving conflict that, as in Afghanistan and Iraq today, will manifest itself in complex, traditional, and irregular challenges to include cyberspace attack. These struggles will be waged by Soldiers who will be expected to perform difficult tasks and create decisive outcomes to accomplish the objectives of the National Military Strategy.
- Our Soldiers must be prepared to deal with the full spectrum of threats. As described in the Army's capstone concept for the future force, they must be able to operate effectively as part of joint, interagency, and coalition teams. Therefore, we must continue to improve the strategic responsiveness of our forces and our generating base through improvements in:
  - strategic agility;
  - joint interdependence;
  - speed;
  - survivability;
  - lethality;
  - sustainability;
  - networks to improve situational awareness and command of forces; and
  - information assurance and network security
- Our Soldiers and units must be prepared to operate with little to no warning. We will no longer have the luxury of partially manning, equipping, or training a unit and relying on significant warning time to mobilize, train, and prepare to deploy. Rather, the units we have designated to be available for deployment will need their full complement of Soldiers, equipment, and training to be ready for immediate deployment from our power projection infrastructure.

Failure to invest in Soldiers to build the right capabilities – by improving our doctrine, organizations, training, materiel, leaders, people, and facilities – will increase risk for the Army, the Joint Team, and our Nation. Building the capabilities required to hedge against the uncertainty of tomorrow will require prudent investments today. These investments must be sustained at predictable, consistent levels over time. Investing in defense capabilities in this manner would reflect a significant departure from historic patterns of spending, which have increased America's vulnerability prior to each of the major conflicts of the 20th century.

The Army Vision: Relevant and Ready Landpower in Service to the Nation

The challenges posed by the 21st century security environment drive our vision of the force we must

become to continue to accomplish our mission. The Nation has entrusted us to preserve peace, maintain freedom, and defend democracy. We have performed this role for more than 230 years. Today, because of the actions of our Soldiers and our record of accomplishment, the American people regard the Army as one of the Nation's most respected institutions. We will maintain this trust.



Mission: Providing Forces and Capabilities

The Army exists to serve the American people, to protect vital national interests, and to fulfill national military responsibilities. Our mission is enduring: to provide necessary forces and capabilities to the Combatant Commanders in support of the National Security and Defense Strategies. The Army is also charged with providing logistics and support to enable the other Services to accomplish their missions. The Army organizes, trains, and equips Soldiers who, as vital members of their units, conduct prompt, sustained combat on land as well as stability operations, when required.

Accomplishing the Mission Today: Sustaining Global Commitments

The Army continues to provide Combatant Commanders with a wide range of capabilities to prevail in the war on terrorism and to sustain our global commitments. These capabilities include support to civil authorities in response to threats and crises at home. Our worldwide commitments extend far beyond Iraq and Afghanistan. Today, approximately 600,000 Soldiers are on active duty (currently 487,000 active component, 72,000 Army National Guard and 41,000 Army Reserve), with 245,000 Soldiers serving worldwide in 120 countries (Figure 8). More than 1,700 Army civilians serve side-by-side with them in the field. Our Soldiers and civilians perform a variety of missions vital to America's national defense. Here at home, more than 13,000 Soldiers are on duty specifically fulfilling critical missions to support the Global War on Terrorism.

The Army's operational pace remains high, sustaining obligations and continuing trends established during the post-Cold War era. In addition to Iraq and Afghanistan, our forward presence continues to preserve peace on the Korean Peninsula, the Sinai, the Balkans, and numerous other places of strategic importance.

Whenever and wherever needed, Soldiers continue to answer the Call to Duty. During this past year, Soldiers supported civil authorities during a variety of disaster relief and recovery missions. More than 42,000 National Guard Soldiers; 7,300 active component Soldiers; and 3,500 Army civilians assisted citizens in Louisiana, Mississippi, Texas, and Florida after Hurricanes Katrina and Rita. Active and reserve aviation units flew thousands of helicopter sorties. These pilots and crews saved countless lives while distributing food, water, and other supplies. Working closely with state and federal agencies, the Army Corps of Engineers provided emergency support and is now

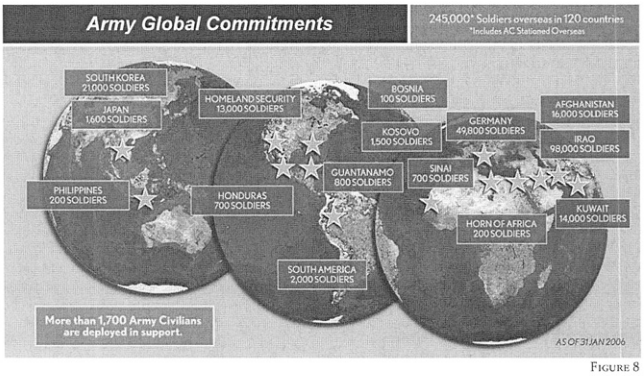


FIGURE 8

executing more than $4 billion worth of projects to support recovery. Soldiers also provided relief for earthquake survivors in Pakistan. At home and abroad, on a daily basis, our Soldiers and civilians are doing critical work in service to our country.

In the four years since September 11, our National Guard has mobilized more than 329,000 Soldiers for both state and federal missions. On any given day, the Army National Guard provides vital capabilities in virtually every mission area. As of January 2006, more than 72,000 Soldiers from the National Guard are mobilized. Besides their commitments in Iraq and Afghanistan, National Guard Soldiers are protecting the homeland by securing borders, protecting key infrastructure, and securing special events such as the Super Bowl. They also support other missions of U.S. Northern Command. They are preserving peace in the Sinai and in the Balkans. They are also establishing the conditions for continued progress in Iraq and Afghanistan.

Since September 11, the Army Reserve has mobilized over 143,000 Soldiers who, together with their fellow active and National Guard Soldiers, have enabled the Army to accomplish its mission at home and abroad. The Army Reserve provides vital capabilities across a diverse range of mission areas. As of January 2006, more than 41,000 Army Reserve Soldiers serve on active duty. The Army Reserve's 98th and 80th Divisions (Institutional Training) deployed to Iraq and Afghanistan to support U.S. Central Command's training of security forces.

Major Decisions in 2005

During 2005, the Army made four key decisions to accelerate change needed to win today and to continue to prepare for tomorrow's challenges.

- **Accelerated the Fielding of the Future Force.** In April 2005, the Army announced refinements of its plan – The Army Plan – to transition continuously from the current force to the future force to realize the Army Vision. This plan guides our efforts to transform the Army into a modular force, while continuing to modernize by fielding Future Combat Systems (FCS) and other technologies. We are leveraging recent combat experiences to train and educate our Soldiers and leaders and provide the campaign and expeditionary capabilities needed to deal with future challenges.
- **Restructured the FCS Program.** In April 2005, the Army restructured the FCS program for two reasons: (1) to improve contractual

arrangements with industry and provide a better framework to manage the cost and schedule aspects of this vital program; and (2) to further leverage FCS technologies as quickly as feasible to improve our Soldiers' ability to fight and to protect themselves. By improving control and oversight, these new arrangements are paying dividends now.

- **Established the Business Transformation Initiatives.** In February 2005, the Army decided to implement an Army-wide Business Transformation initiative. (We are reviewing all of our business, resourcing, management, and acquisition processes to become more effective, improve quality, reduce cycle time, and achieve cost reductions.) To do so, we are applying the *Lean Six Sigma* methodology. Just as we are leveraging the lessons of war to improve fighting effectiveness, we are applying relevant corporate best practices to improve our business processes and make best use of our financial, human, and materiel resources. Other key aspects of Business Transformation include: Information Management Systems Portfolio Management, Institutional Army Adaptation, and Business Initiative Councils.
- **Adopted the Army Force Generation (ARFORGEN) Model.** The Army began to implement the ARFORGEN model to ensure all units are fully ready for deployment. This model will establish and coordinate cycles of readiness and training for all active and reserve units. To sustain our ability to execute the National Military Strategy, this model schedules deployment windows for our units while balancing the requirements associated with transforming, modernizing, implementing a new global stationing plan, and other mission demands.

The Army Plan to Enable Mission Accomplishment

We are executing The Army Plan, consisting of four overarching, interrelated strategies, to enable mission accomplishment and to achieve the Army Vision over time. This plan accelerates the redesign of the forces, support structures, and headquarters that are accomplishing our mission today. This plan also guides our initiatives to provide the Combatant Commanders the assets to protect the Nation today and tomorrow.

The Army is:

- Providing relevant and ready landpower for the 21st century security environment;
- Training and equipping Soldiers to serve as warriors and growing adaptive leaders;
- Sustaining an All-Volunteer force composed of highly competent Soldiers that are provided an equally high quality of life; and
- Providing infrastructure and support to enable the force to fulfill its strategic roles and missions.

We are transforming to create a future force with a broad set of capabilities to enable our Soldiers to address strategic problems the Nation will face (See Figure 9).

The benefits of our approach are clearly evident in the attitudes and levels of commitment we see in our Soldiers, as well as the attributes of our combat formations, the forces that sustain them, and the facilities and business processes that generate them from their home stations. The combined effects of transformation, modernization, innovation, and improvement – reinforced by positive change in the attitudes and behaviors that create the culture of our service – are helping us to become the force the Nation will need to safeguard its peace and freedom in the 21st century.



Examples of Unique Army Capabilities to Support Joint, Combined, and Interagency Operations

Countering Terrorism

- Assist friends, allies, or partners to conduct military operations by providing logistics, command and control, intelligence, protection, and other support to the Joint Force.
- Train military and security forces to counter extremist, radical, or insurgent elements.
- Provide ground forces (conventional and special operations) to sustain large-scale counter-terror and counter-insurgency operations.
- Rapidly deploy substantial numbers of ground forces from strategic distances to meet Combatant Commanders' requirements for counter-terror or combat operations.
- Conduct extended stability operations.

Defending the Homeland

- Detect and prevent hostile actions against the homeland through the presence of the National Guard and the Army Reserve within states and communities.
- Support civil authorities in consequence management, disaster relief, and other roles including: reinforcing public safety and providing logistics, transportation, communications, utilities management, engineering, and other services.

Shaping Choices of Countries at Crossroads

- In support of Combatant Commanders, establish relationships with foreign leaders, forces, and people through: security cooperation, training, humanitarian and civil assistance, medical, engineering, exercises, and other national and international programs.
- Seize control and defend key facilities or terrain to preclude actions by potential adversaries.
- Conduct expeditionary operations to deter, destroy, or defeat potential adversaries.
- Conduct extended campaigns to deter or prevent potential adversaries from engaging in protracted conflict with joint or U.S.-led coalitions of forces.

Preventing Acquisition of Weapons of Mass Destruction by State and Non-State Actors

- Conduct irregular or unconventional warfare in support of the Joint Force.
- Deny sanctuary and safe haven for terrorist groups.
- Assist the forces of other nations to conduct operations against adversaries seeking to possess or transfer control of weapons of mass destruction.

While the problems we face will evolve, Soldiers' "boots on the ground" will remain vital to our solutions.

Source: Strategic Problems drawn from 2006 Quadrennial Defense Review, Office of the Secretary of Defense, February 2006.

Figure 9

The Army Plan is continuously improving our ability to operate as part of the Joint Team, while ensuring our ability to dominate in any environment against current, emerging, and unforeseen threats. We believe that every dollar spent to build capability for our current force is an investment in our future force. Our initiatives are guiding our efforts to:

- Grow innovative, adaptive Soldiers and leaders through training and education programs that build on recent combat experiences and leverage the Training Transformation Program;
- Adapt the doctrine which guides how we fight, how we sustain our forces, and how we train Soldiers;
- Create far more capable, strategically deployable brigades that are designed to receive new technologies and equipment as soon as they become available;
- Increase Soldier and unit effectiveness and protection; and
- Apply better business practices to free resources to use for our most pressing operational requirements.

Our ongoing intellectual and cultural transformation is dramatically improving how our leaders, Soldiers, civilian workforce, and families are adapting to the reality of protracted conflict. This transformation is reinforcing the commitment to continuous improvement that has taken hold across the Army.

Provide Relevant and Ready Landpower for the 21st Century Security Environment

To support current global operations and prevail in the war on terrorism, we are increasing the quality and the effectiveness of our essential fighting units, the Brigade Combat Teams (BCTs). We are forming a rotational pool of 70 BCTs that will allow us to sustain global commitments, surge forces for unforeseen contingencies, and reduce stress on Soldiers and equipment. We are

also creating the right mix of Support Brigades to ensure that our Soldiers receive the logistical, engineering, intelligence, protection, aviation, and communications capabilities they will need to support the Combatant Commanders.

We are rebalancing the force by placing the right Soldiers with the right skills into our jobs and organizations in greatest demand. At the same time, we are stabilizing Soldiers, to keep them with their units longer, to improve teamwork and reduce stress on families caused by frequent moves between posts. We are maintaining momentum in transforming and modernizing our formations – through modular conversion, pursuit of future combat systems, and fielding other advanced technologies. These complementary initiatives will ensure that our Soldiers are well prepared to operate in campaign and expeditionary settings with our joint and coalition partners.

Support Current Global Operations with Relevant and Ready Landpower

To sustain a steadily increasing demand for military forces, we are building a modular force centered on BCTs. Our modular conversion across the active and reserve components is designed to meet the demands of the current war, sustain other global commitments, establish the organizational structure needed to accelerate modernization, and support a new global basing posture that will rely more heavily on rotational presence.

Our plan will create a rotational pool of 70 BCTs: 42 in the active component and 28 in the Army National Guard. These BCTs will be organized into one of three standard designs: Infantry, Heavy, or Stryker. We will support these BCTs with more than 200 active and reserve Support Brigades. These Support Brigades will enable the BCTs to accomplish a broad range of missions. They will also provide essential capabilities to support civil authorities in homeland defense missions, including consequence management and disaster relief.

Our Support Brigades are organized into two categories: Multi-functional Support Brigades and Functional Support Brigades. The multi-

Accomplishments

Since 9-11

- Soldiers helped to overthrow two terrorist regimes, rescue two nations from oppression, and to liberate over 50 million people.
- More than 144,000 Army Reserve Soldiers, 329,000 National Guard Soldiers, and 498,000 active component Soldiers supported Combatant Commanders in Iraq, Afghanistan, Guantanamo Bay, the Balkans, the Sinai, and elsewhere.
- 120,000 National Guard Soldiers and 31,000 Army Reserve Soldiers, along with active component Soldiers, helped secure the homeland through key asset security, special events security such as the Super Bowl, airport security, and Air Force Base security augmentation.
- Began 37 of the 70 planned Brigade Combat Team modular conversions; 18 of these 37 conversions completed.
- Doubled depot output in just three years to refurbish and reset vehicles and equipment for future deployments.
- Extended the life of more than 4,000 HMMWVs and 1,200 aircraft through the reset program.

2005

- Soldiers and coalition forces secured vital elections in Iraq and Afghanistan where millions voted.
- Two training divisions plus 4½ Brigade Combat Teams worth of officer and noncommissioned officer leadership trained Iraqi and Afghan security forces.
- Soldiers trained and equipped 88,000 Iraqi Security Forces during 2005, increasing their ranks to 224,000 in 136 battalions.
- Soldiers deployed to South Asia and Southwest Asia to provide tsunami and earthquake relief.
- More than 42,000 National Guard Soldiers; 7,300 active component Soldiers; and 3,500 Army civilians; complemented with Army Reserve aviation and transportation units, provided hurricane relief support (including Katrina and Rita).
- Deployed advanced systems to share information and improve situational understanding and command of forces for four divisions and three Brigade Combat Teams in Iraq and Afghanistan.
- Equipped most deploying units with the Joint Network Node to enhance command of forces.
- Advanced $2.2 billion contract for production of 368 Armed Reconnaissance Helicopters – the Army's first new manned helicopter acquisition since 1983.



functional brigades will perform operational roles including: Combat Aviation, Combat Support (Maneuver Enhancement), Sustainment, Fires, and Battlefield Surveillance. The functional brigades will perform broad support roles on a theater-wide basis including: Air Defense, Engineer, Explosive Ordnance Disposal, Military Police, Signal, and others.

Like our theater commands, our corps and division-level operational command posts and headquarters, Support Brigades will also be converted to modular designs. They will be trained, manned, and equipped to work directly for each of these headquarters without augmentation of people or equipment.

We are also improving the readiness of our reserve forces that are making vital contributions on a daily basis – and have transitioned from a strategic to an operational reserve as our global commitments have increased. We are working to improve our access to these forces to support our strategic requirements. Access will be enabled by reducing reserve component overstructure and managing reserve Soldiers in ways that will improve assigned strength in each of our units, while increasing opportunities for education and special skills training. These improvements, coupled with modular conversion, will improve the Army's overall ability to provide ready forces and capabilities to the Combatant Commanders and to civil authorities in a timely manner.

In addition, to make best use of our resources, we are both rebalancing and redistributing our forces. We are rebalancing to create the right mix of units in high demand, and Soldiers with critical and high demand skills in each of our active and reserve components. At the same time, we are redistributing Soldiers to create the right mix between our operational forces and our institutional structures.

- To assure timely access to the right types of units and Soldiers, we are rebalancing skills within our three components. We have determined the types of units and skills that are in greatest demand in today's environment – including infantry, engineer, military police, military intelligence, Special Forces, chemical, civil affairs, and psychological operations units – and have identified over 100,000 positions to rebalance. We have accomplished more than half of this rebalancing and project to be completed by 2011.
- To sustain increased global commitments, we are also increasing, or "growing," the Operational Army in the active component. Our goal is to grow the Operational Army by 40,000 Soldiers by 2008 (from the 2004 baseline of 315,000) to bring our active component operational force total to 355,000 Soldiers. This change will be enabled by military-to-civilian conversions and better management of our Individuals Account.

The combined effect of rebalancing, redistributing, and growing the Operational Army is increasing our overall effectiveness. We are improving our ability to provide trained Soldiers in cohesive formations to the Combatant Commanders and to support civil authorities, while reducing stress on Soldiers and families.

To support global operations while transforming, we are preparing our forces for war – or resetting them – as quickly and efficiently as we can. Our reset program is restoring units returning from

war to required levels of readiness to prepare them for future missions. As we reset our units, we are simultaneously converting them to their new modular designs. We have reset more than 20 major units. Many of these units have already returned to theaters of war in their new configurations.

The Army Plan introduces a new readiness model, ARFORGEN, to manage the force and ensure the ability to support demands for Army forces. ARFORGEN sequences activities for all active and reserve Army units to include:

- Reset;
- Modular conversion;
- Modernization;
- Manning adjustments;
- Soldier and leader training and education programs;
- Unit training;
- Employment; and
- Stationing decisions.

To sustain global commitments, we will transition units through a progression of three sequential readiness pools: *Reset and Train, Ready* (eligible for deployment and exercises), and *Available* (immediately available for world-wide employment). This model establishes a plan for scheduled deployment on an Army-wide basis. Through semi-annual synchronization conferences, we will organize our forces into three Expeditionary Force Packages:

- Ready Expeditionary Forces that are training and preparing for potential future missions;
- Contingency Expeditionary Forces that are ready for employment or exercises but not yet deployed; and
- Deployment Expeditionary Forces that are executing assigned missions.

Our goal is to be able to generate a continuous output of trained and ready forces that will support one operational deployment in three years for the active component, and one operational deployment in six years for the reserve component. At lower levels of demand, this model may allow the Army to support one operational deployment in four years for active forces. This new model establishes the basis to bring all units to a full state of readiness – with people, equipment, and training – before they are scheduled to deploy. It allows the Army to accomplish the following critical objectives:

- Reduce uncertainty for Soldiers, families, and the communities that support installations;
- Improve availability of forces for Combatant Commanders;
- Generate a continuous force of 18-19 BCTs, along with all required Support Brigades; and
- Surge up to an additional 15-19 BCTs in response to crises.

Build a Campaign-Quality Modular Force with Joint and Expeditionary Capabilities for Today and Tomorrow

The war on terrorism and the changing paradigm for maintaining forward presence have created both the necessity and the opportunity to accelerate change from the current to the future force. Our conversion to a modular force – one that is carefully balanced between active and reserve component BCTs, Support Brigades, and division and corps-level operational command posts – is well under way. This conversion is transforming the Army into a more lethal, flexible, deployable, and sustainable force. It is enabling us to shift the center of gravity

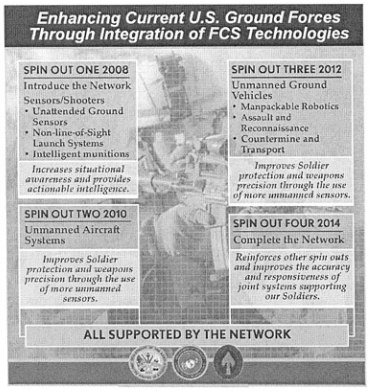


of our capabilities (previously focused primarily on traditional challenges) to better address the full spectrum of traditional, irregular, disruptive, and catastrophic challenges.

The combination of transformation to build a modular Army and continuous modernization, to field Future Combat Systems (FCS) and other advanced technologies, is methodically producing the future force.

FCS is our primary modernization program and most critical investment. This program will pioneer the next generation of warfighting capabilities which will improve Soldiers' ability to find and fight their enemies. FCS includes a new class of manned and unmanned air and ground vehicles, interconnected by a modern network to better support and sustain Soldiers.

The program is currently in the developmental phase. The first unit fully equipped with manned ground vehicles is projected to achieve initial capability by 2014 (and will be able to fight by 2017). When we complete our intended fielding plan in 2025, new manned ground vehicles will replace 40 to 50-year old tactical vehicles designed in the 1970s to defeat Cold War enemies.



A significant contribution of FCS is that it will immediately place advanced technologies into the hands of our Soldiers that will increase their capability and provide greater protection. By integrating advanced technologies into our formations in four "spin outs" that will occur in roughly two-year increments, we will strengthen our current forces in distinct ways:

- The first "spin out," on track for delivery in 2008, will introduce Unattended Ground Sensors, Non-Line-of-Sight Launch Systems, the Intelligent Munitions System, and the Network. These capabilities will enhance Soldiers' understanding of their situation in dynamic, battlefield conditions by promoting a common perspective of enemy and friendly locations on digital maps. This improvement will greatly increase the area that Soldiers can influence and control. The Network will also provide Soldiers with more timely Actionable Intelligence.
- The second and third "spin outs," are currently on track for 2010 and 2012 respectively and will introduce new types of unmanned aircraft systems and ground vehicles for our Soldiers. These technologies will enable Soldiers to employ greater numbers of sensors to see and find their enemies first. These "spin outs" will also enable robotic reconnaissance of dangerous areas, mines, and booby traps. Together, they will increase Soldier protection and enhance the precision of their weapons.
- The fourth "spin out" will complete the Network, currently on track for 2014. When completed, this improvement will reinforce the comprehensive efforts now under way to improve the accuracy and responsiveness of the joint weapons systems designed to support Soldiers.

When whole BCTs are fielded with the full complement of FCS systems, these units will be able to generate significantly more capability. These FCS-equipped BCTs will contain more fighting

vehicles and more infantry squads than the units we field today. They will be able to generate more capability and control more area with significantly fewer Soldiers than today. They will require less fuel, supplies, and other logistical support.

These new capabilities will directly benefit all U.S. ground forces, including the Marine Corps and the Special Operations Forces from all Services. They will fundamentally alter how we deploy, employ, and sustain our ground forces. These capabilities will improve our capability to put "boots on the ground," to stabilize contested zones, and to support joint and interagency teams.

The future force comprises more than just FCS-equipped, modular BCTs. It includes all of the improvements in strategic agility and efficiencies that will result from implementing BRAC and IGPBS decisions. These decisions will enable the repositioning of forces to better respond to emerging challenges. We will also be able to execute much of our enduring overseas presence mission with units that deploy from the United States for overseas duty, during rotational windows scheduled and managed as part of the ARFORGEN model.

For both rotational duties and for contingencies, our units will rely on pre-positioned equipment. To increase both strategic agility and efficiency, we are modernizing our pre-positioned equipment sets. We are also reducing the number of variants of our heavy combat vehicle fleet from four to two. This initiative will promote standardization, reduce the number of systems that we must train active and reserve Soldiers to operate, and reduce maintenance costs.

Our commitment to being a learning, adaptive organization is evident in our efforts to apply lessons learned from our operations both at home and abroad. We are working to develop a future force that is better able to fight as part of joint and coalition formations in either protracted campaigns or in expeditionary operations and to serve the Nation – by examining how to best accomplish traditional and nontraditional missions through five major areas of focus:

Compelling Needs

- Full funding of the Army request in the 2007 President's Budget, plus the requisite supplemental funding for combat operations to ensure Soldiers are fully trained and equipped in the most expeditious manner to enhance current force readiness and to achieve victory in the long war.
- Resource the Army's requirements for resetting over 50 brigades consisting of over 350,000 pieces of equipment including: 615 aircraft; 7,000 combat vehicles; and 30,000 wheeled vehicles.
- Support the Army's effort in 2007 to grow our operational forces to 355,000 Soldiers (increase of 40,000 Soldiers), and restructure both the Institutional and Operational Army across the active and reserve components to meet global commitments now and in the future.
- Fully fund continuous modernization of the current force through the Future Combat Systems Program and key supporting programs, including increasing Soldier protection, sustaining development of advanced technologies, developing the Joint Network Node, LandWarNet, and rebalancing active and reserve component units and skills to ensure the Army remains the preeminent landpower on earth.
- Sustain momentum in force transformation through modular conversions planned in 2007 – three active component and seven reserve component Brigade Combat Teams, 13 active component and five reserve component supporting brigades, headquarters and support units – to ensure the Operational Army has relevant combat power for the 21st century.

- Sustain the Force enables modular Army logistics units to better anticipate requirements and provide rapid and precise capability to Army, joint, and multinational partners. We are improving theater-wide distribution systems


Soldiers responding to Hurricane Katrina

and visibility of all of the assets and resources, both deployed and in-transit, needed to support military operations.

- Actionable Intelligence is providing Soldiers and leaders with expanded situational understanding by distributing intelligence with more speed and accuracy, while providing the means to improve understanding of different languages and cultures.
- Improve Capabilities for Stability Operations is improving our understanding of how to stabilize areas of operation and support security, transition, and reconstruction operations while continuing to conduct combat operations.
- Improve Contributions to Homeland Defense is focusing on balancing capabilities in the Active and Reserve Components to ensure the right capabilities are available to address expanded homeland defense requirements and broadening the options available to civil authorities.
- Increase Army Capabilities to Dominate in Complex Environments is focusing on finding innovative solutions to challenges posed by operations in urban, mountainous, cavernous, and jungle environments while expanding Soldier ability and protection, and enhancing cultural awareness, regional familiarity, and language skills.

The combination of transformation and modernization, reinforced by initiatives of this type, and continued improvements in training Soldiers, developing leaders, and improving facilities is producing relevant and ready landpower for the 21st century.

Supporting Initiatives (Addendum C): The areas of focus discussed above are reinforced by six initiatives:

- Develop Operational Capabilities in LandWarNet
- Execute Major Acquisition Programs
- Restructure Army Aviation
- Enhance Joint Interdependence
- Stabilize Soldiers and Units to Enhance Cohesion and Predictability
- Leverage Science and Technology

Train and Equip Soldiers to Serve as Warriors and Grow Adaptive Leaders

The Army Vision centers on producing Soldiers armed with the values, combat skills, and mindset that enable them to serve as competent, disciplined warriors who reflect our shared ethos. Our training programs, at our home stations, our Combat Training Centers, and across our institutional training base are leveraging our combat experiences to grow adaptive leaders who are highly skilled, resilient, able to thrive in rapidly changing environments, and ready to operate with our joint, interagency, and multinational partners. We are committed to continuing to equip our Soldiers with the best capabilities, weapons, and protection our Nation can provide – leveraging our national strength to reduce risk to our Soldiers.

Reinforce our Centerpiece: Soldiers as Warriors

Our Soldiers continue to serve magnificently as we enter the fourth year of the war on terrorism. They believe in their mission, the Soldier's Creed, and the Warrior Ethos. As evidenced by their service, they remain committed to something far bigger than themselves.

In Iraq and Afghanistan, our Soldiers are consistently defeating the enemies of freedom.

Accomplishments

Since 9-11

- Adapted Combat Training Center training scenarios to match expected threats and provided enhanced training challenges to develop adaptive leaders.
- More than half of the observer/controllers at our Combat Training Centers have experience in Iraq or Afghanistan.
- Greatly improved individual Soldier protection. Today every Soldier in Iraq and Afghanistan is issued improved body armor.
- Continued to meet Combatant Commander requirements to up-armor the vehicle fleet. To date, over 37,000 light, medium and heavy tactical wheeled vehicles have been fielded.
- Equipped 49 Brigade Combat Teams and nearly 500,000 Soldiers with state-of-the-art equipment through the Rapid Fielding Initiative.

2005

- Instituted the Combat Action Badge to recognize those Soldiers who directly engage or who are engaged by the enemy.
- Implemented standard 39 Warrior Tasks and Nine Battle Drills to initial military training for Soldiers of all military occupational specialties.
- Expanded training base capacity from 405,000 to 454,000 seats to enable growth in combat forces.
- Began implementation of new Officer Education System, including Basic Officer Leader Course and Intermediate Level Education.
- Used our experience gained in Iraq and Afghanistan to adapt our training bases and Combat Training Centers to provide enhanced training on marksmanship, fighting in urban areas, live fire convoy training, IED awareness, and working with non-English speaking allies.
- Increased ammunition production more than 400 percent to 1.5 billion small arms rounds per year to adequately train Soldiers and meet operational needs.
- Participated in the Joint Task Force that developed technical solutions and provided critical training for ground forces to detect and defeat Improvised Explosive Devices.
- Began development of a new Civilian Education System.

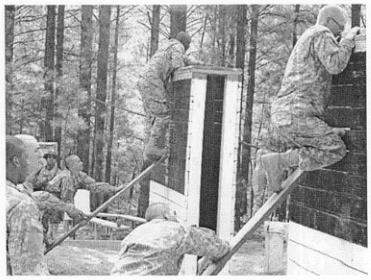
They have created the conditions to permit free, democratic elections and to reconstruct vital infrastructure and institutions. Like the American Soldiers of generations past, today's warriors are distinguishing themselves with tremendous acts of courage and valor in places such as Baghdad, Samarra, An Najaf, Fallujah, Tal Afar, Mosul, and Khandahar.

Our Soldiers understand the Army's values and personify our ethos, demonstrated most poignantly by their willingness to sacrifice all so that others may live in peace and freedom. Our Nation must remain equally committed to them by providing the capabilities and support they need to succeed in their mission.

Train Soldiers

Our continued commitment to innovative training and education led us to enhance the rigor and relevance of Initial Military Training for new enlisted Soldiers and officers. Today, every Soldier, regardless of specialty, becomes a *warrior first*. To be better prepared for combat, all recruits receive advanced training in marksmanship and live-fire convoy procedures. Current training draws from recent combat experience and emphasizes 39 Warrior Tasks and Nine Battle Drills previously required only of infantry Soldiers.

Our commitment to medical training and readiness has resulted in the highest survivability rate in military history. Every Soldier in combat carries



a new blood-clotting bandage and a new one-handed tourniquet. Many are certified as combat lifesavers through extensive training. These capabilities combine with highly-trained combat medics, tremendous improvements in medical evacuation, and world-class field medicine to save lives every day.

We are strong believers in life-long learning. We are using information technology to enhance Soldier and leader education in a time of war. Soldiers participate in more than 1,500 online courses to improve job proficiency and to work toward civilian degrees. Our Army Knowledge Online websites average more than one million visits per day, allowing Soldiers and leaders to collaborate and to share information regarding the lessons learned from combat and from training.

Enhance the Combat Training Centers

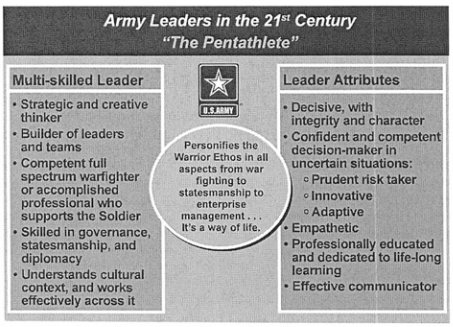
Just as we have transformed individual Soldier training, our unit training has evolved to better reflect the complexity of modern battlefields. We have invested in our Combat Training Centers to replicate the complex environments – terrain, social, language, and culture – in which our Soldiers are fighting. Using these world-class training facilities, every unit conducts a Mission Rehearsal Exercise before deploying to combat. These exercises feature nongovernmental organizations, contractors, media, coalition role players, and hundreds of civilians on the battlefield. Similarly, our Battle Command Training Program uses state-of-the-art simulation techniques to replicate the realities of combat. This program trains deploying division, corps, and task force staffs who will serve as joint or coalition task force operational headquarters and includes information operations and other joint missions they might support or execute in the future.

We are continuously improving training by providing a mix of live, virtual, and constructive training events. This cost-effective approach, which uses state-of-the-art simulation tools, improves Soldier and unit capabilities and links home station training to the joint team. The rigor that we are adding to our Soldier, unit, and joint-level training, is reducing risk for our Soldiers by improving our pre-deployment preparation.

Grow Adaptive Leaders

The complexity of the 21st century security environment requires more of Army leaders at all levels. As we have seen in Iraq, Afghanistan, Korea, Europe, across the Americas, and in peace enforcement operations around the world, the actions of individual Soldiers and leaders can have strategic consequences. To be effective today and tomorrow, we are growing a new breed of leader — one more akin to a pentathlete who is able to rapidly transition between complex tasks with relative ease.

The future environment will demand that Army leaders at all levels be multi-skilled, innovative, agile, and versatile. Therefore, we are continuing to evolve our training and education systems to grow adaptive civilian and military leaders who are comfortable in leading during times of change and uncertainty.



Recognizing that intellectual change precedes physical change, we chartered a task force to Review Education, Training and Assignments for Leaders. This task force, now six months under way, is drawing upon the ideas and experiences of the finest leaders inside and outside of the Army. The task force will recommend changes to assess and improve all Army education, training, and assignment processes to produce pentathletes.

Unlike World War I and World War II, when the Army closed the Army War College, we have improved our leader education programs while at war. At the Army War College and in all of our schools, training centers, and doctrine development positions, we are placing recently returned veterans into key positions to enhance the relevance of the education and training we provide. We are also moving to fully implement a new Basic Officer Leader Course (BOLC). Consistent with our *warrior first* approach, this tough, standardized, small-unit leadership experience is ensuring that all junior officers, in all of our branches, master the skills they will need to lead in combat. We are executing similar improvements in all of our officer and noncommissioned officer education programs. Our civilian development program is enhanced through our Civilian Education System.



Equip Our Soldiers

Protecting our Soldiers continues to be our highest priority. With great support from the Congress, the Department of Defense, and the President, we have delivered more than 37,000 up-armored vehicles to meet Combatant Commander requirements. Additionally, we continue to contribute to the Joint Organization established to defeat our adversaries' use of improvised explosive devices. (Figure 10)

We are also exploiting the value of the Rapid Equipping Force (REF) to better protect our Soldiers. REF works in partnership with industry, academic, and military leaders to support Soldier needs as quickly as possible. It provides field commanders with readily employable solutions to enhance lethality and survivability. Often using off-the-shelf and developmental technologies, REF is enabling us to remain ahead of an adaptive enemy and to save Soldiers' lives. Examples of last year's successes include the deployment of digital translators, vehicle scanning systems, and robots able to inspect possible improvised explosive devices.

A similar program to increase Soldier capabilities is the Rapid Fielding Initiative (RFI). RFI has equipped nearly 500,000 Soldiers since its inception. RFI accelerates the fielding of commercial, off-the-shelf

Equipping Our Soldiers: Soldier Protection Programs in Iraq and Afghanistan

AREA	WHERE WE WERE SEPTEMBER 2003	WHERE WE WERE JANUARY 2005	WHERE WE WERE JANUARY 2006
Body Armor	Estimated 10 percent of Soldiers in Iraq equipped	All Soldiers and DoD civilians in theater equipped; plus 60,000 Deltoid Axillary Protectors issued	All Soldiers and DoD civilians in theater equipped; total of 693,000 Body Armor sets fielded; plus 173,000 Deltoid Axillary Protector sets issued
Up-Armored HMMWVs	500 Up-Armored HMMWVs in Iraq and Afghanistan	More than 6,400 Up-Armored HMMWVs in Iraq and Afghanistan	More than 11,100 Up-Armored HMMWVs in Iraq and Afghanistan
Tactical Wheeled Vehicle Add-on-Armor Kit	Contingency mission only	More than 18,000 vehicles in theater have Add-on-Armor kits	More than 37,500 vehicles in theater have Add-on-Armor kits
Armored Security Vehicle (ASV)	No ASVs in theater	Resurrected a terminated program; 82 ASVs in theater	194 ASVs in theater
Bradley Reactive Armor Tile (Brat)	140 sets delivered; acceleration plan in execution	592 sets delivered	790 sets delivered; acceleration plan in execution
Counter-IED Device	Minimal capability in theater	1,496 systems in theater	More than 23,000 systems in theater
Tactical and Small Unmanned Aircraft Systems	Two systems deployed to theater	128 systems in theater	155 systems in theater
Aircraft Survivability Equipment (ASE)	No fixed-wing ASE; in process of upgrading Blackhawk and Chinook aircraft with basic ASE	All theater aircraft upgraded with basic ASE	All theater rotary wing aircraft to be upgraded with Latest Common Missile Warning System
Buffalo	No systems deployed in theater	No systems deployed in theater	44 systems deployed

FIGURE 10

Compelling Needs

- Support and funding to implement the findings of the Review of Education, Training, and Assignments for Leaders, examining all pertinent policies and programs with a view to creating military and civilian "pentathletes" able to lead effectively amidst the complexity and uncertainty of the 21st century security environment.
- Continue to support Army initiatives to sustain Soldier, leader, and unit training development and provide stability for Soldiers and their families.
- Continue to support the Rapid Fielding Initiative to complete the goal of equipping all operational forces (active and reserve component) by September 2007.
- Maintain funding support for equipment modernization programs that speed state-of-the-art force protection systems and weapons to our Soldiers in the field.

systems to produce state-of-the-art capabilities. RFI provides a specific set of equipment to every Soldier, and a set of additional items to Soldiers assigned to BCTs. The Training and Doctrine Command is using combat lessons learned to maintain the currency of the items we supply. We plan to complete fielding these items to all operational forces by September 2007.

Supporting Initiatives (Addendum C): The areas of focus described above are reinforced by three supporting initiatives:

- Support Joint Improvised Explosive Device Defeat Organization (JIEDDO)
- Expand Cultural Awareness and Language Capabilities
- Develop Joint Training Capabilities

Sustain an All-Volunteer Force Composed of Highly Competent Soldiers That Are Provided an Equally High Quality of Life

We owe our success to the versatile young Americans who answer the Call to Duty. This is the first time in our modern history that the Nation has tested the concept of an All-Volunteer force during a prolonged war. We are executing a full range of initiatives and incentives to recruit and retain high caliber citizens to man our active, reserve and civilian ranks. Caring for Soldiers and Army families through tangible quality of life programs provides a sense of belonging and sustains motivation for continued service. Improving Soldier and family housing reflects our commitment to providing a quality of life that matches the quality of our Soldiers' service to the Nation.

Recruit and Retain the All-Volunteer Force

We have maintained our All-Volunteer Army by recruiting dedicated, high-quality Soldiers and then retaining them well beyond their initial obligations. While the recruiting environment for America's young men and women is competitive, we will not compromise standards as we temporarily increase the size of the Army by 30,000 Soldiers. Our recruiting goal this year exceeds 186,000 Soldiers for all three components. This annual



goal compares to about 140,000 recruits for all of the other Services combined.

Accomplishments

Since 9-11

- Exceeded combined active and reserve retention goal each year.
- Built over 24,000 barracks spaces and modernized over 9,000 existing spaces through the Barracks Modernization Program.
- Privatized 59,500 sets of quarters at 26 different installations through the Residential Communities Initiative to improve family housing.
- Continued to provide returning Soldiers state-of-the-art health care as they return from theater.
- Established a Well–Being framework to integrate, resource, and measure quality-of-life programs for Soldiers and families.

2005

- Achieved 106 percent of the combined active and reserve retention goal.
- Increased recruiting and retention incentives programs.
- Assisted Family Support and Readiness Groups from company to division-level. Developed Virtual Family Readiness Groups.
- Implemented the U.S. Army Wounded Warrior Program (formerly Disabled Soldier Support System) to synchronize Army programs that care for severely disabled Soldiers.
- Established a community-based Child and Youth Services Program for child care, youth development, and school transition to support 160,000 Army Reserve youths.
- Implemented a $250 million Barracks Improvement Program to upgrade sub-standard Soldier barracks.

Last year was a challenging recruiting year. However, we finished strongly, exceeding the monthly goals for the last four months by more than 400 Soldiers per month in the active component. This trend continued into the new recruiting year in all three components. To achieve success this year, we have expanded advertising, increased the number of recruiters, and augmented numerous incentive programs. We recently initiated a new program, Unity of Effort, to recruit former members of the Armed Forces. This program features enlistment bonuses and, in many cases, reinstatement of previous rank. We are optimistic that our efforts, reinforced by Congress and the Nation's support, will result in meeting our recruiting goals for this year.

The Army is retaining Soldiers at tremendously high levels. Since 2002, while fighting the war on terrorism, we have surpassed our combined Army retention goals each year. In 2005, we exceeded our goal by more than six percent. We reenlist two out of every three eligible Soldiers who reach the end of their term of service during a given year. We are particularly proud that one out of every two first-term Soldiers decide to reenlist. In a time of war and a high operational pace, we believe this achievement is indicative of the high quality of leadership that our Soldiers experience in their units. Our Soldiers value the tradition of service to the Nation and appreciate the opportunity to contribute in a meaningful way.

The continued support of spouses, parents, veterans, and the employers of our reserve component Soldiers plays a huge role in recruiting and retaining the All-Volunteer force. This support has a direct effect on the pride and morale of each of our Soldiers. In May 2005, to recognize the role and contributions of key influencers in our society, we established the Freedom Team Salute Program. To date, we have received requests to commend almost one million spouses, parents, veterans, and civilian employers.

Care for Soldiers and Army Families

We continue to work to assure Soldiers and their families that they will be taken care of and all their needs will be met. Caring for families plays a vital role in sustaining a national commitment to serve and requires both the attention of leaders and the application of resources.

Army Well-Being programs provide leaders a variety of ways to care for Soldiers and their families. We have integrated numerous quality-of-life functions into a comprehensive well-being framework that enables us to focus resources, measure success, and address the needs of an Army at war. Our objective is to sustain the fighting strength of our Army while providing for the individual needs of Soldiers and families.

To assist Family Support and Readiness Groups at all levels, we have developed Virtual Family Readiness Groups. We have expanded child care programs on installations and in communities that have deployed Army National Guard and Army Reserve units. The Army Reserve established a Child and Youth Services Program to facilitate access to child care, youth development, and student support. The new Deployment Cycle Support Program helps families to understand and cope with the stress of deployments. Our Army Spouse Employment Partnership program has placed over 11,000 spouses in positions with major corporations and State and Federal agencies. We are currently working on a school transition program to help families and communities affected by BRAC decisions. These are just a few of the many ways that we care for Soldiers and families.



Health care is another critical aspect of caring for our Soldiers and their families. The Army provides world-class health care for 3.5 million beneficiaries, on the battlefield and at hospitals and clinics worldwide. To honor our obligation to care for Soldiers and families, we continually look for ways to improve health and well-being. The U.S. Army Wounded Warrior Program, formerly known as the Disabled Soldier Support System, provides sustained care for our severely wounded Soldiers. This program provides continuous and comprehensive transition and support services for our Soldiers until they are returned to duty or for up to five years after medical retirement. This program exemplifies our commitment to honor the Soldier's Creed by "never leaving a fallen comrade."

Improve Soldier and Family Housing

We are committed to providing quality housing for our Soldiers. Housing for single and married Soldiers has been improved significantly as a result of the Barracks Modernization Program and Residential Communities Initiative (RCI).

To improve substandard living conditions across our installations, we committed $250 million to an immediate Barracks Improvement Program. As part of a longer-term Barracks Modernization Program, we will have funded 85 percent of our barracks modernization by the end of this year. We have programmed funding through 2009 to modernize our remaining barracks spaces. In addition, 45 percent of barracks for our recruits at our training centers will be modernized by 2011. Using vital supplemental funding, we also initiated

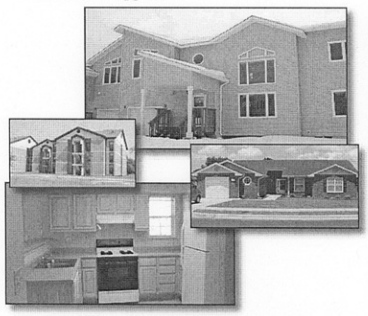
a program to modernize the barracks used by Army Reserve and Army National Guard Soldiers during their annual training.

Through RCI, we are providing better family housing for our Soldiers by privatizing 82,000 homes at 42 installations. This program leverages private investment capital to improve housing at a much faster rate than traditional methods of financing and contracting for military construction. When completed in 2010, over 90 percent of Army housing in the United States will have been privatized. We have also constructed more than 3,600 family homes and renovated 6,300 existing homes using traditional military construction.

Improved housing, in barracks and quarters, provides Soldiers and families with a quality of life that recognizes their service to the Nation. These programs have a positive, enduring effect on Soldiers' morale, and contribute immeasurably to our ability to sustain our volunteer force.

Supporting Initiatives (Addendum C): The above areas of focus are reinforced by the following three supporting initiatives:

- **Continue** Army One Source
- **Establish** Multi-Component Family Network
- **Execute** Child and Youth Services School Transition Support



Compelling Needs

- Support and funding to achieve critical recruiting and retention goals. Meeting these goals for all components will ensure the quality of our All-Volunteer force.
  - Achieve an active component recruiting goal of 80,000 and retention goal of 64,200; an Army National Guard recruiting goal of 70,000 and retention goal of 34,900; and an Army Reserve recruiting goal of 36,500 and retention goal of 16,900.
  - Continue support of Army initiatives to provide predictability and stability for Soldiers and their families in both the active and reserve components.
- Full funding and support for quality-of-life programs to sustain the All-Volunteer force, now being tested for the first time in a prolonged war.
  - Support housing initiatives to provide quality housing for Soldiers and families at installations impacted by Base Realignment and Closure and the Integrated Global Presence and Basing Strategy.

Provide Infrastructure and Support to Enable the Force to Fulfill Its Strategic Roles and Missions

The infrastructure that the Army maintains plays a vital role in supporting the Joint Force. We are adjusting our global footprint to improve readiness at each of our installations. To free resources for more compelling operational needs, we are reengineering every one of our business processes. At the same time, we are completely transforming our infrastructure, consisting of installations, depots, and arsenals – and the information network that connects them – to reflect the deployment requirements and global commitments of the 21st century security environment, while becoming dramatically more efficient.

Accomplishments

Since 9-11

- Created the Installation Management Agency to unify the business structure of Army installations and to create uniformly high standards of quality for Soldiers and their families.
- Developed a strategic stationing plan that synchronizes decisions of Base Realignment and Closure, Integrated Global Presence and Basing Strategy, Army Modular Force initiative, and the demands and realities of the Global War on Terrorism.
- Optimized Power Projection Platforms to mobilize and deploy over 500,000 Soldiers to support the Global War on Terrorism.

2005*

- Awarded the General Fund Enterprise Business System contract to enhance the management of financial resources.
- Planned and implemented an Army-wide Business Transformation initiative based on the *Lean Six Sigma* methodology to reduce the cost of the business side of the Army.
- Identified and began initial implementation of substantial structural changes to the institutional base of the Army.
- Implemented a strategic management system to measure Army performance and ensure optimum allocation of resources.

** Several continue into 2006*

Adjust Global Footprint to Create "Flagships of Readiness"

The Army is moving units and transforming posts through an effort that we call "Stationing." In 2007, we will reposition major elements of our operational force (Figure 11). At the same time, we will establish the environmental foundation and initiate the renovation and construction needed to reposition schoolhouses, headquarters, and other support activities. Our stationing effort will posture our forces, logistics activities, and power projection infrastructure to respond to the demands of a complex, uncertain future as efficiently and effectively as possible.

We have produced a plan that integrates BRAC decisions, the IGPBS plan, and the Modular Force initiative. This plan allows us to divest Cold War era infrastructure and create the infrastructure required for the foreseeable future. We are consolidating activities by leveraging information technology and advances in supply chain management. We are also completely reengineering our business processes to eliminate waste.

This consolidation will yield tremendous savings over time. Our plan reduces overhead costs by streamlining the installation staffs, contract support, and infrastructure that will support units and activities at their new locations. We are exploiting this opportunity to become more efficient and more effective as we implement our stationing plan.

Stationing involves more than merely opening, closing, or realigning functions. It requires balancing military, economic, and strategic

Major Stationing Moves in 2007

- 1st Brigade, 1st Armored Division moves from Germany to Fort Bliss.
- 212th Fires Brigade moves from Fort Sill to Fort Bliss.
- 17th Fires Brigade moves from Fort Sill to Fort Lewis.
- Stryker Brigade Combat Team 7 activates at Fort Lewis.
- Battlefield Surveillance Brigades activate at Fort Hood and at Fort Bragg.
- Support Brigades (Maneuver Enhancement) activate at Fort Irwin and Fort Polk.

FIGURE 11

necessities to determine the scope and timing of closures, consolidations, construction, renovation, unit activations, and unit deactivations. We have scheduled all of these activities to occur in ways that will enhance the flow of forces to and from current global commitments.

Our stationing plan and requirements for funding, construction, renovation, and environmental remediation are guided by a set of key goals:

- Use existing infrastructure to reduce cost and excess capacity;
- Minimize use of temporary facilities; and
- Place priority on barracks, housing, motor pools, ranges, and training facilities to ensure that our Soldiers are properly prepared for the challenges they will face.

While positioning the Army to better respond to the 21st century security environment, we are simultaneously working to ensure that our Soldiers and families enjoy the benefits of installations that are truly "Flagships of Readiness."

The quality of our installations remains critical to accomplishing our mission. Our depots, training bases, and home stations enable the Army to:

- Build, train, deploy, and sustain our operational forces;
- Reset and regenerate combat power of returning forces for future missions;
- Provide homes, health care, essential support, and much of the quality of life that our Soldiers and families enjoy; and
- Provide the workplace for our civilian workforce of more than 230,000 people that is performing an increasingly important role in accomplishing the Army's wartime mission.

Since 2001, the Army has made tremendous progress in enhancing training and generating combat power in time of war. Despite improvements, the Army still requires significant resources to overcome years of insufficient investments in its installations and infrastructure. We are committed to reducing our facilities recapitalization rate to meet the



Department of Defense 67-year goal. If resourced, our stationing plan will produce installations better able to train and prepare our forces for future missions. Our plan will also provide a quality of life that our Soldiers and families deserve, and help to sustain the All-Volunteer force.

Implement Business Transformation Initiatives

We are fundamentally changing how the Army conducts business. Our goal is to streamline or eliminate redundant operations to free financial and human resources to redirect to our core warfighting missions. We are:

- Improving our processes to repair equipment and reset our forces;
- Reengineering our manufacturing and administrative processes;
- Outsourcing, where it makes sense;
- Seeking to make best use of economies of scale in all of our contracted services;
- Applying information technology to improve support and eliminate functions where possible; and
- Achieving cost savings in software and hardware while pursuing enterprise-level solutions in our networking practices.

Compelling Needs

- Support to execute a carefully synchronized plan to achieve a new global basing posture while fulfilling the requirements of the National Military Strategy. The requirements of this plan (for renovation, construction, environmental remediation and other costs) will exceed the resources currently apportioned for base realignment and projected to be recouped through consolidation and closure.
  - Support Army efforts to synchronize Integrated Global Presence and Basing Strategy, Base Realignment and Closure, and stationing of modular units.
  - Support funding to achieve a 67-year facilities recapitalization rate.
  - Maintain support for 2007 military construction requirements in accordance with the Army Modular Force initiative, Base Realignment and Closure, Integrated Global Presence and Basing Strategy, and other Department of Defense guidance.
- Support for funding and authorities for Army Business Transformation initiatives to achieve targeted efficiencies through management reform, Institutional Army adaptation, and reengineered business practices. These initiatives will free human and financial resources for more compelling operational needs.

Across the Army, we are reengineering all of our business processes to achieve greater efficiency, improve quality, decrease cycle time, and reduce cost. The method we are using, *Lean Six Sigma*, has already produced a marked improvement in manufacturing and repair processes at all of our depots within the Army Materiel Command. Once fully implemented across the Army, with full adherence to labor laws and other administrative requirements, we will replicate these successes across the Army in all our activities.

Develop the LandWarNet Institutional Infrastructure

We are investing in information technology at our installations and reserve component facilities to lay the foundation for fielding LandWarNet. The Army's portion of the Global Information Grid, LandWarNet compromises both infrastructure and services. It moves information through a seamless network to better support our combat forces and the institutional structures that generate them. Our information technology infrastructure will enable operational forces to "reach back" for data, such as repair part visibility, intelligence and other support, and innovations such as telemedicine. This same technology is improving our ability to manage business.

Supporting Initiatives (Addendum C): The areas of focus discussed above are reinforced by three supporting initiatives:

- Execute Base Realignment and Closure
- Improve Global Force Posture
- Improve Medical Infrastructure

Balancing Risk: The Tension Between Current and Future Demands

The Army has always experienced a tension between current and future demands, perhaps more now than ever before. Consistent investment in current and future readiness is needed to:

- Ensure that the size and mix of our components and capabilities are in balance;



- Enhance our global posture, agility, and readiness to conduct expeditionary operations on short-notice; and
- Organize, man, train, and equip our Soldiers to win today and tomorrow.

Meeting Today's Demands While Preparing for Tomorrow

The Army has adapted to fight the war on terrorism following a decade of insufficient modernization investments. At the start of combat operations, many of our units were under-equipped and not immediately ready for deployment, especially in our reserve components.

To meet Combatant Commander requirements, we had to aggregate equipment from across the force to fully equip those Soldiers deploying into harm's way. As a result, we significantly reduced the readiness of many units to prepare others for combat.

This readiness decision was especially evident in the Army National Guard during our national response to hurricanes Katrina and Rita. With help from the President, the Congress, and the Department of Defense via supplemental appropriations, we have been provided the means to address many of our equipment shortfalls and readiness requirements, yet we still have much to accomplish.

To manage risk within acceptable levels during wartime, the Army requires:

- Full funding of the Army request in the 2007 President's Budget and special consideration, in light of wartime demands, for avoiding any reductions to the Army's budget and program. In addition, supplemental funding is required for combat and contingency operations and to continue to reset, repair, recapitalize, and replace battle losses of equipment for several years beyond major deployments. Supplemental funding is needed to overcome the stress on equipment resulting from sustained combat operations in harsh environments. These resources will ensure that the Army is

Army Actions to Mitigate Risk in 2005

Operational Risk

- Funded our reset program to repair over 7,000 tracked and wheeled vehicles and over 550 helicopters;
- Completed the modular conversion of 11 Brigade Combat Teams, including one Stryker brigade that will deploy this year; and
- Implemented the ARFORGEN model to allow the Army to sustain a commitment of up to 18-19 Brigade Combat Teams with the ability to surge an additional 15-19 Brigade Combat Teams on short notice.

Future Challenges Risk

- All tactical vehicles in Iraq and Afghanistan that operate away from forward operating bases have up-armored or add-on armor protection. Nearly 2,400 tactical wheeled vehicles do not have missions off of forward operating bases and are not armored; and
- Restructured the Future Combat Systems program to "spin out" advanced technologies to Soldiers as they become available, rather than waiting for total system fielding.

Force Management Risk

- Continued modular force conversions, enlarging the pool of available units to reduce the stress on the force;
- Continued military-to-civilian conversion to free up Soldier positions from the Institutional Army to the Operational Army;
- As a component of the ARFORGEN, initiated lifecycle management of 11 Brigade Combat Teams to keep Soldiers in units longer, improve unit readiness and cohesion, and provide greater predictability for Soldiers and their families; and
- Created a stationing plan to better posture the force for deployments and other global commitments.

Institutional Risk

- Implemented business transformation initiatives to improve how the Army does business and consequently reduce cost;
- Awarded the General Fund Enterprise Business System contract to allow better financial management;
- Created a stationing plan to improve strategic responsiveness and invest in our most critical installations; and
- Invested in LandWarNet to improve each installation's ability to manage information and better support operational forces.



fully manned, trained, and equipped to achieve victory in the war on terrorism. These resources will also enable the Army to maintain the momentum of key programs, while accelerating transformation.

- Funding to increase Army capabilities and overall capacity as well as support for the legislative authorities and programs needed to assure access to our reserve components – who, by necessity, have become an operational vice a strategic reserve. We must achieve a proper balance of capabilities and skills among our active and reserve forces and continue to build high-quality units to increase capability and ease the strain on our deployed Soldiers.
- Support and funding to achieve critical recruiting and retention goals needed to grow our operational forces. Meeting these goals for our active and reserve Soldiers sustains the quality and effectiveness of our All-Volunteer force.
- Funding for the FCS program – to enhance current force capabilities today with "spin outs" of available technology – and accelerate more than 300 other modernization programs. Our most critical investment program, FCS will be the Army's first major modernization in over 30 years and will better prepare and protect Soldiers for current and future threats. These capabilities will directly benefit our active and reserve components, all U.S. ground forces, and our allies that support ground campaigns.
- Full funding to maintain momentum in building a rotational pool of 70 BCTs and more than 200 modular Support Brigades and headquarters. Already well under way, our transformation to become a fully modular force is preparing our Soldiers to conduct sustained operations of the type we see today. In addition, our transformation is increasing the depth and breadth of our capabilities to prepare our Soldiers for tomorrow's challenges, particularly as we evolve to maintain overseas presence with rotational units.
- Full funding for Army installations and support to execute a carefully synchronized plan to achieve a new global basing posture, while fulfilling the requirements of the National Military Strategy. This plan will make full use of the resources currently apportioned and projected to be recouped through consolidation and closings. Unanticipated costs associated with environmental remediation, renovation, construction, and other areas, may require additional resources in future years (a situation that will require continuous reevaluation). Full funding and continued support for Army installations and quality-of-life programs is required to sustain the All-Volunteer force, now being tested for the first time in a prolonged war.
- Support for funding and authorities for Army Business Transformation initiatives to achieve targeted efficiencies through management reform, Institutional Army adaptation and reengineered business practices. These initiatives will free human and financial resources for more compelling operational needs and accelerate other aspects of our transformation.

The Army is committed to producing units that are ready for the challenges they will face tomorrow and to overcoming years of underfunding prior to the events of 9-11. We have received unprecedented

support to "buy back" much needed capability. We cannot, however, fool ourselves by maintaining large numbers of forces on paper that, in reality, lack the people, equipment, training, and support needed to accomplish the missions they will be assigned. We are determined to support our Soldiers and their families with an improved quality of life that matches the quality of the service they perform for America.

Building the capabilities required to hedge against the uncertainty of tomorrow will require prudent investments today. These investments must be sustained at predictable, consistent levels over time – a departure from historic patterns of spending which have increased our Nation's vulnerability at the outset of each of the major conflicts of the 20th century. As George Washington stated, "To be prepared for war is one of the most effective means of preserving peace." Consistency in funding, even as the war on terrorism ebbs and flows, is absolutely essential to the Army's ability to preserve peace and freedom for the Nation.

Preserving Peace and Freedom for the Nation

Guided by the Army Vision, we are accomplishing our mission today while building the future force – of Soldiers, leaders, modular forces and institutional support structures – to do so tomorrow.

We remain resolute in our determination to preserve peace and freedom for America. To identify, learn, and adapt to new challenges, we continue to focus on tough questions that will remain at the center of the defense debate:

- What are the strategic requirements of the 21st century? What decisions must we make now to fulfill our Title 10 obligation to ensure the Army, as part of the Nation's Armed Forces, is best prepared to defend U.S. interests in the face of traditional, irregular, catastrophic and disruptive challenges?
- How can we best prepare our leaders to become multi-skilled "pentathletes" able to operate confidently and successfully amidst the challenges and uncertainties we will face?
- Are joint land forces (Army, Marines, and Special Operations Forces) properly sized, structured, trained, and oriented to provide the capabilities needed to perform the missions that the Nation will require?
- What additional actions are required to ensure that our forces are organized, trained, manned, and equipped to be relevant to, and ready for, the challenges they will face?
- How do we ensure that our physical infrastructure (installations, depots, arsenals, and the network that connects them) best supports our mission? How do we balance our resources to: provide quality of life to sustain our volunteer force; maintain deployment facilities (air, ground, sea, rail, cargo, and other facilities) to support Combatant Commanders' timelines; and establish a training base to prepare our Soldiers and units for the challenges they will face?
- How can we best leverage the human and financial resources we have been provided to ensure that we remain the world's preeminent landpower – ready to meet and relevant to, in capabilities and mindset, the challenges we will face?
- What will be the impact of protracted conflict on the All-Volunteer force? What combination of quality of life, compensation, incentives, service options, and other tools will be required to recruit, retain, and sustain the concept of the All-Volunteer force for the future?

With the support of the President, the Congress, and the Department of Defense, we are developing the capabilities and the capacity to sustain our global commitments and to prevail in the war on terrorism. We need your continued support to meet the needs of the Combatant Commanders and our Soldiers, who answer the Call to Duty by volunteering to serve the Nation in this time of war.

Acronyms

AC	Active Component
ARFORGEN	Army Force Generation
ARNG	Army National Guard
ASEP	Army Spouse Employment Partnership
AW2	U. S. Army Wounded Warrior Program
BCT	Brigade Combat Team
BOLC	Basic Officer Leader Course
BRAC	Base Realignment and Closure
CBRNE	Chemical, Biological, Radiological, Nuclear and High Yield Explosives
CTC	Combat Training Center
DoD	Department of Defense
FCS	Future Combat Systems
FTS	Full Time Support
FY	Fiscal Year
GBIAD	Ground Based Integrated Air Defense
GDP	Gross Domestic Product
HMMWV	High Mobility Multipurpose Wheeled Vehicle
IED	Improvised Explosive Device
IGPBS	Integrated Global Presence and Basing Strategy
JIEDDO	Joint Improvised Explosive Device Defeat Organization
JTF	Joint Task Force
MFO	Multinational Force and Observers
NDAA	National Defense Authorization Act
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
O&M	Operations and Maintenance
QDR	Quadrennial Defense Review
RC	Reserve Component
RCI	Residential Communities Initiative
RDA	Research, Development, and Acquisition
REF	Rapid Equipping Force
RFI	Rapid Fielding Initiative
SAPI	Small Arms Protective Inserts
SBCT	Stryker Brigade Combat Team
TOA	Total Obligation Authority
UAS	Unmanned Aerial Systems
USAR	United States Army Reserve
WMD	Weapons of Mass Distruction

Addendum I (Helpful Army Websites)

The following websites provide greater information on various topics:

The Army Website: This site is the most visited military website in the world, averaging about 7 million visitors per month or 250 hits per second. It provides news, features, imagery, and references.
http://www.army.mil

The Army National Guard: Provides information about the Army National Guard.
http://www.arng.army.mil

The United States Army Reserve: Provides information about the Army Reserve.
http://www.armyreserve.army.mil/usar/home

Army Families Online: This site provides information and links to other support programs that support our Soldiers and their families.
http://www.armyfamiliesonline.org

Wounded Warrior Program: This site provides information on the Army's Wounded Warrior Program which provides support for severely wounded Soldiers and their families. It can be found through the Army Families Online website at
http://www.armyfamiliesonline.org

Deputy Chief of Staff for Personnel, G-1: For information on personnel issues.
http://www.armyg1.army.mil

Deputy Chief of Staff for Logistics, G-4: For information on Army logistics.
http://www.hqda.army.mil/logweb

Chief Information Officer, G-6: For information on Army Information Management.
http://www.army.mil/ciog6

Deputy Chief of Staff for Programs, G-8: For information on materiel integration.
http://www.g8.army.mil

Future Combat Systems: For information on the Future Combat Systems program.
http://www.army.mil/fcs

Army Logistics Transformation Agency: For information on Army logistics transformation.
http://www.lta.army.mil

Army Medicine: For information on Army medical programs.
http://www.armymedicine.army.mil

Army Posture Statement: For the web-based version of this year's Army Posture Statement and previous years versions.
http://www.army.mil/aps

Army Modernization Plan: Provides a detailed overview of the Army's organizational and materiel modernization efforts.
http://www.army.mil/features/MODPlan/2005

Addendum J: Additional Information on Army Related Topics

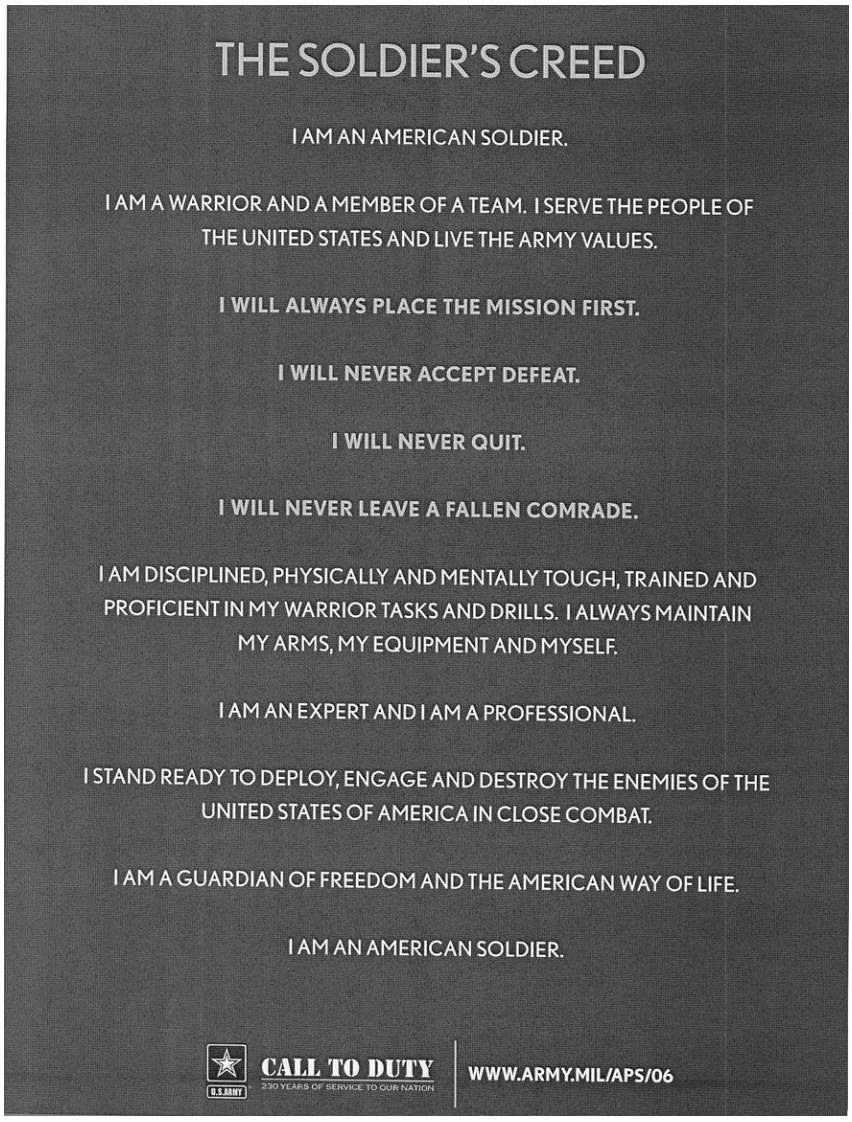
We have provided additional information on the following topics in the CD-ROM and web-based versions of the 2006 Army Posture Statement. They are available as in-text links and may be accessed through this addendum either on the CD-ROM or the Web.

Actionable Intelligence
Active Component / Reserve Component Rebalance
Adapting the Major Army Command Structure
Add-on Armor for Tactical Wheeled Vehicles
Army Barracks Modernization Program
Army Capabilities to Dominate in Complex Environments
Army Career Intern Program
Army Community Service
Army Energy Strategy for Installations
Army Environmental Programs
Army One Source
Army Prepositioned Stocks
Army Reserve
- All-Volunteer Force and the Army Reserve
- Army Reserve Child and Youth Services Program
- Army Reserve Education Services
- Army Reserve Employer Relations
- Army Reserve Facility Management Transformation
- Full-Time Support Revalidation
- Regional Personnel Service Centers
- Reserve Components Separate Competitive Categories for Officer Promotions
- Selected Reserve Incentive Program
- Sexual Assault Prevention and Response Program
- Trainees, Transients, Holdees and Students Account
- Voluntary Selective Continuation of Alerted and Mobilized Selected Reserve Lieutenant Colonels and Colonels

Army Retention Program
Army Spouse Employment Partnership
Army Well-Being
Army's Capstone Concept for the Future Force
Base Realignment and Closure Decisions for the Army in 2005
Basic Officer Leader Course
Battle Command
Business Transformation
Campaign Quality Force
Child and Youth Services School Transition Support
Civilian Aides to the Secretary of the Army Program
Combating Weapons of Mass Destruction
Combined Force Interoperability through Security Cooperation
Concept Development and Experimentation
Cultural Awareness and Language Capabilities
Defense Integrated Military Human Resources System
Defense Support to Civil Authorities
- Avian Flu Pandemic Preparation
- Establishment of Army Forces North
- Hurricane Katrina Response
- Special Events for 2005

Deployment Cycle Support Program
Expeditionary Capabilities
Freedom Team Salute
Future Combat Systems
Future Combat Systems Manned Ground Vehicle Development
Global Force Posture
Information Assurance and Network Security
Installation Design Standards
Integrated Global Presence and Basing Strategy
Interceptor Body Armor
Joint Improvised Explosive Device Defeat Organization
Joint Interdependency
Joint National Training Capabilities
Joint Tactical Radio System
LandWarNet and the Global Information Grid
Life Cycle Management Initiative
Live, Virtual, Constructive Training Environment Integration
Major Acquisition Programs
- Future Combat Systems
- Black Hawk Utility Helicopter
- Medium Extended Air Defense System
- Chinook Cargo Helicopter
- Longbow Apache Attack Helicopter

Medical and Dental Readiness
Medical Infrastructure Requirements for Army Transformation
Military-to-Civilian Conversions
Modular Conversion
Modular Force
Multi-Component Family Network
Naming Convention Decisions
National Security Personnel System
Rapid Equipping Force
Rapid Fielding Initiative
Recruiting an All-Volunteer Force
Red Team Education and Training
Reset
Residential Communities Initiative
Restructuring Army Aviation
Review of Education, Training, and Assignments for Leaders
Science and Technology
Soldier's Creed
Spiraling Technology into the Current Force
Stability Operations Capabilities
Stabilizing Soldiers and Units to Enhance Cohesion and Predictability
Sustainable Range Program
Sustaining the Force
U.S. Army Combat Training Center Program
U.S. Army Wounded Warrior Program
Unity of Effort
Up-Armored Vehicle Program
Utilities Privatization
Virtual Family Readiness Group
Warfighter Information Network – Tactical
Warrior Tasks and Battle Drills



Chairman WARNER. Thank you, Mr. Secretary, for a very powerful statement.

General Schoomaker, I wish to ask you once again to recite, as you did with the hearing with the Secretary of Defense, your personal observation about the state of the Army today compared to the Army that you came into during the Vietnam era. I think that sets a very profound tenor for the situation before us today.

General SCHOOMAKER. Mr. Chairman, Senator Levin, distinguished members of the committee: Good afternoon. Mr. Chairman, I would be glad to do that in the most succinct way I can. We were severely challenged, if not broken, in the post-Vietnam Army. Al-

though it was filled with great people, we were challenged in almost every dimension. This Army today, although we are challenged and we are busy, our tempo of operations (OPTEMPO) is very high. Some would call us stretched. This is not a broken Army. This is a very strong Army, the best that I have been in in my entire service and, quite frankly, observing my father's three decades of service, I do not remember one as a kid that was as good as this Army the way it is.

Sir, I would like to recognize some other senior leaders that are present today, important parts of our Army. First of all, Lieutenant General Steve Blum of the Army National Guard and his sidekick, Lieutenant General Vaughn, who are sitting right to my right rear; and Lieutenant General Ron Helmly, U.S. Army Reserve. Of course, these are very important leaders in the Army. I just wanted to recognize the fact that they are present today and with us.

Last week when I spoke, I talked about where we were, where we are, and where we are going. I am sure we will get into more of that during the testimony here. But today we have with us our posture statement, that I hope is at your position. I know that we are submitting this for the record, if we could, as part of our official testimony.

Chairman WARNER. Without objection, all of your statements in entirety, together with other items that you wish to have put in the record, will be done.

General SCHOOMAKER. Thank you, sir. I would just reference during the time that we are here, if you would take a look at page 2 some time. I will be referring to that because it shows you some figures there and some charts about the history of where we have been that backs up some of the things I said previously, to include the fact that we had about $100 billion in lack of investment over the previous decade in the United States Army that we are now trying to overcome.

I made the statement that we started the current operations following September 11, 2001, at some $56 billion in the hole in equipment. You can see there in those three charts on page 2, actually figures 4, 5, and 6, a graphic history of the kinds of things that were occurring and what our traditional fiscal representation has been for the Army.

Of particular note, you might notice that on the bar chart at the very bottom the gold band shows you the relatively small percentage of our total budget that goes towards the investment accounts. The United States Army typically has been funded at about 16.5 percent of the Department of Defense (DOD) on our equipment procurement, et cetera. So when I take all of this in context, I think it supports what I said and have testified to.

We are on the right path, there is no question about it, and I believe that we have presented a very balanced force structure that is consistent with the level of resourcing we have. If we were to have more resources I would accelerate what we are doing. I would not necessarily grow it bigger. I think this is an important point. I think what we have done is achieved a sense of balance across the specialties, the capabilities, and the capacities in the Army that are relevant to the 21st century and I believe that we must continue on that path.

So, having said that, what I would like to now do before I conclude my oral statement, I would like to introduce three soldiers. As you have heard me say many times, I cannot tell you what a privilege it is to be associated with the men and women of the United States Army, those in uniform and those civilians and their families that support us.

Today we have three soldiers, one each from the Guard, the Reserve, and the Active component, and I would like to introduce them one at a time, tell you just a little bit something about them. The first is Sergeant First Class Judith Quiroz on my far left. Sergeant Quiroz is with the U.S. Army Reserve and her specialty is personnel. She deployed during 2003 from January to December to both Kuwait and Baghdad, where she served as Noncomissioned Officer in Charge (NCOIC) in the personnel business supporting our soldiers over there in a very important function. She was recognized with two Army commendation medals for her period of service during Operation Iraqi Freedom (OIF) and she now resides in Hanover, Maryland, here in the local area. So I am very proud of Sergeant Quiroz and her associates from the Army Reserve. Thank you, Sergeant Quiroz.

Second, I would like to introduce Specialist David Yancey. Specialist Yancey is from the Army National Guard, from Mississippi as a matter of fact, the 155th, Dixie Thunder. He was deployed from January 2005 to 29 March 2005, when he was wounded. He and three of his compatriots were struck by an improvised explosive device (IED). He suffered a broken left femur, a severed artery in his leg, a collapsed lung, a closed head injury, a damaged spleen, rib fractures, and a T1 fracture. According to Specialist Yancey: "These actions have changed my life, but I am driving on with new goals and a new career as an American soldier would."

He is currently under our Operation Warfighter program and he is seeking employment in the U.S. Postal Service and I am sure that he will be as fine an employee in the Postal Service as he has been a soldier. We are very proud of him. Thanks.

Chairman WARNER. We wish you well. We are hoping that you will meet this new challenge with the same vigor that you performed your military duties, sir. Well done.

General SCHOOMAKER. He also wears the Combat Action Badge, which is something that our soldiers wear very proudly who have engaged in direct ground combat.

Our third soldier is from the Active component, Staff Sergeant Wesley Holt. Sergeant Holt is an infantryman, served in a Stryker brigade for a year, comes out of Fort Lewis, Washington. He was with what has gotten a certain amount of fame, the Deuce-Four out of the 1st Brigade, 25th Infantry Division, Fort Lewis. They were up in Mosul.

He received a Silver Star for action on 29 December 2004 when he displayed extraordinary heroism while under heavy fire and personally was responsible for saving over 40 men's lives during that action. To give you an example of the kind of Army we have today, during his time in Iraq Staff Sergeant Holt's platoon accounted for over 100 enemy killed and over 15 high-value targets captured, and his platoon was awarded 22 Purple Hearts—this is a platoon of

roughly 40 people—22 Purple Hearts, 3 Silver Stars, 4 Bronze Stars with V, and 19 Army Commendation Medals with V for valor.

He reenlisted in Iraq and was recently selected to become an aviation warrant officer in the United States Army. So we are very proud of him as well.

Chairman WARNER. You are an inspiration to all men and women of the Armed Forces. Well done, sir.

General SCHOOMAKER. Sir, with that introduction, I stand with the Secretary, prepared to answer your questions.

Chairman WARNER. We thank you very much.

We will go into a round of 6 minutes on the first, and hopefully we will have a second and a third if necessary.

Always foremost in our minds here on the committee again is the care for our wounded. Nearly 16,000 men and women have been injured or wounded in the war, and with advances in medical care soldiers have lived that otherwise would not have in earlier conflicts. Please describe for the committee, Mr. Secretary, the programs in this budget that will support our wounded soldiers, and are there other programs or other legislative things that Congress can do to support you as Secretary and the others in the Army to care for those individuals and their families?

Secretary HARVEY. Thank you, Mr. Chairman. As you may know, we have a program called the Army Wounded Warrior Program, which is primarily aimed at taking care of our wounded soldiers in the sense of ensuring that they get the proper medical attention and once they leave the Army that continues, and also, importantly, that they get a good job in the government or in the private sector. To that end, we have partnered with four other Cabinet Departments—Homeland Security, Labor, Transportation, and Veterans Administration—and also through our Army Career and Alumni Program (ACAP), we have identified 70 employers who have signed up to hire disabled soldiers. So that and our own internal programs, one of which we call Always a Soldier, another transition to Army civilian.

So I think at this time we have a comprehensive set of programs to help our wounded warriors, they continue to receive the medical treatment they need to fully recover from their injuries and wounds, and also to help them transition back to their communities and get a very good, well-paying job. So I think we initiated that program a couple of years ago. We initially called it the Disabled Soldier Support Program, and we have changed it at the request of the wounded soldiers to the Army Wounded Warrior Program.

So I think at this time we have a solid programmatic base to help them to do that.

Chairman WARNER. A few years ago this committee put into the authorization bill legislation to enable the Service secretaries to retain those who had experienced wounds, yet had recovered to the point where they could continue to serve in uniform. Has that worked out successfully and do you need any additional authority? Because I find and each of us on this committee have found when you visit the wounded, so many of them are anxious to return to active service and continue to wear the uniform and perform their duties.

Secretary HARVEY. Thank you, Mr. Chairman. You have provided the authorities we need. I know personally, I know the chief personally, when we go up to Walter Reed—I was there just yesterday, but a couple of weeks ago I met Staff Sergeant Rummell Bradley, who is a double amputee and a remarkable young man of courage, who personally asked me to stay in the Army. I said: "You just give me your name and number and when you are ready and you are recovered we will ensure that you stay in the Army."

There are a number of examples like that. So I think we have the authority we need. The Always a Soldier Program is a program in our Army Materiel Command that offers either military or civilian jobs to wounded soldiers. So I think we are in good shape. Thanks for that question.

Chairman WARNER. Let us recognize really the extraordinary chapter in the history of our military. That was not the case when you and I served in different positions during the war in Vietnam, General. But it is today.

Do you have anything to add on this subject?

General SCHOOMAKER. Sir, I think in almost every dimension that we are doing very well. I subscribe to what the Secretary just said. I will remind you that over time soldiers make different decisions about their future once wounded. I believe that leaving the options open and encouraging soldiers to reach as far as they can reach is very important for them, very healthy and helpful, and then of course they will make decisions based upon how they recuperate physically.

But I do believe that it is worth saying—for instance, Sergeant Yancey back here. Some of you may recall we had some discussions about tourniquets at one time. Sergeant Yancey is alive today because of the one-handed tourniquet that we fielded, the tourniquet that a lot of people said we did not have.

Chairman WARNER. I remember it well.

General SCHOOMAKER. I suggested that we had solved that problem.

I might also tell you that the 91 Whiskey program, which is the combat medic and our combat lifesaver program, has paid extraordinary dividends to us. The fact that we are now having less than 10 percent of our soldiers wounded die of those wounds is historically just a wonderful story, the fact that we are able to do that.

Chairman WARNER. We are going to get into the questions on that eventually here, about the equipping.

General SCHOOMAKER. Yes, sir.

Chairman WARNER. But to both the Secretary and you, General: Under the President's budget, the Department does not intend—I repeat, does not intend—to seek a permanent increase in end strength for the Active-Duty Army. In fact, the Army is funding the Army Reserve and National Guard to levels which are 5,000 and 17,000 lower respectively from the end strength levels authorized in fiscal year 2006.

Can you address those two issues and how hopefully it is your professional judgment that this will not cause a decrement in the combat capabilities of the Army and the Reserve?

Secretary HARVEY. Let me address the Active component. We have a plan for the Active component that will increase the size of

the operational Army by 40,000, keeping in mind that the Active Army is really divided into three parts: the operational Army—that is the Army that fights the war—the institutional Army, as we like to call it, which generates the force; and then the overhead account, which we refer to as Trainees, Transients, Holdees, and Students (TTHS).

So we have a master plan starting in the fiscal year 2004 baseline of 482.4, which we will grow the operational Army from 315,355. Then, following that, a little bit later, we will convert through military to civilian conversions a number of military positions in the institutional force to civilians. So that when you do all the arithmetic, in fiscal year 2011 our plan is to end up at 482.4, but with a much bigger operational Army, that is the Army that fights the war.

In terms of the Guard and Reserve, our approach is to, in the last few years we have had difficulty in meeting the congressionally-mandated end strength. We are currently at 334,000 versus 350,000 in the Guard and about 188,000 versus 205,000 in the Reserves. So our plan is to fund the Guard to whatever troop strength, I should call them, they can achieve. So if they achieve anywhere between and up to 350, we will plan to find it.

For fiscal year 2007, we thought it was the prudent and responsible thing to do just to fund them going into the budget at a troop strength of 333,000, where they were, they have been on the average for about the last 14 to 15 months. So again, signs are right now that they'll be able to grow, but this is a tough recruiting market and we are prepared to reprogram and fund them to whatever level they will achieve.

Chairman WARNER. In our meeting with the Secretary of Defense we discussed this issue. There may be some technical budgeting problems there, but we will work with you to achieve those goals.

Secretary HARVEY. We appreciate that.

Chairman WARNER. General, do you have anything to add to that, sir?

General SCHOOMAKER. Three very quick points. We have no intention to cut the Guard and Reserve, and we have made that point very clear; and we have the flexibility, second point to fund it, with your help, to the levels that we need. The third thing is that we are balancing this Army across these components in a way that is necessary to balance them, and my view is that we are on the right path in that regard.

Chairman WARNER. Thank you.

I would like at this time to ask the Chief of the National Guard, General Blum, to comment on this question and such views as you might have as to the status of the Guard in the coming fiscal year. We can hear you very clearly. That voice carries.

General BLUM. Mr. Chairman, the National Guard supports the principles outlined by the Secretary of the Army and the Chief of Staff of the Army. We see nothing but advantage to the Nation to have its Army, both Active, Guard, and Reserve, fully manned, fully equipped, and adequately resourced for the challenges of the future.

As you pointed out, we are working together with the Army to bring that great theme and message in line with the realities of the

bookkeeping. We are working very closely with Congress on that at this time.

Chairman WARNER. Thank you.

Do either of the Reserve officers care to add anything? [No response.]

Fine. Thank you very much.

Senator Levin.

Senator LEVIN. Just on that last point, last year we authorized the Guard 350,000 and the actual strength that it reached was 333,000. Since you are willing and determined that you would fund it up to 350,000 should they be able to recruit that many, what is the reason not to put the same authorization in this year as last year at 350? What is the harm that is done to the budget?

Secretary HARVEY. Just that we have to give it back or underspend. This is at a level that I think goes back into I believe at least calendar year 2004, where we have been at this range, plus or minus, on the average 333,000. We just thought from a management standpoint that it is prudent to budget at a troop strength that has some history to it rather than the 350 and if necessary ask to reprogram the funds to make up for it. So it was just a management approach to funding the actuals rather than some number that we have not met for some period of time.

Chairman WARNER. Not to—I will give you the time.

Senator LEVIN. That is okay.

Chairman WARNER. We are working on an escrow concept with your team now whereby the funds could be placed in escrow as a challenge to both the Guard and the Reserve, and indeed the Active, to move up to their full statutory end strengths. So I am confident this will work.

Secretary HARVEY. We appreciate that, Mr. Chairman. I think that is a very good approach and if we need it we have it. If we do not, it is a prudent use of taxpayers' money.

Chairman WARNER. Thank you, Senator.

Senator LEVIN. That is fine. This approach which you have just outlined and the chairman has just mentioned is agreeable, as I understand it, to both you and the Guard? You have reached basically an agreement in terms of what you are recommending basically to us, is that right?

Secretary HARVEY. Yes.

Senator LEVIN. General Blum?

General BLUM. Senator Levin, I trust General Schoomaker with my life——

Chairman WARNER. General, I think you should just borrow the Secretary's microphone to make sure that this message is carried to the press and others.

General BLUM. Mr. Chairman, Senator Levin, members of the committee: I trust these gentlemen with my life. If they say they are going to resource us at a force structure allowance of 348,000 and up to an end strength of 350,000, I have to take them at their word. How they are going to do that has to be worked out, but I trust that it will be worked out.

Senator LEVIN. That is fine.

General Schoomaker, I should have called on you first. I take it you are satisfied, comfortable that this agreement makes sense for the Army, including the Guard?

General SCHOOMAKER. Sir, I do. Let me throw in my explanation here. First of all, all of us want to have the Guard and the Reserve at their end strength. All of us want to have the Guard and Reserve, under the principles we have agreed to, fully resourced and manned. That is where we want to go. But we do not need idle money. We have to accelerate what we are doing.

So, in 2006 we have funded to the levels that you are talking about. We have all the way to the end of this year to determine whether or not we are on the path to reach it, and we have a lot of time in 2007 to make a determination how to adjust to the realities. So we are committed and on the record that what we want is—there is no intent to cut anything. We are looking forward to having this fully resourced.

I might add one more thing. Our insurance policy across the Army is the additional 30,000 soldiers that you have authorized using supplemental money that we can grow to, and that is yet to be determined out, probably out in 2009, somewhere like that, whether or not more of that will be needed to be kept. So although we have a plan to stay within the end strength structure that we have, we do have options, and we are running a parallel program to recruit these soldiers with the resources that you have given us. So you might know how difficult that has been. We have been at it now 2 years and we have grown about 10,000 to 12,000 soldiers.

Senator LEVIN. Thank you, General.

Secretary, in your introduction to your posture statement you say that you are depending on congressional leadership for, "obtaining legislative authorities to assure predictable access to our Army National Guard and Army Reserve soldiers who have become by necessity our operational rather than our strategic Reserve." What legislative authorities do you need?

Secretary HARVEY. I think there is going to be a proposal coming over—it should be part of the 2007 budget—to ask to extend the Presidential Reserve Call-up (PRC), from its current in-statute, 270 days. We want to be able to do that up to a year. That is one of the proposals that we want.

Also, part of that, I think we do need some legislative authority to ask people who join high demand units to voluntarily agree to be available for more than the 37 days a year, so that we—for example, civil affairs, the shore people, the people that open up ports and so forth, have the ability to train them, because they are very high demand, low density, units and that we have enough time to get them ready for their particular mission.

Senator LEVIN. Thank you.

General, the budget proposes to increase some TRICARE premiums and deductibles for working age military retirees. Do you support those proposals and why do you think they are necessary?

General SCHOOMAKER. Sir, I support what the Chairman testified to last week in the hearing, that he represents consensus on the part of the chiefs that we believe this has to be balanced back to the proportion that it was in 1995. It has never been adjusted since then in the copay payments. We believe that these adjustments are

relatively minor, given the problem that we face. I understand there are other proposals working to deal with this extraordinary growth that is in the defense health care program. But it is a serious problem that we are going to have to face soon.

Senator LEVIN. My time is up. Thank you.

Senator INHOFE [presiding]. Thank you, Senator Levin.

First of all, let me say to both of you how much I appreciate your coming to our Army Caucus. Senator Akaka and I started that Army Caucus some time ago and it has really focused the attention on where it should be. Our needs change so often and it was great of both of you to be there.

Now, you have heard me say this before, but as you look at the big picture, 6 years ago we asked Secretary Rumsfeld where should we be. When I look at what is happening in all the Services, where they are giving up here and giving up here and trying to predict so that we will be prepared for any kind of asymmetrical threat that should come along, it is reminiscent of the old days when we were ready for just about anything out there.

I think it goes back to the overall defense funding. We have talked about the fact that during the entire century of the 20th century the percentage of GDP was 5.7 percent. That was both at times of war and peace. During the Eisenhower presidency it was up to 10 percent. In the early 1990s it was at 6.1 percent. Now, after the drawdown of the 1990s it got down to 2.9 percent and now at 3.8 percent.

I go through all of these because I think at some time we are going to have to be addressing this in terms of what the real needs are. Now, on page 6 of your report, which I was looking through, it talks about the investment—let me get it right here—the investment accounts. Now, the investment accounts from 1990 to 1995 for the Army were only 16 percent of the total, compared to the Navy having 33 percent and the Air Force 35 percent.

Now, so you have two problems. First of all, we are unfunded as a military. We are underfunded, I should say. Second, in terms of the investment accounts, which gives us the capability of modernizing, it is at 16 percent. I asked John Bonsell of my staff to go back and get me what it was between 2000 and 2005. It was still 16 percent. So your plight has not gotten any better over that period of time.

I guess I would just have to ask you, in the event that you did have something closer to what the others have or have a higher percentage, what would be the first thing, Secretary Harvey, that you would need that you think perhaps should be funded now that is not funded now? What would it be? Would it be force strength, modernization, advancing in the FCS program? What would it be?

Secretary HARVEY. Thanks for the question, Senator. The chief and I have done a lot of talking about that and I think developed a strategy that says that we feel coming out of the QDR and the operational assessments right now that the force structure that we have in terms of the 70 BCTs, supported by the robust FCS program, and I might note a very excellent Army aviation program, are adequate for us to meet the threats of the 21st century.

Having said that, we can certainly accelerate that effort. So if we were to do anything with additional funding, we would accelerate

the conversion to the Army modular force. Technology development, systems development, I do not think permit you to accelerate the FCS program. I think we have a balanced program right now in terms of balancing risks against technology against systems development.

Because of the foresight of the chief and others, we restructured the aviation program a couple of years ago under the chief's leadership. We feel that we have a very robust program in terms of the next generation of Blackhawk, upgrading the Chinooks, upgrading the Apaches, and two new helicopters in terms of the Army Reconnaissance Helicopter and the Light Utility Helicopter.

So I think we look across that. We have doubled or tripled the size of the ammo accounts. We are requesting, because of the war, supplementals and reset and recapitalization of upwards to $10 billion. So I think we feel good, at least I do, and the chief and I talk about it a lot, about the force structure in all components, the modernization program centered around FCS, and our ability to recap and reset the force. But we could do it quicker.

Senator INHOFE. Before getting a response from General Schoomaker, let me just put it a little bit different way. I had Air Force General Schwartz of the United States Transportation Command (USTRANSCOM) in my office yesterday and we were talking about some problems that the Air Force has. He was talking about the blend of lift vehicles, where are the C–17s, what is the right level for that, what is going to happen to our C–5s, and then of course the new C–27s, some of the two-engine varieties, and the C–130Js, and all of that.

I said that these are decisions that are tough to make because you do not know what kind of a threat is going to be out there. If we knew that we would have all of the above. But if you think you have it bad, look at the Army.

I think you said it just now, General, in your opening statement. You said it has been four decades since we have had really major modernization programs. I think it would be worthwhile for you to use the same example you used during the Army Caucus a couple of days ago in terms of—one of the frailties that we have in terms of our equipment, the cannon, the fact that we are still operating with the Paladin. I remember telling this committee a couple of years ago about the Paladin, that it is World War II technology. You have to get out and swab the breach after every shot.

Now, compare that in terms of capability and of crew, if you would, please, with the Non-Line-of Sight Cannon (NLOS–C), the lead security for the FCS?

General SCHOOMAKER. Sir, I would be glad to. I would like to put it in context. What you mentioned a minute ago was on page 2 of the posture statement. It shows the charts and it shows the history of what you talked about, percentage of GDP over time, the Army's percentage of the pie, et cetera. The big issue that we have today before us is the fact that much of our recapitalization and reset is in supplemental funding. Now, we have moved in the 2007 budget about $5 billion for modularity inside the base budget and we have about the standard $2.5 billion for recapitalization and about $1.5 billion for depot.

But what we have the opportunity to do here is to accelerate and fix the Army that you are talking about because of the war that we are in and the capacity that is running. One of the things that we would like to see come in sooner is things like the NLOS–C. The NLOS–C has a two-man crew. One gun can fire six rounds in the air and they will impact the ground simultaneously on the target. That is what right now it takes a six-gun battery with one round each, each gun with a six-man crew, plus a Fire Direction Center (FDC). So two people are doing about 40 people's work with precision with the NLOS–C. Those are the kinds of capabilities that allow us now to move.

If we move into the FCS level technology, we will take 900 people out of the BCT, but we will double the amount of infantry that is in squads inside of that.

Senator INHOFE. That is the example that I wanted you to use. When you stop and think about it, there are now five countries, including South Africa, that make a better cannon than we have. I just do not think that is acceptable. So I appreciate the fact that you are rushing into this and that we are going to be modernizing.

Senator Reed.

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

Thank you, Mr. Secretary, General Schoomaker. General Schoomaker, last week when you appeared before the committee I asked you what the reset-recap course of the Army was and you replied $4 billion per year over the next 6 years. On Friday my staff and the staff of the committee received a briefing, the Army equip and reset update. This is one of the charts that was included in—I think you have a copy of it. I have also had a chance to talk with some of your staff about these numbers.

First, let me clear up the definitions as I understand them. "Reset" is made up of three components: repair, replacement, and recapitalization. I believe, General, that you only spoke about repair and replacement last week and did not include recapitalization. If you just look at repair and replacement, that is $24 billion over 6 years. But recapitalization is an additional $12 billion over that time. As I understand it, this is only with respect to equipment that is in the inventory being used. This is not modularity, this is not new equipment you are buying. This is equipment we must repair.

Second, you said reset costs about $4 billion a year, but if you look at this chart the cost incurred this year in 2006 is $13.47 billion. Next in the chart the reset and recap costs start to drop significantly over the 5-year projection. But this chart assumes that beginning in July of this year we start to draw down our forces and by December 2008 we literally have no forces left in Iraq. I think we would all like to see that happen, but I think you have to ask seriously, is that a realistic assumption to make about the conduct of operations in Iraq?

Now, let me just get a few points clear so that we can have a discussion. First, General, the $13.47 billion is the total recap, reset obligation this year, the amount of money that we need; is that correct?

General SCHOOMAKER. I think first of all let me concede that I was talking in a much narrower band than what you have de-

scribed, and I agree with you. I would also increase your band to include force protection, because there are many things that we have had to bring into the Army that we did not have prior to September 11 as a result of our experiences, and you know what many of these are: up-armoring vehicles, jammers, and this kind of stuff.

Senator REED. Yes, sir.

General SCHOOMAKER. So I think when you expand the definition, which I think is properly proper, your figures are much closer to the mark.

We also have a bow wave in this, based upon things that have been pushed forward from previous years. You know that it was just recently that we started getting procurement money for reset in our supplemental funding. So that is part of that problem, too, in terms of what we can deal with.

Senator REED. The number is accurate this year?

General SCHOOMAKER. I believe it is in the ballpark.

Secretary HARVEY. Can I add something, Senator? The baseline number that we have in our plan for fiscal year 2006 now, for fiscal year 2006, is a total of, in round numbers, $15 billion, of which $12 billion is in the supplemental and $3 billion is in the base. Remember, we also have to——

Senator REED. Mr. Secretary, that $3 billion in the base is the steady state——

Secretary HARVEY. Yes, right.

Senator REED.—numbers that we have had in practically every budget going back over the last decade.

Secretary HARVEY. Right.

Senator REED. We are really talking about roughly $12 to $13 billion of recap, reset, that is a result of activities, Iraq, Afghanistan. All of that is in the supplemental. There is nothing in the budget.

Secretary HARVEY. Yes, $12 billion.

Senator REED. $12 billion, and the assumption underlying these projections, though, is that we will begin a significant drawdown this summer and that we will, for all intents and purposes, be out of Iraq by 2008.

Secretary HARVEY. I do not think—this is a plan put together by the Army equipment campaign. I think they made certain assumptions that may or may not come to fruition.

Senator REED. That is my point, I believe. If these assumptions do not come to fruition, the annual cost of reset and recap is closer to $12 billion than $4 billion.

Secretary HARVEY. I think you appreciate, Senator, that this is not an easy number to come up with. Besides the number of people in theater, it also depends on their OPTEMPO and whether or not they participate and perform the same operations that they did a year ago. So I think this is probably a reasonably good planning number. I would expect that with the standup of the Iraqi Security Forces for this number to come down.

Senator REED. Was this the planning guidance given to you by the DOD, that you would begin the withdrawal this summer and be completed by 2008?

Secretary HARVEY. No, no. This is an Army equipment campaign exercise based on assumptions.

Senator REED. Mr. Secretary, we have been at this now, and General Schoomaker, since March 2003. We have never seen these numbers go down. They seem to go up. I also understand that under the policy you cannot anticipate the loss of equipment, the battle loss of equipment. That has been happening. So those numbers are not even in here.

Secretary HARVEY. The battle loss is in here.

Senator REED. Going forward?

Secretary HARVEY. Well, at least this year the battle loss numbers are in here.

Senator REED. But going forward there is no, as I understand it, anticipation of battle loss until it is actually accrued, if you will? That is a strange term to use for this type of calculation. But more than that, there is also here an assumption that no equipment will be left behind for the Iraqi forces. Is that a correct assumption also?

General SCHOOMAKER. I do not believe that—I think these are unknowns, and I believe that, if I could——

Senator REED. Yes, sir.

General SCHOOMAKER.—because I may be misunderstanding you, but I think that we had this conversation when the Secretary of Defense was here, that the supplemental is to be used for war-related costs, much of which is unpredictable. We did not predict early on that we would have the number of electronic jammers that we have. We did not predict we would have as many up-armored vehicles as we have, nor did we have a good prediction about what our battle losses would be. So in many respects this is a rolling number, and I do not know of any assumptions——

Senator REED. General, I think an alternate way to look at it is that you are assuming away the problem. You have accrued $13 billion in recap and reset funds this year. You think you will have $10 billion next year, even though you are beginning to redeploy your forces according to your assumptions. These are absolutely unrealistic numbers, the notion that this is simply going to conclude at $36 billion, that we are going to be out of there in 2 years; and that is what I object to, sending budgets up here that underestimate, deliberately underestimate in my view, what you can reasonably anticipate in terms of the costs of reset and reequip.

General SCHOOMAKER. I do not know what the 2007 supplemental numbers are that have been sent up here, whether you have seen them. But that will answer part of your question.

Secretary HARVEY. We really have not sent up a 2007 supplemental, Senator. We have not sent it up yet. We have sent—the 2006 will be—I think as a result, when you passed the 2006 base budget you gave us a so-called bridge supplemental of, I think our part was $30 billion, and we call it a title 9 bridge supplemental. But we will submit the entire supplemental. It is still being worked through the Office of the Secretary of Defense (OSD) and the Office of Management and Budget (OMB) as we speak. So the final numbers on the 2006 supplemental are not yet finalized. We will then after that begin formulating the 2007.

But I think there is a degree of unknowableness here and we try to react to it.

Senator REED. My time has expired. Mr. Secretary, we all understand this is a projection. I do not think it is a terribly realistic one. If you incur at least $12 billion, $10 billion a year and you do not assume, as you just indicated that you are going to have a significant withdrawal of forces over the next several years, you cannot assume away at least that much cost. Perhaps it is a little less. Maybe it is just $9 billion. But it does not trail out to effectively zero in 2008, 2009, 2010, and 2011.

I think unless we have realistic assumptions—in fact, frankly, I think we would be in better position if you were giving us the worst case or the medium case, rather than what looks to be like a very saccharin best case.

Secretary HARVEY. Well, again, as I said, this is—a lot of this is unknowable at the present time and it depends on force levels, which you know have gone down somewhat. It also depends on the level of engagement of the troops in theater, which has gone down. So we try to do our best job in putting this, plugging this into our equipment campaign, because we need to give our depots, we need to give our suppliers, some planning numbers. These are, believe me, in the out years are very rough planning numbers, and the number I think that you can say has a lot degree of surety is what will come over in the 2006 supplemental. The 2007 has not been formulated.

General SCHOOMAKER. Sir, before we close this, for the record, I would just like to make sure that I am clear. Number one, I do not subscribe to the assumptions. I have never heard those assumptions, nor have I planned against them, what you have said. That I would say—

Senator REED. Can I ask you what assumptions you are planning against, sir?

General SCHOOMAKER. We are planning to provide the current level of effort, as we have briefed before, because we do not know. It is going to be determined by the combatant commander on the ground.

Second, you do not know the supplemental figures, nor do I know the supplemental figures that will be pushed for 2007. But we have stated what we believe to be our true requirement. It is not in our best interest to understate this requirement because we must get this Army balanced and resourced and make up for the situation that I have described here in the past.

The last thing I will say is that we have to think, on the basis of the Army, because of the way that we are supported by supplemental funding, to think about this in tandem. We cannot think about it separately. So any war-related costs that we have, reset, recapitalization, combat losses, force protection, all the rest of it, we are articulating to OSD and it is going forward in the appropriate way.

Chairman WARNER [presiding]. Thank you very much, Senator. We appreciate that.

Senator Dayton.

Senator DAYTON. Thank you, Mr. Chairman.

I want to recognize and appreciate the remarks of Senator Inhofe regarding the NLOS–C and recognize the leadership that he provided in that measure.

General Schoomaker, you said last week in your testimony before this committee that you are trying to manage our Reserve components on a predictable and manageable level that basically deploys them and gives them about five times the amount of dwell time as it does deployment time. My understanding is the Army's initial force structure design calls for reducing the number of Guard BCTs from 34 to 28, the number of division headquarters from 8 to 6. You stated earlier today that you are talking about 106 brigades total for the National Guard. How is that reduction going to affect this deployment rotation and what is the rebalancing going on then with the Guard if you keep the same number of brigades overall and going from 34 to 28 combat?

General SCHOOMAKER. I think it is a great question. Active, we are building from 33 not completely resourced active brigades to 42, and we are building 75 support units of action fully resourced. It is in the support units of action that we are most stressed. In the National Guard, we are building from—remember the National Guard had 34 brigades on paper, 15 of them called enhanced brigades that were more enhanced than the 34 but not as well off, equipment, et cetera, as the Active brigades. I prefer to say that we are going from 15 enhanced brigades to 28 fully resourced brigades, plus we are building—the residual is 78 support units of action in National Guard, fully manned, fully equipped, fully resourced, and within their 350,000 end strength we are building a TTHS account, which is the transients, trainees, holdees, and students account, that allows us now to get them the requisite training and education like their Active-Duty counterparts, without degrading the units from which the soldiers come.

In the U.S. Army Reserve we are doing exactly the same thing: 58 support brigades, fully resourced, with a TTHS account that allows them to do the same thing. We believe that what we are building to is the best equipped, best trained, best resourced Army, Active, Guard and Reserve, that we have ever had. That is why it is important for us to do it this way.

We have this window of opportunity, as I have said, with this extraordinary level of activity that we have going on with the war effort and the funding that you have supported us with to get this right. But this window will not last forever, and that is why there is the sense of urgency about getting it done. I hope that helps put it into context.

Senator DAYTON. Very much so. Thank you.

One of the reasons that we are in this recurring discussion about the Guard is because at least some of the adjutants general (TAGs), some of the Governors, I believe, felt that they were not fully apprised of your at least preliminary intentions. How are you going to, each of you, involve TAGs and the Governors, for that matter, but especially TAGs, in this shaping of the force and making sure that, on some of these things like the recruiting, the end strength, and the like, they are involved and engaged and aware of what the plans are?

Secretary HARVEY. A couple of weeks ago, or 2 to 3 weeks ago, we had a 2 to 3-hour meeting. General Blum brought all the TAGs in from all over the United States and we had a meeting to further roll out the force structure and answer their questions.

Senator DAYTON. Mr. Secretary, at that point they were, at least I had heard from my adjutant general, pretty concerned based on the rumors or preliminary information. I guess that that's exactly what I would like to see how are we going to avoid.

Secretary HARVEY. The intention of that meeting was exactly that, Senator, to make sure they were fully informed, as the chief said, of the details of the plan in terms of growing the number of brigades from 15 to 28.

I might add that we also showed them that we are standing up an additional type of support brigade called the combat support brigade, which has functionality in it which we think that has great applicability to their State missions. In the combat support brigade we have engineers, military police officers (MPs), we have air defense, chemical, civil affairs, functions like that, which help us in overseas deployment, but also have great applicability to State missions, and also stood up a number—we increased those by 40 percent and we increased the number of engineer brigades, strictly engineer brigades, by 60 percent. We revealed all those force structure changes.

Senator DAYTON. General?

General SCHOOMAKER. If I could just make one statement here. I will take responsibility for this. It was not handled as well as it should have been and I will accept responsibility.

Senator DAYTON. Thank you for that. Can we trust that there is a commitment now to engage them on an ongoing basis?

General SCHOOMAKER. We are now listening and in a very real way we have the leadership that is interfacing with the States. We are working to make sure that we meet the local demands, the State demands, and the National demands in a way that is as good for all of us as we can make it.

Senator DAYTON. That is good enough for me. Thank you.

Just for my information, when we are talking about the difference between 333,000 and 350,000, approximately how much money is that on an annual basis? What kind of differential are we talking about here? Maybe you can give me an answer to that in writing afterwards.

Secretary HARVEY. I think it is a couple billion. Could we add that to the record?

Senator DAYTON. Sure, just let me know.

Secretary HARVEY. We will add that to the record.

[The information referred to follows:]

FUNDING FOR POTENTIAL END STRENGTH

The table below outlines funding necessary to resource the Army National Guard (ARNG) at an end strength of 350,000 provided mobilizations continue as anticipated, approximately 40,000 mobilized annually. The National Guard Personnel, Army and Medicare-Retired contribution, Army is specifically needed to pay the additional 17,100 ARNG soldiers and provide the required Defense Health Program funding. Additional funding is needed in operations and maintenance and military construction to continue providing the necessary support to these soldiers. Current negotiations are ongoing regarding equipment/investment (procurement) restoral, and the total dollar amount depends on the final outcome of force structure adjustments.

It is important to note that current funding levels in fiscal years 2008–2011 will only support an ARNG end strength of 324,000 not 333,000.

[In millions of dollars]

	Fiscal Year					
	2007	2008	2009	2010	2011	2007–2011
NGPA	$188.8	$536.1	$554.7	$567.1	$579.9	$2,426.6
Medicare—ret HFC (NGPM)	62.4	66.4	70.7	75.3	80.1	354.9
OMNG	219.6	252.1	292.8	323.8	332.1	1,420.4
MCNG	0.0	80.3	30.6	88.7	42.6	242.1
ARNG specific procurement	318.0	111.5	0.0	106.6	413.2	949.3
Total	$788.8	$1,046.4	$948.9	$1,161.5	$1,447.8	$5,393.3

ARNG funded end strength: Fiscal Year 2006-350,000, Fiscal Year 2007-333,000, Fiscal Year 2008-324,000.

Senator DAYTON. Mr. Secretary, last week the Secretary of Defense indicated on a chart that there was, I guess I call it the international Base Realignment and Closure (BRAC), the consolidation of the deployment of our forces, which I believe are in over 130 countries around the world. It seems that part of the strain on our forces is the need to continue to deploy to that number of countries, which is in part what we have from the past rather than what we are trying to do for the present.

Is that process both in terms of bases and personnel deployed internationally going as far advanced as the domestic BRAC and reconsolidation?

Secretary HARVEY. We call that Integrated Global Positioning Basing Study. You have to discriminate between forward stationed overseas and deployed. When they are deployed they are not forward stationed. What our master plan is, which includes the BRAC recommendations and approvals, this Integrated Global Rebasing, and the standup that General Schoomaker mentioned of the nine additional brigades. That ensemble together represents our restationing plan.

In particular, we are bringing approximately 47,000 troops back from Germany and Korea. That is the major restationing and that amounts to, as I said, about 47,000.

Senator DAYTON. Is that considered to be the end point or is that——

Secretary HARVEY. Yes.

Senator DAYTON. My time has expired.

Secretary HARVEY. No, that is the end point.

Senator DAYTON. Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much, Senator.

Senator Clinton, followed by Senator Kennedy.

Senator CLINTON. Thank you very much, Mr. Chairman, and I would like to thank both of our witnesses for your service and your efforts on behalf of an Army which is bearing the brunt of our operations in Iraq and Afghanistan.

I would like to focus on two issues with both of you, body armor and pay problems of wounded soldiers. Secretary Harvey, on January 9, 2006, I sent you a letter regarding recent press reports that revealed a study by the Armed Forces medical examiner suggested that more extensive armor could have saved the lives of more than 80 percent of the marines killed by upper body wounds in Iraq between 2003 and 2005. I ask unanimous consent that my letter to Secretary Harvey and his response be included in the record.

Chairman WARNER. Without objection.

[The information referred to follows:]

HILLARY RODHAM CLINTON
NEW YORK
SENATOR

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COMMITTEES:
ARMED SERVICES
ENVIRONMENT AND PUBLIC WORKS
HEALTH, EDUCATION, LABOR, AND PENSIONS
SPECIAL COMMITTEE ON AGING

United States Senate
WASHINGTON, DC 20510-3204

January 9, 2006

The Honorable Francis J. Harvey
Secretary
Department of the Army
The Pentagon
Washington, D.C. 20310

Dear Mr. Secretary:

In light of the latest revelations on body armor vulnerabilities, I urge the Army to make every effort to provide additional body armor in the most expeditious manner possible to our troops serving in Iraq and Afghanistan.

Recent press reports have revealed that a study by the Armed Forces Medical Examiner suggest that more extensive armor, since 2003, could have saved the lives of more than 80 percent of the Marines killed by upper body wounds in Iraq between 2003 and 2005. The study concluded that greater body armor protection could have saved lives in Iraq. Indeed the number of lives lost to inadequate body armor could reach the hundreds if Army deaths attributable to inadequate armor not included in this survey are counted as well.

According to these press reports, the Army is still deciding what body armor plates to purchase. With every day the Army delays the decision of which additional body armor to procure, we put more of our men and women at risk. Now is not the time to allow the bureaucratic process of Army procurement to interfere with providing the best equipment to our troops serving in harm's way.

In addition, I would like my staff to be briefed on the study by the Armed Forces Medical Examiner that has not yet been made public.

Our soldiers make up the best fighting force in the world. We owe them nothing less than our fullest efforts in providing them the best gear now.

I look forward to your prompt response. Thank you for your consideration.

Sincerely yours,

Hillary Rodham Clinton

Hillary Rodham Clinton

SECRETARY OF THE ARMY
WASHINGTON

JAN 17 2006

The Honorable Hillary Rodham Clinton
United States Senate
Washington, D.C. 20510

Dear Senator Clinton:

Thank you for your letter regarding body armor, and your support for providing such equipment to our Soldiers "in the most expeditious manner possible." Nothing is more important to the Army, or to me, than protecting our Soldiers.

Since the start of hostilities in Iraq, the Army has made several significant improvements to Soldier body armor to address existing and future threats.

The basic body armor in use today is Interceptor Body Army (IBA), which includes an Outer Tactical Vest (OTV) and Small Arms Protective Inserts (SAPI) ballistic plates. This protection has been very effective and has saved thousands of Soldier's lives. In March 2003 the Army had roughly 32,000 complete sets of IBA. By April of 2004, all Soldiers in Iraq and Afghanistan had IBA. Today we have provided over 700,000 sets of IBA to Soldiers, more than enough for every Soldier in the Iraq and Afghanistan Areas of Responsibility (AORs) and the majority of the operational Army at large.

Our Soldier protection efforts did not stop there. We immediately started to develop an enhanced version of body armor because improved material and manufacturing technology were mature enough. The development was initiated in response to an anticipated threat. In a matter of a few months, the Army designed, fully tested and began fielding Enhanced SAPI (ESAPI) which provides increased ballistic protection from more lethal ammunition types. In less than six months the Army developed, tested and fielded over 90,000 sets and we expect to complete the Theater fielding requirement of 201,000 sets by March 2006.

The Army continues to work closely with the Office of the Armed Forces Medical Examiner, deployed healthcare providers, and operational commanders to ensure Soldiers have the best available protective equipment that does not hinder their mission effectiveness. As new requirements are identified, the Army has worked to meet them expeditiously. For example, the Army has provided 173,000 sets of deltoid axillary protectors – enough for every Soldier stationed in the AORs – which provide enhanced protection for the shoulders and side areas.

Last September, after Army commanders in the two AORs identified the need for additional body armor protection in the form of side plates, the Army quickly developed, tested, evaluated and began procurement of new side plates based on Enhanced SAPI

technology. The initial test and evaluation is complete and the Army will begin production and fielding in February 2006 with an initial production of 3,000 sets per month and production quickly ramps up to 30,000 sets per month.

Further, while I cannot comment on the recent reports regarding the effectiveness of the United States Marine Corps (USMC) body armor, an initial assessment of Army hostile fire casualty reports in 2005 indicates that few, if any deaths were the result of gunshot wounds to the side. It is difficult to make a similar estimate from IED/shrapnel injuries/deaths because there are often numerous wounds from this type of attack. Notwithstanding this analysis, we believe it is important to quickly field these side plates because of the adaptive nature of the enemy.

The bottom line is that we continuously develop improvements across the spectrum of our war fighting capabilities, quickly and comprehensively test the improved equipment and field that equipment without delay. Unfortunately, even though we provide our Soldiers with the best equipment available, armor alone will not protect them from all of the threats posed by the insurgents in Iraq. That is why the Army is constantly working to update tactics, techniques, and procedures (TTP) to ensure our Soldiers have the situational awareness and combat effectiveness they need to engage the enemy. Further, in our efforts to provide Soldiers with the maximum amount of body armor protection, we need to be careful that we do not overburden, overweigh or overly-restrict their movement to the point that they risk becoming unable to respond effectively and efficiently to these insurgents.

The men and women of our all-volunteer Army are the best trained and equipped fighting force in the world, and we will continue to strive to ensure they remain so.

As always, we are willing to have the appropriate Army personnel come and brief you and your staff on the facts surrounding body armor and other force protection issues.

Sincerely,



Francis J. Harvey

Senator CLINTON. In your response you stated that the Army began development of new side plates based on enhanced small arms protective inserts last September after Army commanders in Iraq and Afghanistan identified the need for additional body armor protection. When did commanders in the two areas of responsibility first learn of the need for additional body armor? Was that also in September?

Secretary HARVEY. Senator, I do not think I really have firsthand knowledge of when they discovered that. I can just tell you that these, we call them Operational Needs Statements (ONS), come

from theater, and the request for a side plate came in September. Our materiel people went immediately to work on that, designed the side plate and how to attach it to the Interceptor body armor, tested it in ballistic tests and other tests, and certainly tried to minimize the weight, and then put it into production in a matter of less than 4 months.

So it is in production and the first 5,000 will be delivered this month and we want to get to a rate of 20,000.

I think I also mentioned in the letter that this is up to the commander in theater whether to use it. We really cannot order him to use it. It is up to circumstances and missions and so forth. Our job is to make it available. So we will quickly, I think, be able to make those side plates available. It is an additional 5 pounds, Chief, I think? So they now, with the side plates, have 31 pounds of armor on, which, as you may have read in the paper, is not universally accepted by our soldiers.

Senator CLINTON. I am well aware of that. I think that the challenge is to provide it and, where appropriate and commanders feel that it should be worn that is part of the command decision. Where it is optional, at least it is available so that soldiers can make a decision based on their own assessment.

But what concerns me—and this is a point that I would like to zero in on—according to the Marine Corps, the Marines identified the body armor requirement in June 2005. One of our hopes through the emphasis on jointness, going back to Goldwater-Nichols, is that information will be shared among the Services, that decisions about procurement can be expedited, because clearly if marines are finding from their commanders that this might be necessary, then a few months later we hear that the Army is doing the same—and I just hope we can get a little more coordination on some of these issues going forward in the future that pertain to the protection of our force.

Secretary HARVEY. We were aware of that Marine Corps study. It was performed by the Army.

Senator CLINTON. That is what I thought. But here is why I raise it. According to an article on February 12 in the L.A. Times, there is a similar disparity existing between the Army and the Marine Corps on plans to employ the Joint Improvised Explosive Device Neutralizer (JIN). According to this article, the Marines have decided to deploy the JIN prototypes while the Army claims the device needs further study.

Perhaps you and the General could just explain to me, why do we see this disparity in the way that our commanders, Army and Marines, in the field are reacting to the need to neutralize IEDs, and is there a process where we can better coordinate this? It is the same young American body out there doing the job we sent that young man or woman to do. Is there some reason why the Army would be delaying a decision on that while the Marines felt satisfied that they could go ahead with it?

Secretary HARVEY. I think, Senator, there is some confusion on this issue. I am familiar with the JIN. We developed it at the request of theater. Multi-National Corps-Iraq (MNC–I) disapproved deployment for operational assessment pending the development of what we call tactics, techniques, and procedures. I cannot speak for

the Marines, but we provided, at their request, a prototype, actually 12 prototypes, and MNC–I ruled that until these tactics, techniques, and procedures are developed that they believed it was not ready for deployment yet.

The next step is to do this operational assessment in theater. I do not really know the details of why, but it is again up to the theater and it is up to the theater commanders to say that they believe that this device is safe and it is effective. I cannot speak for the Marines, but it is my understanding that until MNC–I says you can do it, it is not the Army's decision. We provide it and they have to develop its use, train the soldiers how to use it, and ensure that, for example, it does not result in an accident—it defeats an IED, but a soldier rolls over and there is an accident or there is a death involved.

So I do not think it is as straightforward as it seems and my understanding is until the MNC–I signs off it will not be deployed either by the Army or the Marines.

Senator CLINTON. Obviously one of our great concerns on this committee has been the enemy's capacity to innovate with respect to explosive devices, and I would hope that we are putting any effort on our part on a fast track, that we are not in any way getting bogged down in bureaucracy about procedures, that we are out there in appropriate circumstances, with appropriate supervision, trying to test these devices that we think can neutralize it.

General, did you want to add to that?

General SCHOOMAKER. If you would permit me, I think I might be able to add something to it as well. First of all, over 2 years ago the Army on our own initiative started the Joint IED Task Force, and we were doing that within our own resources. More than a year ago, we went forward and I personally talked to Secretary Wolfowitz and asked that OSD help us provide some top cover and expand the resources that we would have, not just money, but access into places, industry, and into the scientific laboratories, et cetera, that would help us with this.

Now we have this thing with General-retired Monty Meigs at the head of it and it is quite expansive. This Joint IED Defeat Organization is in fact a joint clearinghouse for these kinds of issues. It does not mean that the Services have to comply with the recommendations that come out of there, but it certainly is a way to bring things together.

Going back to the Army and Marine Corps, we are working closely together. In fact, we are probably working more jointly together than any other Services are with the Army, although we have improved considerably across the board. The Marine Corps is fighting in different places. They fight with different tactics, techniques, and procedures than we do and they are on a totally different scale. They are also not as heavily armored as the Army is. So they make decisions based upon how they operate that may be different than the way we would go about doing it. Certainly the scale at which they would field things makes it a little bit different than when we talk about fielding them on the scale that we are.

So that is not to say that this was the right decision, and I do not know all the ins and outs of the particular issue that you have, but I do know where the clearinghouse is and where we are having

these conversations and this is certainly something we should look into and find out what the circumstances. I hope that helps clarify.

Secretary HARVEY. Senator, I might also add that in round numbers Congress has been very generous in support of the Joint IED Task Force. This year there is $3.5 billion devoted to this. We are about to field the next generation countermeasure IED, which is another advance in technology. We continue to improve the armor of our vehicles. So we have a holistic approach. We continue to develop tactics, techniques, and procedures. We continue to look up the food chain, so to speak. There is a wholesale part to these IEDs, the wholesale and the distribution. We have a whole spectrum of initiatives, both technology and tactics, that we are fielding and, as the chief said, a very able four-star retired General Monty Meigs came back and felt so strongly about it he volunteered to head the organization.

So I think in terms of fundamentals we have everything in place, and I can tell you from my personal experience that our institutional Army takes this very seriously. We are soldier-focused and bureaucracy is set aside because we have to get it to the theater as quickly as possible, but it has to be reliable. It cannot be a false sense of security.

Senator CLINTON. Thank you. My time is up.

Chairman WARNER. Thank you. Senator, if I might observe, through many years that I have been privileged to be associated with the military, I have observed, particularly as a former marine myself, where the commandant and other senior officers felt that certain equipment which was available to both the Army and the Marine Corps would be more desirable for the Marines. I remember specifically in Korea there was a boot that, fortunately, the Marines selected which protected from frostbite and it is documented to be far superior to the Army boot, and they had to play catch-up.

But I do not think it is mismanagement. It is to give some discretion, some measure of discretion, to the two most valuable ground combat units in the world, the Army and the Marine Corps, to select for themselves.

I am glad, Secretary Harvey, you brought in a recitation for this record about General Meigs coming back on Active-Duty and the elevation and the increase of that joint organization. I think it has quadrupled almost.

Secretary HARVEY. It has, at least.

Chairman WARNER. In terms of budget.

Secretary HARVEY. Yes.

Chairman WARNER. So every possible attention is being given to this IED problem. But I thank the Senator from New York because body armor and the protection of our troops has been one of your hallmarks and specialties.

Senator Kennedy.

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

Just to continue along on this line, I will tell you why many of us are concerned about the sense of urgency on these issues, because we remember, General Schoomaker, that 3 years ago when we talked about up-armoring the Humvees you said you would look

into it, and 2 years ago before the committee you said that, I am confident we are doing everything we can to move more up-armored Humvees and other armored vehicles into theater. Yet, nearly a year later soldiers were still digging through dumpsters to find armor for their vehicles.

The Pentagon now in the time that I have been—since we have been in Iraq, has changed their estimate and the requirement for up-armored Humvees nine times, nine times. So do you expect them to go up again?

General SCHOOMAKER. First of all, sir, the demand is placed upon us from the theater, not in the Pentagon. We now—

Senator KENNEDY. Wait. The theater, not the Pentagon. Well, who makes the judgment out in the theater? Who is responsible, then?

General SCHOOMAKER. The commanders, and General Casey at this particular time is the commander that levies the requirement about what they want. This is not to denigrate them at all. This has been a learning process. So they have upped several times, maybe nine times—maybe you are correct—the——

Senator KENNEDY. Nine times, it is nine times.

General SCHOOMAKER.—numbers of Humvees that are required and, by the way, all of the other armored wheeled vehicles that we have provided, which now is over 20,000, maybe more. Additionally, we have added additional tanks and Bradleys, Strykers, and other kinds of vehicles over there to also be part of the equation.

So it is a dynamic situation, one in which we continually work to fill, and I agree with you it is frustrating because we seem to be shooting behind the ducks all the time. We are trying to get——

Senator KENNEDY. I am not sure that is a good analogy today, but in any event, moving on. [Laughter.]

General SCHOOMAKER. I think you are referring to quail hunting, not ducks.

Senator KENNEDY. That is all right.

It is difficult for us, particularly when we have heard from those who have served over there where they have not had the Humvees. We have lost 42 brave men and women in my own State of Massachusetts. Up to probably the last three or four deaths, we were having about a third that had been killed because they did not have the up-armored Humvees. Now that has moved, the up-armoring has moved along, but it has taken a long time, a long time.

I think the idea that the responsibility is from the local commanders that we have not had the up-armored Humvees and it has taken this long a period of time should not be terribly satisfactory. It should not be terribly satisfactory, I would not think, to you or to the others, since we have changed that number nine times. As I understand it, you are going to change it again. Am I correct?

General SCHOOMAKER. It could be. There is no excuse in this. The reality is this. We started the war with less than 500 up-armored Humvees. The Army and the Marine Corps and everybody else never had a plan nor an idea that we would ever up-armor this many wheeled vehicles.

We also started the war manufacturing only about 1,200 sets of body armor a month, as opposed to the 25,000. It goes back to the level of resourcing that we have had over the last decade or more,

$100 billion worth of shortfall, and those are some of the areas where risk was taken. Now all of a sudden, we have a requirement to up-armor everything and for everybody to wear this stuff and it is chasing a requirement that in my view will continue to migrate, and we are going to continue to have to either anticipate it and overproduce, which I believe we have in body armor, or come up with other solutions to this situation that we have.

Senator KENNEDY. The point is now, are you changing your estimate in terms of the up-armoring the Humvees now? Are you going to request additional numbers?

Secretary HARVEY. Senator, our plan is to continue to produce the level 1 Humvees. We now have 11,000 in theater.

Senator KENNEDY. Are you increasing the production rate?

Secretary HARVEY. Yes, we are. In 2003, it was at 30. Now it is at 700 and it is on its way to 1,100 a month. So we are increasing it over the next 6 months to 1,100.

Senator KENNEDY. The reason we make it is because the Government Accountability Office (GAO)—this is not just—this is the GAO last year criticized for not having a strategy to end the equipment shortfalls. I mean, this is not just a member of the committee. This is the GAO. I do not want to take the time, but this is a part of the reason that many of us are concerned, whether we are going to miss the opportunity again with this new vehicle that Senator Clinton—the JIN vehicle, whether we are going to be back here now, hopefully not, in another year, 2 years, and 3 years and have someone that is going to say, look, I am going to take a look at it, I am confident we are doing everything we can to move it forward.

But does General Votel agree that this should not be deployed, I would ask Secretary Harvey or General Schoomaker, who has been involved in this program?

Secretary HARVEY. I do not think that is General Votel's decision. That is a theater decision, whether the training materials are there, whether the tactics have been developed. General Votel would, say, provide it from a technical point of view.

Senator KENNEDY. Well, what would he say, since he was in charge, as I understand——

Secretary HARVEY. I think you would have to—I would not know.

Senator KENNEDY. Well, do you think it would be worthwhile finding out?

General SCHOOMAKER. We can provide it for the record.

Senator KENNEDY. Yes.

[The information referred to follows:]

JOINT IMPROVISED EXPLOSIVE DEVICE DEFEAT ORGANIZATION (JIEDDO) FIELDING OF JIN

Senator Kennedy, we have asked the Director, JIEDDO, to respond to your concerns.

General SCHOOMAKER. But I believe we are mixed here, because I believe what Senator Clinton was talking about was a robot, a robotic vehicle that is not manned.

Senator KENNEDY. That is right. It is called JIN, the Joint IED Neutralizer.

General SCHOOMAKER. It is not in the same category as up-armored Humvees.

Senator KENNEDY. No, I am moving. What I was pointing out is that we were awfully slow in getting the up-armor and we do not want that to happen in this case here. We have, as I understand—this has been tested, supported by Secretary Wolfowitz and General Votel, who believe that this can provide a very dramatic and important additional security against IEDs for the men and women in the field. Since he was, as I understand, the program manager out there and been very positive, I would have thought it would be useful for someone to talk to him whether he thinks it should be deployed as well.

General SCHOOMAKER. Sir, we certainly should if that is his opinion. That is not what I understand and we will have to check.

Senator KENNEDY. Well, Secretary——

Secretary HARVEY. We can do it, but again the final decision is not from the acquisition community; it is from the operational community.

Senator KENNEDY. My time is up. Do you have the resources available if they ask for it?

Secretary HARVEY. Absolutely. If it pans out to be as effective as it is intended to be, we have the resources. We can reprogram resources. As I said before, I think the total budget is $3.5 billion for IED-related technologies and systems development and production.

Senator KENNEDY. Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much, Senator Kennedy.

Senator Lieberman.

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

Mr. Secretary, General, thank you very much for your testimony, for your service every day and, through you, to the men and women of the United States Army, for the extraordinary job they are doing for us everywhere that we ask them to protect our security in a very wide range of missions. I cannot—I agree with every superlative that has been used this afternoon to describe the Army today. I have seen it myself as I have had the honor to go around the world and see them, particularly in war zones.

The quality of our soldiers I think is extremely high and is not at all a problem. The problem that I want to talk about and a concern that I have is whether we have enough soldiers, whether we are giving you and them enough personnel support to carry out the multiple missions that we have given to the Army.

The Army is not broken in my opinion. I appreciate actually your term, General Schoomaker, because I think it says it more accurately. It is stretched. We are asking you to do an awful lot. My fear is that if we do not give you more Army end strength and fill it, it is never going to break, but the stretching is going to develop some cracks that we do not want to see in this great Army of ours, particularly because we are asking you in a modern context to do a lot more than just engage the enemy in combat. You are performing an extraordinary range of peacekeeping, humanitarian, civil, political, in the best sense of interacting with the local population, missions.

So here are the facts. The QDR recommends that the Army decrease its size. Right now there are approximately 500,000 Active

soldiers in the Army, which incidentally is down from about, as you well know, 800,000 at the end of the Cold War. So the Army has taken some hits and, to put it another way, given back during the so-called peace dividend years.

The QDR suggests that this number now should decrease by about another 20,000, to about 482,000, by fiscal year 2011. We are in a war. By everybody's description, it is going to be a long war. I myself can find no instance in our Nation's history where we reduced the size of our Army in the middle of a war, and we may well be just at the beginning of this war.

My question is—and I want to straight-out express my concern, my own concern about what happened here, that you are operating in a budget-limited environment and you have an understandable commitment to the development of the FCS, which I support, have as long as I have been on this committee and been chair or ranking on the Airland Subcommittee, and once you do that you are just not left with enough resources. Something has to give, so the number of personnel has given.

I think that is an unfair position to put the Army in, not only you as the leaders of it, but all of the soldiers who are in it because it puts more stress on each of them.

So my question really is a general one: What is the rationale for decreasing Army end strength at this point in time, which is wartime?

Secretary HARVEY. Let me respond to that and then General Schoomaker can chime in. Just by way of background, Senator, the Army is really—let us talk about the Active Army. It really consists of three parts. It consists of the operational Army, which provides the warfighting mission; it is the institutional Army that generates the force—the Army Materiel Command, Training and Doctrine Command, commands like that—and then this overhead account that we call the TTHS account.

If you look at those together, in fiscal year 2004 we had 482,400 and the operational Army was 315,000. Our plan is to grow that operational Army by 40,000 over the—actually by fiscal year 2008, so that we go from 315 to 355. In parallel with that, we start to decrease the size of the institutional Army through military to civilian conversion, which is looking—and we have identified 22,000 positions thus far where we think that we could put a civilian in and then that position could be filled and transferred over to the operational Army.

But the timing of all that does not work out. So in the interim we want to build to about 512,000 as the operational Army goes from 315, and I might note today it is at 330, so we have added 15,000 people to the operational Army. We have also brought the institutional Army down by about 5,000. So we are starting to have one grow and one come down, with the net result in fiscal year 2011 to hold it at 482.4.

But we are really growing that part of the Army that fights the war in terms of its end strength, which we think is most important.

Senator LIEBERMAN. I must say that is the first time I have heard that explanation.

Secretary HARVEY. I can come over and give you more detail on it.

Senator LIEBERMAN. I would like to go over it in more detail. So if I hear you right, based on the changes you are making, you are actually saying that you are going to increase the so-called boots on the ground.

Secretary HARVEY. That is exactly right. We are going to more efficiently manage through this military to civilian conversion the institutional side.

Let me also say that operational capability is a function clearly of end strength, but it is also a function of the quality of the soldier, it is also a function of the quality, quantity, and technology of the weapons and information system. It is also a function of the caliber of the leadership, the degree of training, the efficiency and effectiveness of the tactics, techniques, and procedures. All those elements go into the operational capability, also the number of units. So if you look at what I just described as really the operational capability of a unit and then the number of units we are growing from 33 to 42.

So besides the end strength, we are increasing the overall operational capability from other dimensions and, as you mentioned—and we appreciate your support of the FCS—that is going to make, as the chief—I do not know if you were in the room when the chief talked about that two people in the future are going to do the job of 40 people because of the technology of the weapons system, and this is the NLOS–C.

So all those factors come into play.

Senator LIEBERMAN. But you agree that at some point, notwithstanding the force multiplier effect that technology can have, that at some point——

Secretary HARVEY. You need a minimum of boots on the ground, absolutely.

Senator LIEBERMAN. If I could just go back to that. The FCS. You need boots on the ground.

Secretary HARVEY. Absolutely.

General SCHOOMAKER. The brigade will be 900 people smaller because of technology, but it will in fact have twice as many infantrymen in squads than the current brigade has. That is how powerful the deal is.

Here is the other piece, why what Secretary Harvey is talking about here is so important. Growing the operational Army is what is important and we have to do it within the resources that we have, because you have given us the authority to grow the Army by another 30,000 to 40,000 soldiers and you have given us the money to do it, and we have been doing it for 2 years, but we have only grown a little over 10,000 soldiers.

You could authorize us to have another 2 million in the Army and it will not make it any bigger because of the challenge of recruiting. We are recruiting 170,000-plus soldiers every year, Active, Guard, and Reserve. That is the size of the entire United States Marine Corps. That is what we are recruiting every year. So it is academic about what you authorize because we are already recruiting the end strength——

Senator LIEBERMAN. You have touched on a real problem. My time is up, but obviously one of my concerns is that because the Army is stretched and we are asking a lot of those on Active-Duty

now, it becomes a less attractive alternative for people in terms of signing up.

General SCHOOMAKER. I have a different problem than that. Only 3 out of 10 males between the age of 17 and 24 can qualify to be in the United States Army today.

Senator LIEBERMAN. Right.

General SCHOOMAKER. That is a serious problem. About 15 percent of that population that qualifies is providing about 49 percent of our recruits right now to the United States Army. So this is the business side of this that really makes this a very tough kind of conversation. That is why the way we are approaching this, by growing the boots on the ground piece of the Army inside of our resources, is so important. That is why our modernization is so important, so that we can leverage that in a way.

This is the first time this Nation has been in a protracted war with an All-Volunteer Force and the fundamental problem we have in restructuring our Guard, Reserve, and Active Forces is that in many respects the force structure was still structured for the Cold War and was expected to be filled out by what we used to have, which is draftees, which we do not have any more. So we have to fundamentally change the equation here. That is why this program is so important.

Senator LIEBERMAN. My time is really up, but I would like to continue this discussion, because I think there are a lot of people on this committee in both parties who want to make sure that, for resource reasons, you are not—of course we are not going to add two million, but you are not being limited in personnel in a way that is going to compromise the effectiveness of the Army.

Secretary HARVEY. Let me say on the good news side that for the last 8 months we have met our recruiting goals, and February looks good, and the Guard has done very well. They have recruited their goals for the last 4 months. So it is a challenge every day, but we are doing much better and we are gaining confidence.

Senator LIEBERMAN. Bless you.

Thank you.

Chairman WARNER. Thank you, Senator.

I will now begin the second round. You do mention the recruiting goals, but I was aware of the fact that you are falling short in some of your officer requirements, captains and majors; am I not correct in that?

Secretary HARVEY. No. I will tell you, Senator, if I could talk to that, in terms of company-grade officers, our attrition rate of company-grade officers is around 8.3 percent and if you look at historically back over the last 5 years you will find that we have averaged—the average attrition rate is just about 8 percent, maybe it is a little higher, 8.5 percent. It dipped after 2001 and then went back to its historic levels.

But the attrition is only one component, of course, because coming in is the accession or the recruitment or the graduation in this case of officers out of our various and sundry schools. If you look at over the last 5 years the number of company grade officers has actually increased by about 10 percent.

Chairman WARNER. Let me just interrupt. Members of this committee and other members of Congress are very careful in ana-

lyzing the media and so forth. This question was prompted by an article in yesterday's Washington Post. Have you read it?

Secretary HARVEY. Yes.

Chairman WARNER. Do you say that it is inaccurate, then?

Secretary HARVEY. Yes, because—I can submit numbers for the record, but let me roughly say that——

Chairman WARNER. We must press on. Would you kindly provide for the record——

Secretary HARVEY. I will, I will.

Chairman WARNER.—your recitation of fact which you feel has an accuracy that is lacking.

Secretary HARVEY. In terms of company-grade officers.

[The information referred to follows:]

NUMBER OF COMPANY GRADE OFFICERS

The Active Army is not short company grade officers in the aggregate. There is, however, a shortage of some of the more senior captains needed to fill positions where more experience is desired. The current authorizations and operating strength is as follows:

	Authorized	Operating Strength
Lieutenants 01/02	10,019	11,843
Captain/03	20,482	21,375

The operating strength does not include officers assigned to the Trainee, Transient, Holdee, and Student account.

Chairman WARNER. I thank you.

I would now go to the next question, which bears on this same issue, and that is the women, its importance and ever-growing importance in the military Services. What is the Army's current practice with regard to the assignment of women as it relates to their assignments bringing them into areas where there is combat? We, I think all of us, recognize today it is almost a 360-degree zone of combat certainly in Iraq, maybe to a lesser extent in Afghanistan.

Secretary HARVEY. Let me just comment on——

Chairman WARNER. So what is your policy today and how do you handle that?

Secretary HARVEY. The policy, of course, is a well-established policy that goes back to 1992.

Chairman WARNER. I think it is 1994, section 5.401.

Secretary HARVEY. Actually the co-location component I think went even earlier than that. But there are two components to the policy for the Army and that is assigning women to units below the brigade that perform direct combat, direct ground combat; we exclude women from those units in our design of the Army modular force. Those units, those skills that perform direct ground combat, are infantry, armor, combat engineers, special forces, et cetera. They are excluded from that.

Now, in terms of co-location, we have designed the BCT that we have talked about and we code positions in forward support companies and other companies so that no women will co-locate with a unit performing direct ground combat. So from an organizational point of view, our designs—and I am confident in this—are totally,

totally consistent and compliant with DOD policy and they have been since I have been involved in it over the last several years.

Chairman WARNER. I just want to make sure that women are given opportunities——

Secretary HARVEY. They are.

Chairman WARNER.—at no cost to their careers.

Secretary HARVEY. They are.

Chairman WARNER. But we recognize there are certain limitations.

Secretary HARVEY. We comply totally to the policies of the DOD.

Chairman WARNER. That is fine.

General, do you have anything further to add on that? Do you see any pushback from the women? They are at risk, we recognize that. Even though these statutory and code provisions, we must recognize they are at risk.

General SCHOOMAKER. Sir, the policy is as stated and that is what we are organizing, training, and equipping to do. But as you pointed out, the battlefield is a 360 battlefield. We have to train every soldier to be able to survive and not be a liability on the battlefield and we are.

Chairman WARNER. That is understood.

General SCHOOMAKER. Should a female soldier become engaged in direct ground combat as a result of a 360 battlefield, we want them to be well-trained and equipped to do so, and that is what we are doing.

Chairman WARNER. Understood. Now, what about the aviation units, gentlemen—either of you can take that—which are often in direct support of those combat units? We have a number of women in aviation billets.

General SCHOOMAKER. The same policy applies, sir. They do not have a direct ground combat role, nor do they co-locate during the point of direct ground combat.

Chairman WARNER. So the helo support going in for a ground unit is then restricted to males flying those?

General SCHOOMAKER. There are females flying——

Chairman WARNER. That is right. In other words, I think your doctrine recognizes that females can fly in on those missions with direct support of those who are engaged in combat; would that be correct?

Secretary HARVEY. Yes, and that is not considered by the policy to be direct ground combat.

Chairman WARNER. All right. It is plenty dangerous for sure.

Secretary HARVEY. Yes.

Chairman WARNER. They have performed magnificently.

Secretary HARVEY. Absolutely.

Chairman WARNER. We are receiving here in Congress from our constituents some concern about the next of kin receiving timely information about their family members in the Armed Forces, and indeed about the cause and circumstances of death and injury. You have directed, Mr. Secretary, my understanding, a review of Army procedures in this regard. What have been your findings on that and how can we ensure that families get accurate information as soon as is possible with regard to their loved ones?

Secretary HARVEY. It is a very important issue to me, Senator. As you say, I was made aware of, going back to last summer, some incidents where we did not meet the expectations of the families. It is a handful of incidents and in my estimation it is too many. The objective here is 100 percent execution. So I started and asked the inspector general to conduct an end-to-end review of our casualty reporting, notification, and assistance process.

Chairman WARNER. So you are really moving out on this situation——

Secretary HARVEY. Yes.

Chairman WARNER.—to improve it as best you can?

Secretary HARVEY. Right.

Chairman WARNER. My last question then would be to General Blum. Now, I provided you a letter written with 77 Senators having signed that letter, regarding the Guard and Reserve, with Senator Leahy and Senator Bond, neither on this committee, but nevertheless with this committee participated to some extent in signing that letter. Do you have any comments on that letter at this time, General Blum?

General BLUM. Yes, sir, I do.

Chairman WARNER. Would you take the microphone, please. What I would ask is just give us a quick summary of your views and then provide me and the ranking member with your response in detail to that letter.

General BLUM. Yes, sir, I would. Mr. Chairman, first let me say I welcome the strong and unswerving support of this body——

Chairman WARNER. You have it, you bet.

General BLUM.—for our citizen soldiers. The two issues of concern here, for the interest of time, were reconciling the Army's message of 350,000 end strength, if we can grow to that and resourcing it, with a force structure allowance of 348,000, which they have reaffirmed and reassured all of us again today they are committed to. I told you the faith and confidence I have in the Army leadership and the degree that I am willing to trust them. They have admitted openly today that we could have done this better and we have fixed that and moved on. I cannot change what happened, but we are moving forward in a collaborative manner. The adjutants general are absolutely helping cobble together the solution for the force structure, and that is the conversion of six combat brigades to six brigades that are even more relevant for future warfare and even more useful to the Guard.

Chairman WARNER. If you would provide an answer then for the record going into some detail.

General BLUM. Yes, sir.

[The information referred to follows:]

DEPARTMENTS OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
1411 JEFFERSON DAVIS HIGHWAY
ARLINGTON, VA 22202-3231

April 7, 2006

Chief, National Guard Bureau

The Honorable John W. Warner
Chairman
Senate Armed Services Committee
Washington , DC 20510

Dear Senator Warner:

During the Senate Armed Services Committee hearing on February 14, you asked me to provide my views on issues raised by Senator Bond and Senator Leahy in their letters to Secretary Rumsfeld and your Committee.

First, I want to address the concern that the End Strength of the Army National Guard is going to be reduced. The Army National Guard's End Strength should continue to be authorized by Congress at 350,000. The Department of Defense FY07 budget as submitted in February proposed an End Strength of 333,000 for the Army National Guard. Over the last several weeks the leadership of the Army National Guard raised concerns that 333,000 was too severe a reduction. The Department of the Army listened to those concerns and agreed to leave the End Strength of the Army National Guard at 350,000 and fund the End Strength that the Army National Guard can achieve by FY07. I have assurance from the Army leadership that they will make funding adjustments as our End Strength increases to 350,000. I have no reason to doubt their commitment to funding the End Strength of the Army National Guard.

The second concern the Senators raised is the issue of restructuring the Army National Guard without significant input from the Army National Guard leadership. Although we were not initially consulted, that is behind us and we are now part of a collaborative effort to achieve the right capabilities for the Total Army. As a result, the Headquarters of the Department of the Army agreed to a 348,000 Force Structure Allowance through FY 10. Starting in FY 11, we plan to resource our Force Structure Allowance at 342,000. The 8,000 space difference is dedicated to an account for non-deployable troops such as trainees, transients, holdees, and students in order to improve the readiness of our units. What remains at issue is the mix of capabilities required to support both State and Federal missions.

The Army originally planned to reduce the Army National Guard by six Brigade Combat Teams, two Division Headquarters, and one Combat Aviation Brigade. As the result of meetings between the Army leadership and the Army National Guard leadership, the Army no longer plans to eliminate the two division headquarters and is still considering its options regarding the Combat Aviation Brigade. It is important to note that the Combat Aviation Brigade is a highly versatile Combat Support and Combat Service Support asset that, if lost, would cause some States to be without aviation assets due to the reorganization that would naturally occur. The number of brigade combat teams within the 106 brigades of the Army National Guard remains at issue.

To resolve this issue, the Army is working a couple of initiatives. First, the Army is moving forward to properly model homeland defense as a subset of the National Military Strategy. The results will be reflected in a better resourced force during the next Total Army Analysis. Second, the Army is working with the Adjutants General of the United States in a collaborative effort to determine the right capabilities for the Army National Guard. The Adjutants General Association of the United States is meeting with the Headquarters of the Department of the Army through an Adjutants General Force Structure General Officer Steering Committee. This Steering Committee of 15 to 20 Adjutants General representing all 54 States and Territories is absolutely essential in order for us to achieve the right mix of capabilities that the States need to execute both their State and Federal missions. I am optimistic that the right solution will be reached.

At the same time, I am working with the leadership of the Air Force so they are aware of the important homeland defense mission the Air National Guard performs for the Nation. I am also calling their attention to the wisdom of including the States in these sorts of programmatic decisions.

As we work through the coming period of changes in our force structure, Citizen-Soldiers and Airmen will continue to be grateful for your enthusiastic support and stewardship of the National Guard.

Sincerely, V/R

H Steven Blum

H Steven Blum
Lieutenant General, US Army
Chief, National Guard Bureau

Chairman WARNER. Lastly, it is not included in that letter, but as you well know the Guard has a responsibility to their governors and the State adjutants general. In this reorganization, is that carefully protected, that mission of every State Guard?

General BLUM. I think it is not only carefully protected, but it is actually enhanced. That is as clear as I can make it. I truly believe in the rebalancing effort and I believe in doing it collaboratively with the adjutants general the States will actually build State plans that will be aggregated at my level, and I will work with the Army to ensure that what those formations used to be become something even more useful to this Nation.

Sir, the last piece to this letter is the most significant and that is the understanding of the cost of doing what we are talking about approximates about $800 million in 2007, and I have the assurance and commitment of the Army leadership that even while the current budget submission does not reflect exactly that and it shows a shortfall or a taking away of that money for an earlier plan, that will be restored, and the two gentlemen at this table have committed to me and I am sure would commit to you to do that.

Chairman WARNER. Thank you very much, General.

Do you have any further comment on that letter?

Secretary HARVEY. No, I do not.

Chairman WARNER. Thank you.

General Schoomaker?

General SCHOOMAKER. No.

Chairman WARNER. If not, Senator Levin.

Senator LEVIN. First let me commend all of you in terms of addressing this Guard issue in a way that is understandable to the members of the military, the members of the Guard. They perform

an extraordinarily important service. We want to make sure that their needs are met. We also want to make sure that some of the reforms which the leadership of the Army are talking about to fully man those units and to restructure those units so that they can meet the newer threats, that those leadership efforts are also supported, and I think you have done a good job of coming together here to try to work this out, and I commend you for it.

Secretary HARVEY. Thank you, Senator.

Senator LEVIN. General Schoomaker, a couple of respected organizations, RAND and the Center for Strategic and Budgetary Assessment, two respected organizations, have sounded the alarm that the Army is what RAND called "stretched thin" or what the Center for Strategic and Budgetary Assessment called "the thin green line." Both analyses question whether the Army is large enough and organized in a way to sustain such high levels of deployments, to sustain high levels of deployments, while maintaining ready units for other possible contingencies.

The Army has stated that its Active-Duty units have had less than 2 years and in some cases less than 1 year between Iraq and Afghanistan rotations.

Can you comment on those two organizations' reports that the Army is stretched thin, as RAND and as the Center for Strategic and Budgetary Assessments have reported?

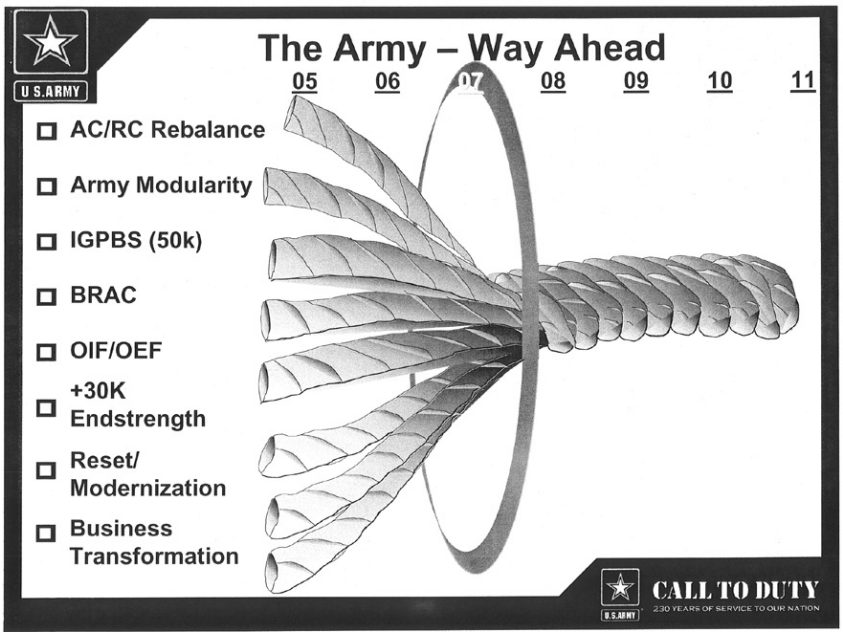
General SCHOOMAKER. Sir, I have not read either of those reports in detail, but I can comment to what you just characterized. I would tell you that our Army is as busy as it has ever been. But I think we are performing, our Army is performing, in an extraordinary way, and I think the fact that our reenlistment is as it is and the fact that all of the things we are doing are happening to the standards that they are happening is a good testament.

Put that rope chart up if you could real quick.

You have seen this before, but I want to show it to you one more time.

Do it as quick as you can, please. [Chart.]

[The information referred to follows:]



This is not just Iraq and Afghanistan that are at issue here. You have seen this chart as we do it. These are all of the things that we are doing in 2006 and 2007 in the Army. We are balancing the Active Component/Reserve Component (AC/RC), as we have been talking about here. We are modularizing the Army. We are restructuring ourself globally. We are going through BRAC. There is the war. We are growing. We are resetting and modernizing, and we have major business transformation going on.

So when people talk about the Army being stretched, all of this stuff is going on, and the reason it is going on is because we want to make this Army capable and have the capacity that is resident within its potential to deal with the future at this level of operation without the kind of stress we have. We have to go through these labor pains to get there. We just have to do it. I have testified before this committee, now this is the third year. I said we dumped the toy box out on the floor and it is ugly, and we are getting the puzzle pieces back together.

So I cannot deny that the Army is busy, but I do not know a better solution than what we are doing to get through it.

Senator LEVIN. General, I think it would be useful if you would take the time when you have a moment, which is not often, I know, to take a look at those studies and give us any additional comments that you might have.

General SCHOOMAKER. We have people doing that, sir.

Secretary HARVEY. Senator, if I might add something here. What I use as a barometer about the health of the Army or the reaction to stress on the Army is the retention rate, and the retention rate last year was at an all-time high. We retained 69,500, which was

10 percent over goal, which then that goal was 15 percent over the prior year. We are ahead so far this year of last year.

I think the real telling statistic was the retention rate in the 3rd Infantry Division that was just completing, has just completed its second deployment to Iraq. They are now back, and they exceeded their retention goal by 36 percent. So I think that says that the Army, the operational Army, although very busy and very active, is reacting favorably to it.

I think that is the best indicator of whether we are stretched, strained, or whatever term you want to use.

Senator LEVIN. It is something I think we all want to keep our eye on and to have you keep your eyes on.

Secretary HARVEY. Absolutely.

Senator LEVIN. The retention rate is extraordinary. It is a real positive statement about the feelings, the morale, inside of the military. We are having some problems, I gather, with acquisition rates, at least from time to time. So it may be—the stress factor may be having an impact there rather than on retention. But it is something we obviously are concerned about and we are hopeful it does not create a problem down the road.

Readiness reports seem to show some problems in training and readiness. It may be affected by equipment being deployed or being refurbished and thus unavailable for training. Can you comment on that, either one of you?

General SCHOOMAKER. Where you will find no readiness problems is in the soldiers that are in harm's way and in the next group of soldiers, the units that are going forward to be in harm's way. Where you will find where we have taken risk is in the units that have returned and are resetting. That is how we have to manage it. There is no way of getting around it.

But as we build because of the resources that you are providing us, we will rectify that and we will have a fully populated force generation model that will be historically high in its ability to provide ready units.

Senator LEVIN. Going back to recruiting just for one moment, Secretary, is it true that we are accepting more category 4 recruits now and non-high school graduates? We have raised the enlistment age, I believe, recently from age 34 to age 39, and I believe that that is accurate. But we also have these reports that the Army is accepting a greater number of recruits without high school diplomas.

Can you comment on that?

Secretary HARVEY. The rules are or the standards are a high school diploma or equivalent, and we have not changed that rule.

In regards to the category 4s, last summer we discussed and I requested the rationale behind the following, which is why is the DOD standard 4 percent and the Army's 2 percent? Why are we not complying to the same standards as the rest of the DOD was given? Quite frankly, I did not get a very good answer. The only answer I got was that 12 percent of the command sergeants major in the Army today scored in category 4. So our top Noncommissioned Officers (NCOs), we like to say our leaders, our NCO leaders, the envy of the armies of the world, 12 percent of them scored category 4 on this test.

General SCHOOMAKER. That is when they entered the Army.

Secretary HARVEY. When they entered the Army.

General SCHOOMAKER. Not now.

Secretary HARVEY. So I concluded that, one, that we should use the DOD standard and, as I say, I am quite honored and proud to be head of an Army with such high quality NCOs. So there was no reason for us to do that. Let us keep in mind as you read some of these reports that our goals, our annual goals, it is like a sales or profit. We can take the people in during the course of the year as long as we end up at 4 percent of the, in this case, 71,000. So we know exactly the number. It is 2,873 category 4s. We now have accessed about 1,900 or so. At the end of the year it will be less, it will be 4 percent or less, and that is the DOD standard. Again, high school degree or high school equivalent GED.

That, by the way, is one of the reasons that only 30 percent of eligible males in this age group qualify for the Army, because it is kind of disconcerting, but there is a lot of young men today that do not have high school degrees.

Senator LEVIN. Thank you.

Chairman WARNER. Thank you, Senator. That is a very important point you raised, Senator, and I am glad you that you cleared up the record on that.

Senator LEVIN. It means also the Army is one hell of a great school.

Secretary HARVEY. A builder of character, too.

Chairman WARNER. It makes available, as you point out, for those who entered the Army with some minimal types of qualifications, category 4, and took it upon themselves to educate—avail themselves of all the opportunities for education such that they rose through the ranks, and they would not have risen had they not acquired that. Is that correct, chief?

General SCHOOMAKER. Yes, sir, and almost 100 percent of them have at least a bachelor's degree.

Chairman WARNER. Very interesting.

Secretary HARVEY. We have some Ph.D.s, E–9 Ph.D.s and master's degrees. They are quite a group of young men and women.

Chairman WARNER. Thank you.

Senator Lieberman.

Senator LIEBERMAN. Thanks. Thanks very much, Mr. Chairman.

I will just come back briefly to our discussion, and I do want to continue it as we go on because I think this is so important. I am going to quote from an article, "Inside the Pentagon," January 26, 2006, and it cites a study done by the Institute for Defense Analyses (IDA), which is one of the federally supported research centers, which, as it says here, "has found an Army plan to reorganize its forces into BCTs will reduce net fighting capability rather than strengthen it, contrary to the Service's vision."

It says: "To increase brigades without boosting overall manpower of the Service, officials say they must strip each brigade of one maneuver battalion, composed of infantry troops or heavy arms. Army leaders say they can field just two such battalions per brigade rather than the traditional three. The move results in a net loss of 40 maneuver battalions," according to this analysis.

It also goes on to say—I am going to ask you to respond to this—"The current Army plan for fielding 43 Active-Duty, two-BCTs does not provide the optimum allocation of scarce Army manpower resources. Yet the Army plan reduces the number of maneuver battalions," it says, "by 20 percent below the number available in 2003." The organization describes maneuver capability as "fundamental to the Army mission of controlling terrain," so the cut in maneuver forces, IDA says, "translates to a 20 percent decrease in the Service's ability to control terrain."

I presume you are familiar with this study?

Secretary HARVEY. I am, Senator.

Chairman WARNER. It is part of what alarmed me. Just to state, this was requested, again, by the Defense Department.

Secretary HARVEY. I will comment. Let me just give you some numbers and I will ask General Schoomaker because he can tell you about the capabilities. I think that the study missed the mark because you have to go to the company level and not to the battalion level, and we are actually increasing the number of companies in the modular force from three to four.

So when you do all the arithmetic—and then I will turn it over to General Schoomaker—before, what we call the pre-modular force, had 323 companies. The modular force has 532 companies. So, with all due respect, this study is not accurate and it is companies that really perform the maneuver, and to get into the maneuver battalions and the Reconnaissance, Surveillance, and Target Acquisition (RSTA) battalions I am going to ask General Schoomaker, who knows this subject extremely well.

Senator LIEBERMAN. General?

General SCHOOMAKER. I would characterize it this way. The BCTs are not brigades. In the past, what we had were brigades which needed augmentation to become task organized. So the Secretary is exactly right, the place that you fight and where you hold ground is at the company level, platoon level, and we have increased the numbers there.

But what we have done is take the brigade and we have enhanced its headquarters so that it now can operate in a joint environment. It has tremendous bandwidth, it has all kinds of capability of bringing intelligence down all the way down to the battalion and company level, national level intelligence. We have put inside of that BCT its own artillery battalion, which it never had before. We have put inside of it its own forward support battalion, which it never had before. We put inside that brigade MPs, we put a RSTA brigade in there, the military intelligence, the analysts, the civil affairs, engineers. All of this is now inside of these brigades that are very capable, because that is the world we are now in. We are not in lining up against the Soviets.

Now, the other thing we put in there is four companies per battalion, whereas before we had three. We have also added a RSTA squadron of three company-size elements. So the reality is if you want to count maneuver elements there is actually 11 now inside of a brigade instead of 9 in the old way.

But the real power is not just in that. So what I would say is this. If somebody told me that a three-battalion brigade is better than a two, I would agree with them. If they said four was better

than three, I would agree with them. But the modular force allows us to build those. It allows us to put more battalions, and our span of control will allow us to do that. If you go to Iraq today, you will find divisions and brigades commanding far more units than what they typically would have in our organization.

So I will not say that the report is inaccurate. I will tell you they are measuring things in a context that is not relevant, as relevant today as it used to be. What we are doing today is giving us the kinds of capabilities and the capacity to meet the future challenge. If we want to argue past, we would have different answers. But that is where I stand on it. I just disagree with that type of analysis.

Senator LIEBERMAN. You have made that very clear.

General SCHOOMAKER. Yes, sir.

Senator LIEBERMAN. Thank you, General.

Let me go to one last question, which is I liked the term in the QDR that the military needs a new breed of warrior, who can display proficiency in both irregular and traditional combat. These new warriors will be—and I quote again—"largely self-sustaining because they will understand foreign cultures and societies." This is a whole new range. Talk about skill levels and training.

I want to ask you about the Army's educational plans that are related to the force transformation. I was pleased to see in the budget that there is a significant additional emphasis, increased emphasis, on linguistic training and that is excellent. It looks to me—and you correct me if I am reading it wrong—that the 2007 budget request for educational benefits is lower than this current year's level. I want to ask you, if that is true, whether you can meet the education goals that the QDR sets out for the new breed of warrior?

General SCHOOMAKER. I do not know how it could be lower. I would have to look at that. First of all, we have increased education at our major level, captains and majors, to 100 percent now of our majors must attend intermediate level education, which is command general staff college level, 100 percent.

We are increasing by 200 a year the advanced civil degree program opportunities for company-grade officers, where we will build to about 1,000 degree completion or advanced civil degree program issues where we are encouraging cultural studies, language, and these kinds of things for what we are doing.

We are also now increasing the amount of these studies at both the military academy for those cadets as well as Reserve Officers Training Corps (ROTC) for scholarship cadets on that. We are building out at Leavenworth and elsewhere things like, with General Petraeus, where we are coordinating with the Counter-insurgency (COIN) Academy that they have in theater and capturing all these lessons learned, so that we are now training across all of our NCO and officer education systems the lessons learned that we have had and inculcating them in designated blocks of instruction in every military school we have, to include our basic NCO schools.

So some of that may be called training, but the majority of that in my view is education, and it is a major move that we are making in the right direction.

Secretary HARVEY. Can I just add something, because the chief and I did something last year that I think we are both proud of, and that is we spent a lot of time defining the leader, the military and civilian leader we need for the 21st century. We call that leader a pentathlete, a multi-skilled individual, has the skills that you talked about, among others, and has five major attributes. That is why we called it the pentathlete.

So we have a template for leadership and we also have chartered a task force to tell us—to review the combination of education, training, and assignment that gives us that leader. So we are looking forward to the output of that, chief, later in the spring.

Senator LIEBERMAN. Thank you both. I am over in my time. I think what I would like to do is send you a written question just with a comparison of the budget levels and ask you if you are sure you have enough in there to meet the educational goals that you have for the Army.

Secretary HARVEY. Sure, we will do that, Senator.

Senator LIEBERMAN. Thank you.

Secretary HARVEY. Thank you.

Senator LIEBERMAN. Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much, Senator.

Senator Clinton.

Senator CLINTON. Thank you, Mr. Chairman.

Secretary Harvey, when you testified last year before this committee I asked you about reports of payroll problems for wounded soldiers, a problem that came to my attention because of the pay problems of Specialist Robert Loria, a wounded soldier from New York, who was billed for travel and expenses that he should not have owed.

After I had written you a letter last year inquiring as to the extent of the pay problems of wounded soldiers, Vice Chief of Staff Cody sent me a letter saying that the Army had identified 129 wounded soldiers with payment and debt issues and that the Army was conducting follow-up audits. In your testimony last year you said, "I hope that I am up here next year and you are going to say, I have not heard of anything for the last 3 or 4 months." Unfortunately, that is not exactly the case.

In response to an ABC News Nightline investigation last month, an Army spokesman, using Army figures, said that more than 5,500 soldiers withdrawn from combat on the basis of medical issues have later experienced payroll problems. I am deeply concerned about this. The information that has come to me includes a recent report about the soldier who had received serious shrapnel wounds in Iraq being billed $700 to cover the cost of his body armor that had been removed as he was medically evacuated, which comes on top of a news report in October that the Army had found more than 330 soldiers who were wounded and then faced with military debt and the Army had begun the process of forgiving debts claimed from 99 of these, and a press report revealed that the Army has granted more than 600 requests by soldiers for debt forgiveness totaling more than $600,000.

Now, after last year's hearing I did ask that I be kept apprised of the status of the audits of wounded soldiers and I was given a commitment that you made to give me a comprehensive response

and to keep me informed. My staff and I followed up on this issue several times, asking for answers to questions that I posed last year. Yet I have to confess I learned about the number of wounded soldiers with pay problems through the press.

Now, after these latest reports, earlier this month on February 9, I sent you another letter about the treatment of pay and debt issues, and I ask unanimous consent that my letter to Secretary Harvey be included in the record.

Chairman WARNER. Without objection.

[The information referred to follows:]

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SPECIAL COMMITTEE ON AGING

United States Senate
WASHINGTON, DC 20510-3204

February 9, 2006

The Honorable Francis J. Harvey
Secretary
Department of the Army
The Pentagon
Washington, D.C. 20310

Dear Mr. Secretary:

I write to follow up on my earlier inquiries regarding wounded soldier pay issues. A recent television news report indicates that, according to the Army's own figures, more than 5,500 soldiers withdrawn from combat on the basis of medical issues have later experienced payroll problems. A recent article reports that the Army required a soldier who had received serious shrapnel wounds in Iraq to pay $700 to cover the cost of his body armor that had been removed as he was being medically evacuated. This comes on top of a news report in October 2005 that the Army had found more than 330 soldiers who were wounded and then faced with military debt, and the Army had begun the process of forgiving debts claimed from 99 of these soldiers. A press report has also revealed that the Army has granted more than 600 requests by soldiers for debt forgiveness, totaling more than $600,000, in cases in which the request was made on the basis that the debt has been wrongly charged.

As you know, I have focused on the pay problems of wounded soldiers on the Senate Armed Services Committee. As you may recall, I worked with the Army to resolve pay issues for one of my constituents, Specialist Robert Loria. Soon after these issues were resolved, I wrote to you in order to raise several concerns about wounded soldier pay issues that might affect SPC Loria but went beyond his case as well. I also raised the issue during a Senate Armed Services Committee hearing at which Vice Chief of Staff General Richard Cody testified. In response, General Cody wrote to me in February 2005 informing me that the Army had identified 129 wounded soldiers who had been billed in error and whose debts would be forgiven, and had established an audit team to recommend solutions.

Just prior to a March 2005 committee hearing at which you testified, I also received a letter from Army Deputy Chief of Staff G-1 Lieutenant General F. L. Hagenbeck. His letter informed me that the Army was coordinating with the Defense Finance and Accounting Service (DFAS) on corporate changes needed to protect wounded soldiers from payroll problems; that DFAS had established a team to systematize the process of gathering wounded soldiers' information in a central location; and that DFAS intended to provide oversight of support finance office decisions at DFAS Indianapolis.

When you testified in March 2005 before the committee, I asked you for more information:

- I asked whether the figure of 129 soldiers reflected soldiers at Fort Hood, or more broadly throughout the Army.
- I asked whether the Army planned to audit the treatment of all wounded soldiers to determine whether they had experienced pay problems.
- I asked the Army to provide the committee with the status of all audits of pay problems of wounded soldiers and an update on all soldiers identified as having such problems.

At the March hearing, you said you hoped that when you testified next year, we would not have heard of any problems for several months. In a subsequent Army briefing, my staff was told that no other problems were identified.

Therefore, the recent press report that more than 5,500 soldiers withdrawn from combat on the basis of medical issues have later experienced payroll issues is troubling, as is the reported number of instances of wounded soldiers experiencing pay problems and meriting debt forgiveness. I am certain you agree the Army should make a special effort to avoid placing wounded soldiers in the position of having to resolve payroll problems or to request debt forgiveness, and that it is essential there be no delay in implementing lessons learned.

Based on these reports, I would like an expedited briefing which would focus on:

- how many wounded soldiers have been affected by these pay problems to date;
- what safeguards are now in place to prevent the Army from mistakenly overpaying wounded soldiers and from wrongfully claiming debts;
- what oversight is being conducted of the debt forgiveness process to ensure fair results for wounded soldiers are reached; what assistance currently is being provided to wounded soldiers in making these requests;
- what benchmarks have been established to measure progress in correcting the pay problems; and what ongoing review the Army is conducting of its efforts to improve the system.

I would also like to know what steps we in the Senate can take this year to aid the Army in its effort to better serve the payroll needs of its wounded soldiers.

I know that the Army cares deeply about its soldiers and would like to make sure that wounded and disabled soldiers do not face bureaucratic complications after they have given so much on behalf of our Nation.

I look forward to your prompt response. If you have any questions, please contact Andrew Shapiro in my office at 202-224-5553.

Sincerely yours,

Hillary Rodham Clinton

Hillary Rodham Clinton

Senator CLINTON. I know that the Army has arranged a briefing with my office on this issue. However, Mr. Secretary, I would like this year a detailed response in writing from you regarding each of the issues raised in my letter of February 9 and during last year's hearing. Now, these include how many wounded soldiers have been affected by the pay problems, what safeguards are now in place to prevent the Army from mistakenly overpaying wounded soldiers and then trying to claim debts, and also asking for other payments that are not well founded, what oversight is being conducted of the debt forgiveness process and what assistance is being provided to soldiers making the requests, and finally what benchmarks have been established to measure progress in correcting these pay problems.

Obviously, I know you share my concern that this is something that we should have zero tolerance for, that there should be every effort made to prevent these problems. If they do occur, they should be rare and they should be handled expeditiously.

So I look forward to your prompt response to these questions that concern me this year, as they did last year.

Secretary HARVEY. I share your concerns and we took your request seriously. I apologize for not getting back to you. It was an oversight. But we have made progress since you brought that up

at your hearing in terms of auditing. There is something like 10,000-plus wounded in action and another 48,000 which we call disease, non-battle injury. The Army has audited—I am looking here—24,000 of these accounts, of which 21,000 were termed to be correct, 11,000 are now in further research, and 2 percent were found in error.

I think we have made progress. We are not quite there yet. We have also arranged for the Defense Finance and Accounting Service (DFAS) to develop a database which links medical and finance records, and also we have deployed to the Army medical centers these support teams to have face to face, instead of calling a number that you have a person there that you can resolve this with.

So I think, Senator, we have made progress on this issue. It is important that this be solved 100 percent. I also see that there has been $1.2 million in debt cancellation and waivers for 1,200, 1,300 soldiers. So progress has been made. We will get you a detailed report in response to your letter.

Let me also add, in regard to that soldier, Lieutenant Rebrook, from West Virginia. Actually, when we heard of that we looked into it in detail and it ended up that he actually volunteered to give the money back, and then it was discovered that he had actually lost his Interceptor body armor in battle but did not tell anybody.

So I think what happened was he got a little frustrated with the time it takes to reconcile. He had a number of pieces of equipment missing. Some he lost because of his injury. He said: Oh, the hell with it, I will just pay it. Then when we discovered it we gave him the money back for those things. So it was kind of a mess-up, but we did not charge him. He actually volunteered to pay it in order not to go through this reconciliation process. He is getting out of the Army. So I think we made him whole.

[The information referred to follows:]

This is an issue that is also of great concern to us. The Army and the Defense Finance and Accounting Service (DFAS) have implemented a number of short-term corrective actions, while continuing to move toward longer-term improvements. The ultimate solution is to integrate fully personnel and pay systems to ensure that changes in a soldier's status which impact pay, such as evacuation from theater or hospitalization, are simultaneously updated in personnel accountability and pay records. The Department is developing the Defense Integrated Military Human Resources System to meet this need.

The Army and the DFAS are making progress on addressing the causes of pay and debt problems for our wounded soldiers. DFAS has developed a database that links information from various medical systems to help ensure the medical status of soldiers is considered when pay entitlements are initiated, stopped, or adjusted. Additionally, we are stationing dedicated personnel at Army medical centers to audit pay accounts of wounded soldiers and to take appropriate action as pay problems occur. The Army and DFAS continue to seek out adverse pay problems and work together to develop initiatives that will ensure our wounded soldiers are not negatively impacted by pay problems.

The support of your committee and Congress has been essential to our ability to provide wounded soldiers with the financial support they need. In particular, the new Traumatic Soldier Group Life Insurance program established by Congress helps soldiers transition into new careers, either in the Army or in the public or private sectors. This program, in conjunction with several key provisions contained in the National Defense Authorization Act (NDAA) for Fiscal Year 2006, will provide more assistance to soldiers during periods of hospitalization, reduce the possibility of overpayment on entitlements, and give the Army greater capability to provide fair and timely relief of debts when appropriate.

As of February 10, 2006, DFAS identified 59,463 soldiers who, since October 2001, received medical treatment above the battalion aid station level while deployed

(10,810 wounded in action (WIA) and 48,653 disease/non-battle injury). Audits have been initiated for 25,152 of these pay accounts, of which 21,743 (86 percent) were determined to be correct. The remaining soldiers' pay problems required further research (12 percent) or were determined to be in error (2 percent). The Army has provided debt cancellations and waivers totaling $1,320,166 for 1,309 soldiers.

We also reviewed 331 debts for wounded soldiers who subsequently separated between 2001 and 2005. Of these debts, 204 have been waived. Of the remaining cases, 3 were denied in full or part (i.e. AWOL time), 27 were previously waived or cleared without waiver, and 97 were not eligible for waiver (i.e. unearned bonus). This last group was turned over to the Army Wounded Warrior (AW2) program for possible submission to the Army Board of Correction of Military Records. Of the 97 not eligible for waiver; eight were seriously WIA soldiers being assisted by AW2.

The report of 5,500 soldiers withdrawn from combat for medical problems who later experienced payroll problems is incorrect. As ABC Nightline was told at the time, this represented the total population of soldiers in our audits whose automated payroll records required additional research to ensure that they were paid correctly (i.e. newly wounded or further verification of supporting information).

During 2005, DFAS developed a database to receive information from multiple medical systems, compare that information to the pay system, and initiate actions to correct or adjust entitlements. This enables finance units to identify wounded soldiers and provide them face-to-face finance support. Immediate collection of debts is suspended, and assistance is provided to the soldier to cancel or waive the debt as appropriate. We are auditing the pay accounts of all 59,463 wounded soldiers to ensure that they have been paid correctly and that, as applicable, debts are submitted for waiver or cancellation. DFAS has organized six tiger teams and deployed them to the major medical treatment facilities to assist local finance offices in supporting the current patient population, as well as in auditing accounts of previous patients. DFAS also has a central WIA team working audits.

The major challenge to fair application of debt forgiveness has legislative restrictions. Congress corrected this problem in the NDAA for Fiscal Year 2006 by broadening the scope of the existing debt remission law. The two primary mechanisms under the law to forgive debt are waiver or remission. Waivers are restricted to erroneous payments and are adjudicated under the auspices of the DOD General Counsel. Appeal procedures are included in the waiver process. Remissions were previously restricted to uncollected debts of enlisted soldiers while on Active-Duty and are adjudicated by the Army Human Resources Command (HRC) and can be granted for virtually any type of debt based on fairness or hardship. The 2006 NDAA broadened remission to include officers, soldiers no longer on Active-Duty and previously collected debts. As a general rule, remission requests for WIA soldiers, which fell within the scope of the existing law, have been processed in one business day by HRC. As part of the overall program for assisting WIA soldiers, finance offices supporting medical treatment facilities are currently required to assist these soldiers in applying for any pay due (i.e. dependent travel voucher) or for waiver/remission of bona fide debts. In many cases, we have initiated debt waiver processing on the soldier's behalf without the soldier being aware of the action.

The Army and DFAS are tracking the total population of soldiers who received medical treatment in the theater above the battalion aid station level since October 2001. Responsibility for each soldier's pay account is assigned to a specific finance office and the progress of auditing each account is tracked for each entity. Weekly reports of the number of accounts reviewed and their status are compiled and provided to the senior leadership in the Army finance and medical communities as well as to DFAS. Updates are given to both Army and DOD personnel/pay councils at the assistant secretary and deputy under secretary level. In addition, the Army is tracking the timeliness and accuracy of pay for all soldiers. Our goal is to audit all 59,463 wounded-soldier accounts no later than October 1, 2006.

Senator CLINTON. Thank you, Mr. Secretary.

Finally, I want to add my voice to the previous comments by my colleagues about the Army's budget proposal regarding the National Guard. But I have a slightly different concern to add to theirs. Aside from the question of end strength, there is a question of funding the force structure that the Guard needs. As you may know, the 42nd Infantry National Guard Division, the so-called Rainbow Division, headquartered in New York, recently returned from Iraq. I thank you very much, Secretary, for noting on January

18 that the 42nd Infantry Division completed the first deployment of a Guard divisional headquarters since the Korean War.

Secretary HARVEY. I did fly to Fort Drum to meet them.

Senator CLINTON. I thank you for that, because we were very proud. I saw some of them when I was in Iraq last year and we are just extraordinarily proud. As you put it very well, the Army could not perform full spectrum operations without the Guard and Reserve's tremendous contribution.

I am now concerned about the potential impact of force structure changes on the Guard, and in particular on the survival of this very 42nd Infantry National Guard Division that we are not only proud of but want to see stay intact. The idea that you could send a National Guard division to battle in its entirety, that it would fulfill its responsibilities with great distinction, is one that I think says a lot about what the force structure of the Guard can be.

So could you just tell us briefly what the Army's plans are regarding the Guard's force structure?

Secretary HARVEY. In terms of force structure, I think General Blum said it correctly. Our plan is 350,000 end strength and 348,000 in force structure. So that is the current plan which we are operating to. Again, I cannot agree with you more that the 42nd I.D. under the command of Major General Joseph J. Taluto, who is now TAG in New York, he is an outstanding soldier and leader, they did a great job. We again cannot do it without them.

General SCHOOMAKER. Senator Clinton, if I could. You have all kinds of reasons to be proud of the 42nd and Joe Taluto was a hell of a leader. But I think that inside that story lies the essence of our dilemma, and that is how many States did it take to make that division headquarters whole and that division whole?

Secretary HARVEY. Is it 20?

General SCHOOMAKER. 18 States.

Secretary HARVEY. 18 States contributed to the 42nd.

General SCHOOMAKER. So we have to have more whole structure than that, and we want the 42nd and every other division and every brigade in our entire Army to be whole when we call them up and to be fully resourced, et cetera. So the fact that we had to infuse that many States, plus we put Active and Reserve officers and NCOs inside of that structure to make it whole, and that we trained it to the level that they performed at such an extraordinary level over there, is a testament to the Army, but it is also a little story in itself about what we have to fix, and that is the path that we are on. We are committed to make it right.

That does not detract anything from the 42nd because we are proud of them, but it does talk about what the problem is that we are trying to solve here.

Senator CLINTON. Thank you.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much, Senator.

Just one comment. Senator Clinton is always discussing the plight of people who have problems and I am glad you do that, Senator. But I was particularly struck by the young man who had been wounded and in the course of taking care of him medically his body armor got separated from him and then he had to be charged for it.

General, at the last hearing you said that you would look into that. Perhaps this is the appropriate time to make the statements into the record. I will say that I saw a television broadcast and the young man involved got up and expressed pride in the Army and the fact that he felt it was a misunderstanding. He did not have any recrimination at all against the Army.

General SCHOOMAKER. Sir, I think that is fair to say. First of all, we are very proud of that young lieutenant and he was wounded in the line of duty. It was not his body armor at risk at all. It was the vest that holds his armor and it was approximately 20 other items that he was short.

So he got, as the Secretary said, involved in the reconciliation process, the bureaucracy frustrated him, and so he decided to pay for it. So what we have now done is gone back and reconstructed. We are accounting for those things that were battle losses. For those things that were not battle losses that he lost, he may end up paying for them. But the fact of the matter is it was just frustration with the bureaucracy. I believe it is reconciled, and he has been very—we are proud of him and he has spoken about the Army very well.

Chairman WARNER. I share that pride and I do hope that—because families were struggling to get cash. Apparently they only required cash. All those little details. You are on top of that, General, and let us just make sure it does not happen again.

Senator Levin, do you have any concluding comments?

Senator LEVIN. Just other than Senator Clinton's sensitivity to the individual cases, again, maybe there ought to be a little box on these reconciliation forms that says: If this form frustrates you and you are giving up filling it out, check this box, send it in, and then we will work with you, or something. I mean, of all the people who should not be frustrated in filling out a form, it is these folks, it seems to me.

General SCHOOMAKER. Sir, I agree. There are 21 other cases in that same division and all of them are being worked with now.

Senator LEVIN. Put a little box there.

Chairman WARNER. All right.

General SCHOOMAKER. Does that count for the chief of staff of the Army when he has to fill out forms too? [Laughter.]

Secretary HARVEY. Wait until you have to turn your stuff in, General. [Laughter.]

Chairman WARNER. General, we thank you for bringing these three outstanding noncommissioned officers up here to participate in these hearings. I thank each of you and commend again each of you for your service to country. You are exemplary and you are an inspiration to all of your colleagues, wherever they are throughout the world.

Secretary Harvey, let me give you a pretty good rating, for this is your first full hearing; is that correct?

Secretary HARVEY. No, you remember last year——

Chairman WARNER. I remember we had a little——

Secretary HARVEY. I was an intern in training then.

Chairman WARNER. Well, you have the con now, and I can tell by the tenor of your voice and the manner in which you delivered your responses that you are enjoying the work.

Secretary HARVEY. I am.

Chairman WARNER. In full swing.

Secretary HARVEY. It is an honor to serve and it is an honor to be with my partner over there and have the opportunity to have for the first time in a long time a fully equipped, fully manned, fully trained, fully resourced Army. That is what we are all about, the chief and I.

Chairman WARNER. Wait a minute. Are we fully equipped? Just a minute here.

Secretary HARVEY. Not yet.

Chairman WARNER. It seems to me you just sent some bills up to me.

Secretary HARVEY. I am talking about the end state.

Chairman WARNER. All right, well, the end state is a number of years out there.

Secretary HARVEY. You have it.

Chairman WARNER. As an old lawyer, I would like to cross-examine you on that answer.

General, we thank you for your willingness to come back from civilian life and forego some of the other pay and pleasures of that civilian life to once again proudly wear the Army green. People really look up to you.

General SCHOOMAKER. Thank you, sir. It is a pleasure to be here.

Chairman WARNER. Thank you very much. That will conclude this hearing. It was a very splendid hearing. I commend you all. We are adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JOHN WARNER

ARMY FORCE GENERATION

1. Senator WARNER. General Schoomaker, last year, the Army asserted that 43 Active component combat brigades and the 34 Army National Guard (ARNG) combat brigades would ensure the Army could maintain a 17 brigade force deployed with Active component brigades having 2 years between rotations and the ARNG combat brigades having 5 years between rotations. Now, we understand the Army intends to employ a force structure that includes 42 Active component combat brigades and 28 ARNG combat brigades. How will fewer combat brigades impact the anticipated "dwell" time in-between Army rotations?

General SCHOOMAKER. Prior to the Quadrennial Defense Review (QDR) 2006, the Army had developed a plan for 34 combat brigades and 72 support brigades in the ARNG and 43 combat brigades and 75 support brigades in the Active component. This provided up to 20 combat brigades for steady state operations. Based on analysis associated with the QDR 2006, the Army determined the need to be able to supply 18 to 19 combat brigades in steady state operations and surge another 18 to 19 combat brigades to respond to major combat operations. As a result, the Army is restructuring to form a rotational pool of 70 Brigade Combat Teams (BCTs) and 211 supporting brigades of various types among the three components. This rebalancing is necessary to reduce stress on the Active and Reserve components, achieve the Army goal of structuring the Active component to execute the first 30 days of expeditionary operational requirements, improve the responsiveness of the overall force to achieve national security strategy goals, improve the readiness and deployability of units, and initiate the process of building predictable deployment cycles for Army forces of one rotation every 3 years for the Active component and one rotation every 6 years for the Reserve component. Through these efforts, the Army will provide a sustained deployment posture of modular, trained, ready, cohesive, and rapidly deployable and employable Army forces in predictable patterns to meet requirements for continuous full-spectrum operations while retaining the capability to surge combat power for major combat operations.

QUADRENNIAL DEFENSE REVIEW

2. Senator WARNER. Secretary Harvey and General Schoomaker, some would say that the QDR process, from 1993 until now, has utterly failed to do what it was intended to do: provide a link among strategy, force-planning, and defense budgeting. It appears that the QDR process itself has become another bureaucratic exercise diverting valuable resources to produce studies that defend the status quo. Do you believe it's time to scrap the QDR process? If so, what would you replace the QDR process with? If not, what can be done to improve the QDR process?

Secretary HARVEY and General SCHOOMAKER. The QDR is a valuable process that provides the opportunity for the Secretary of Defense to periodically realign strategy, plans, programs, policies, priorities, and resources. While the Department has only conducted three such comprehensive reviews since 1997, our experience suggests that the QDR process is most relevant during the first term of a new administration when major change is most likely. That said, the quadrennial requirement seems about right. Even in the second term of an administration, the QDR provides an opportunity for the Department's leadership to reconsider previous decisions in light of a rapidly changing strategic landscape.

A QDR in the first year of a new administration is critically important, but cannot develop momentum until the Secretary of Defense has the bulk of his leadership team in place, which typically does not occur until several months after the President's inauguration. For that reason, it makes sense to extend the QDR period until the President's next budget is submitted to Congress. Second term QDRs can typically be completed in a shorter period of time or a more comprehensive assessment can be conducted. The Secretary of Defense makes this decision based on relooking the strategy or realigning resources. The external, parallel review conducted by the 1997 National Defense Panel proved its worth. However, such an independent review should probably be conducted in the year prior to the QDR so that the panel's findings and recommendations can inform the Secretary of Defense. Finally, we have probably reached the point where Defense-centric reviews are less relevant than those that more fully encompass all agencies involved in the national security process. A quadrennial security review may be more helpful in the long run, but it will certainly be more complex as the number of players and issues expand. It warrants our consideration.

ACQUISITION REFORM

3. Senator WARNER. Secretary Harvey and General Schoomaker, according to the QDR report issued on February 3, the Department of Defense (DOD) is focusing on bringing the needed capabilities to the joint force more rapidly, by fashioning a more effective acquisition system and associated set of processes. One of the recommendations is to integrate the combatant commanders (COCOMs) more fully into the acquisition process. What are your thoughts regarding the increased role of COCOMs in the acquisition process?

Secretary HARVEY and General SCHOOMAKER. We recognize and value the importance of COCOM participation and influence in the Department's requirements and budgeting processes, and we are taking steps to strengthen existing means available for that participation and creating new ones as well. Central to this is a COCOM's Integrated Priority List (IPL). The IPL details a COCOM's highest priority requirements across functional lines and defines shortfalls in key programs. In the past, the IPL was a fiscally unconstrained list but now includes detailed capability tradeoff recommendations to inform funding choices. Moreover, the Joint Forces Command (JFCOM) has assumed a more prominent and proactive role in rationalizing and integrating capabilities across all unified and specified commands.

The Joint Staff also sponsors periodic visits to the COCOMs to engage in direct discussions on requirements and budget issues. They have begun to expand the participation in these discussions to a much broader set of participants from OSD as well. Now, representatives from OSD PA&E, Comptroller, Policy and AT&L, among others, are there to discuss COCOMs' specific issues relating to programming, budgeting and acquisition. Also, senior leadership conferences are held throughout the year at junctures aligned with the budget process and provide COCOMs similar opportunities to participate directly in formulating programs and budgets.

4. Senator WARNER. Secretary Harvey and General Schoomaker, what are your recommendations of how the Department should develop and address joint requirements?

Secretary HARVEY and General SCHOOMAKER. The Army is fully committed to implementation of the Department's Joint Capabilities Integration and Development

System (JCIDS) to identify and address the capabilities the joint warfighter will need for the future. The JCIDS process is constantly being improved to strengthen the linkage between Service force modernization efforts and a central vision for future military operations captured in the family of joint operational concepts. We support the Chairman's efforts, through the JROC, to incorporate the operational needs of the COCOMs' into the joint force development dialog. This collaboration is essential for the generation of DOD's land warfare capabilities. The Army continues parallel efforts to improve the integration of the doctrinal, training, organizational, and materiel components of military capability in order to optimize the warfighting capabilities delivered by the Army to the Joint Force Commanders.

MAJOR GENERAL MILLER

5. Senator WARNER. Secretary Harvey and General Schoomaker, the prisoner abuse issue has burdened our Nation and our military for a few years now. The impact of this scandal tarnished the otherwise sterling performance of our military. Congress and the President took important steps to make a clear statement on the way ahead by prohibiting torture and abuse. The DOD and the Army have initiated many corrective actions. However, last month Major General Geoffrey D. Miller, a central figure in the U.S. detainee abuse scandal, invoked his right not to incriminate himself in court-martial proceedings against two soldiers accused of using dogs to intimidate prisoners at the Abu Ghraib prison in Iraq. In my years of association with the U.S. military, I cannot recall a similar situation. Nonetheless, this is clearly a right he has under the Uniformed Code of Military Justice (UCMJ). Still, he testified under oath before this committee (May 2004) and, as I indicated to Secretary Rumsfeld and General Pace last week, I want this committee to have appropriate time to review this matter at a time that is right. Do I have assurances from both of you that this committee will be afforded the opportunity to review this matter fully at the right time and to call Major General Miller before the committee and give him the opportunity to testify?

Secretary HARVEY and General SCHOOMAKER. Yes.

INTERCEPTOR BODY ARMOR SIDE ARMOR

6. Senator WARNER. General Schoomaker, since combat operations began in Afghanistan in 2001, there has been a need to improve individual protection for our troops on the battlefield. As requirements emerged, the Army has responded in several ways, for example, by accelerating production of the new Interceptor Body Armor (IBA) to replace the older, less capable, Kevlar body armor for military and civilian personnel in the combat zone. The Army is currently in the process of buying side plates to improve the overall effectiveness of the IBA. Do you believe the Army's programs to protect its soldiers adequately address the requirements for its personnel in combat zones?

General SCHOOMAKER. Yes, the Army's programs more than adequately address the requirements for providing individual protection in combat zones. IBA remains the best military body armor in the world, and every soldier in harm's way has a set. Each enhancement in individual soldier protection is closely coordinated with COCOMs and rapidly produced by the U.S. industrial base.

For example in February 2005, as a result of commanders' feedback from the field, the Army discontinued procurement of Small Arms Protective Inserts (SAPI) and began procuring Enhanced SAPI (ESAPI). ESAPI provides even more ballistic protection. The industrial base immediately retooled to begin manufacturing the more capable ESAPI. Production ramped-up from a cold start in March 2005 to over 25,000 sets of ESAPI per month by October 2005 using six vendors. This accelerated procurement fulfilled the theater requirement on February 1, 2006, just 10 months after the decision was made to begin production.

Another enhancement to the IBA ensemble was the Deltoid Auxiliary Protector (DAP). The DAP protects the shoulder and armpit regions of the soldier with the same level of ballistic protection as the outer tactical vest, a component of IBA. The DAP prototype was initially developed by soldiers in Iraq in June 2004. The Army expeditiously designed and placed DAP into production by September 2004. In 12 months, the Army fielded over 172,000 sets of DAP, enough for every soldier and DOD civilian deployed in Iraq and Afghanistan.

The latest improvement to IBA is the Enhanced Side Ballistic Inserts (ESBI) or side plates. On September 27, 2005, the Army approved an Operational Needs Statement for 230,000 sets of ESBI. The Army immediately initiated a rapid development process to establish a specification, design a prototype, test and provide an

ESAPI level side plate that will fully integrate into the current IBA ensemble. The first deliveries to theater began in January 2006, 4 months after inception of the concept. The total theater requirement will be met by December 2006.

7. Senator WARNER. General Schoomaker, is there any way you can accelerate the program?

General SCHOOMAKER. We constantly examine means to accelerate production. The Army has accelerated every component or enhancement to the IBA ensemble. For example, the Army awarded the ESBIs, or side plates, contract in January 2006 to meet the theater requirement. Deliveries to theater began January 31, 2006. Critical needs for committed forces will be satisfied no later than April 2006, or sooner, through all available means. The total theater side plate requirement will be met by December 2006.

EQUIPPING THE IRAQIS

8. Senator WARNER. Secretary Harvey and General Schoomaker, as the President has indicated, our capacity to transfer security responsibilities to the Iraqis will rely on the ability of Iraqi forces to stand up and assume control over their nation's security and law enforcement. I have been concerned that the Iraqi security forces (ISF) and policemen are not adequately equipped to perform their missions effectively. The quality of the weapons and equipment we provide to the Iraqis must be of the caliber that contributes to the discipline, confidence, and morale of the Iraqis we are training. Will you provide an update on the Department's plans and progress towards improving the quality of the equipment we provide to the ISF?

Secretary HARVEY and General SCHOOMAKER. The Army is aware of the necessity to fully enable ISF to conduct their security missions. The Multi-National Security Transition Command—Iraq (MNSTC–I) has the mission to train and equip ISF. Funding was provided to MNSTC–I that facilitates that mission, to include the procurement of required equipment. Although MNSTC–I does not report through the Army on the status of this effort, many of their equipment requirements and resourcing solutions have involved, or have been visible to, the Army. As an example, MNSTC–I has approached the Army's Tank-automotive and Armaments Command (TACOM) and requested procurement of equipment for the ISF, and TACOM has awarded contracts in support of that effort. MNSTC–I is also exploring the possibility of obtaining individual soldier equipment from the Defense Reutilization Marketing Offices (DRMO), and the Army staff has been advising them on current and projected availability of equipment, such as older versions of the Army's Kevlar helmet that are no longer being used but are still fully functional. The Army has also provided MNSTC–I with information regarding older sets of body armor that exist in depot or in DRMO facilities.

Most recently, MNSTC–I provided the Joint Staff with a list of required equipment that they believe may be excess to Service requirements, thereby allowing MNSTC–I to obtain it for relatively minor costs (i.e., refurbishment, transportation). The list mainly consists of light trucks, container handling equipment, and generator sets. The Army is still working through this request but believes some of the equipment may become available as a result of operating base consolidation which would free up selected government-owned, contractor-operated equipment.

9. Senator WARNER. Secretary Harvey and General Schoomaker, will this be addressed in the Iraq supplemental?

Secretary HARVEY and General SCHOOMAKER. No, not at this time. The Army does not plan to request supplemental monies for equipment transfers to the ISF because as of this date, we have not been directed to transfer any equipment to them. We cannot speak to whether or not you will see a request for funding for the Iraqi Army from another U.S. Government organization.

10. Senator WARNER. Secretary Harvey and General Schoomaker, will you be requiring any additional authorities from Congress to facilitate this important requirement?

Secretary HARVEY and General SCHOOMAKER. The Army believes sufficient authorities are in place.

ARMY NATIONAL GUARD FORCE STRUCTURE

11. Senator WARNER. Secretary Harvey and General Schoomaker, the Army, supported by the QDR, has modified its plan to increase the number of combat brigades

in the Active and Reserve component. The Army will increase the Active component force structure to 42 combat brigades and will increase the ARNG force structure to 28 combat brigades. This action represents a reduction of one Active component combat brigade and six ARNG brigades from previous plans. Do you believe that the QDR has taken into consideration the ARNG's State mission, especially homeland defense and disaster relief?

Secretary HARVEY and General SCHOOMAKER. The Army is increasing its capacity to ensure that the right capabilities are available to support current global operations, prevail in the war on terrorism, and conduct expanded homeland defense requirements while broadening the options available to civil authorities. This effort is essential to having the kinds of current and future capabilities and forces needed across the Army for sustaining the long war. Based on analysis associated with the 2006 QDR, the Army determined the need to be able to supply 18 to 19 combat brigades in steady state operations. As a result, the Army is rebalancing and restructuring to form a rotational pool of 70 BCTs and 211 supporting brigades of various types among the three components. The collaborative efforts of the Army staff, the Chief of the National Guard Bureau, the Director of the ARNG, the Chief of the Army Reserve, and The Adjutants General Association of the United States Force Structure Committee will determine the appropriate force structure for the ARNG that can best support the Army's efforts to win the global war on terrorism while meeting the demands of our ongoing defense support to civil authorities.

JOINT IMPROVISED EXPLOSIVE DEVICE DEFEAT OFFICE

12. Senator WARNER. General Schoomaker, in October 2003, the Army created the Improvised Explosive Device (IED) Task Force in recognition of the growing IED threat. The task force has gone through numerous reorganizations and is now the Joint Improvised Explosive Device Defeat Office (JIEDDO). I am concerned that the Department is growing another bureaucracy that will not quickly meet Army and Marine Corps requirements to counter the IED problem. How do you ensure that the JIEDDO can respond quickly to the needs of our deployed soldiers and marines?

General SCHOOMAKER. I have asked the Director, JIEDDO to respond to your concerns.

13. Senator WARNER. General Schoomaker, what are you doing to ensure that the office is looking at all solutions, both technical and nontechnical, to address the IED issue?

General SCHOOMAKER. I have asked the Director, JIEDDO to respond to your concerns.

AIRCRAFT SURVIVABILITY EQUIPMENT

14. Senator WARNER. General Schoomaker, helicopters are particularly vulnerable to surface fire and manportable missiles. In fact, the Army had three helicopters shot down in a 10-day period in January 2006. The Army has made aircraft survivability equipment (ASE) a high priority and has taken actions to have modern ASE delivered to the Central Command (CENTCOM) area of operations for installation on Army helicopters. What is the status of the installation of this ASE equipment?

General SCHOOMAKER. Installation of the Common Missile Warning System (CMWS), a component of the Advanced Threat Infrared Countermeasure System (ATIRCM), has been underway since a Chinook helicopter was shot down in November 2003. As of the end of this February, over 540 Army aircraft had been modified with the "A-kits" needed to prepare the aircraft to accept the CMWS equipment (B-kits), and over 273 of those aircraft had CMWS B-kits installed. These numbers are constantly increasing as installations continue and the prime contractor (BAE Systems, Nashua, NH) continues to ramp up CMWS B-kit production. By the end of March 2006, all Army aircraft deploying to Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF) 05/07 will have been modified to accept CMWS. Current projections are for all deployed aircraft to be CMWS-equipped and operational by the end of September 2006.

15. Senator WARNER. General Schoomaker, are these upgrades fully funded for both Active and Reserve component aircraft?

General SCHOOMAKER. CMWS is fully funded for all deploying Active and Reserve component aircraft.

16. Senator WARNER. General Schoomaker, are you satisfied with the Army's and Marine Corps' initiative in providing ASE for aircraft in the CENTCOM area of operations?

General SCHOOMAKER. I am confident that both the Army and the Marine Corps are working diligently to provide our soldiers and marines with the best ASE available for our respective aircraft. Upgrading ASE equipment for our operating aviation fleet remains a top priority for the Army.

REBALANCING THE FORCE

17. Senator WARNER. General Schoomaker, to sustain the operating forces required for the long war against terrorism, the Services are rebalancing some of their force structure—for example, retraining artillerymen for military police duties. How important is this effort?

General SCHOOMAKER. The Army is involved in the most dramatic restructuring of forces since World War II. The centerpiece is modular transformation and an increase in the Army's operational force with the building of BCTs and associated multi-functional and functional support brigades. As part of that effort, the Army has addressed rebalance across all three components (Active, ARNG, and Reserve) in a concerted effort to create the right mix of units in high demand and to develop soldiers with critical and high demand skills. To assure timely access to force capabilities, we continuously review our force structure to determine the types of units and skills that are in greatest demand in today's environment—including infantry, engineer, military police (MP), military intelligence, Special Forces, chemical, civil affairs, and psychological operations units. Between fiscal years 2004–2011 we have programmed rebalance of over 100,000 positions to address early deployer requirements in the Active component, manning shortfalls across all three components, and the elimination of overstructure in the Reserve components to establish personnel training accounts in both the ARNG and the Army Reserve. We also rely on temporary in-lieu-of sourcing as well, within all three components to meet current operational demands. The Army requires forces for major combat operations, field artillery for example, that are not in as high of demand in stability, security, transition, and reconstruction operations. As such, the Army uses innovative techniques, such as deploying artillery units to execute security tasks doctrinally performed by MP units, to support the COCOM's current operational demands. These rebalancing and in-lieu of sourcing efforts are critical in increasing our capabilities to support the long war, while reducing stress on soldiers and their families.

18. Senator WARNER. General Schoomaker, what can you tell us about how that program is progressing?

General SCHOOMAKER. We have accomplished over half of this effort and project completion by 2011. Transformation to the Army Modular Force is a journey that is addressing our capabilities of today without forsaking tomorrow's fight. This continuous reevaluation of the demands of today's long war also reflects the agility of the Army's institution to adapt its units, personnel, and systems to produce trained and ready units. Until the Army fully achieves modular transformation across the Service, the Army will continue to use innovative techniques, such as in-lieu-of sourcing, to fill the gaps between available force structure and COCOM's needs. Units selected to perform these unique in-theater missions are identified as early as feasible in their operational readiness cycle in order to allow commanders to task organize and train to the theater specific mission essential tasks. As the Army continues the modularity effort, these sorts of missions will become less and less frequent.

LIGHT CARGO AIRCRAFT

19. Senator WARNER. Secretary Harvey and General Schoomaker, we are aware that the Army is prepared to release a request for proposals (RFP) for acquiring a fixed-wing light cargo aircraft (LCA) as a replacement for its aging fleet of C–23 Sherpa aircraft. We are also aware that the Air Force may be interested in pursuing a joint procurement of an aircraft that would meet the requirements of both Services. Would you please share with us the current status of this joint effort to procure a LCA, including the number of aircraft to be procured, and any concerns that you might have regarding the Services' roles and missions for this aircraft?

Secretary HARVEY and General SCHOOMAKER. The Office of the Secretary of Defense (OSD), Defense Acquisition Executive approved the joint Future Cargo Aircraft (FCA)/LCA Acquisition Strategy Report on March 17, 2006. The RFP was re-

leased later the same day. The Services will now move forward towards a Milestone C decision by the end of the year. The Army plans to replace its aging C–23, C–26, and a portion of the C–12 fleet commensurate with fielding the FCA.

There is no argument or "turf war" going on between the Army and the Air Force over roles and missions. When it comes to intratheater airlift, specifically at the strategic and operational levels, no one in the world can match the U.S. Air Force's ability to move large volumes of personnel, supplies, and equipment around the globe.

The FCA is a complementary system that fills a gap at the tactical (as opposed to operational or strategic) level. That gap is intratheater airlift—movement of time sensitive, mission critical resupply and key personnel transport from the initial staging base or port of debarkation (POD) to the BCT; what we like to describe as the last tactical mile in the end-to-end distribution system. These BCTs are often deployed to austere locations across the noncontiguous battlefield. Today we are mitigating the risk associated with this gap through employment of a combination of tactical wheeled vehicle convoys, CH–47 helicopters and through the use of our smaller, less capable, cargo and utility aircraft such as the C–23, C–12, and C–26. The FCA will enable the Army to lighten the heavy burden placed on our CH–47 (Chinook) helicopter fleet so they can focus on supporting division level and modular brigade force structure warfighting requirements. Furthermore, the FCA will reduce the risk to soldiers' lives associated with convoy operations and forward arming and refueling points required to support extended CH–47 long-haul cargo operations.

Regarding the topic of intratheater lift, you are correct we have been working with the Air Force for the past couple years on the FCA program. In fact, the Air Force recently recognized the value a LCA could provide to the modern asymmetrical battlefield and in support of natural disasters. As a result, on 17 November 2005 the Air Force published a Stage 1, Initial Capabilities Document (ICD) for Intratheater Light Aircraft which began their initial development of the Air Force LCA requirements.

The Army's Analysis of Alternatives (AoA), dated 18 July 2005 identified the Army's low risk requirement for 145 FCA. On 8 February 2006, the Army and Air Force agreed that the quantity identified in the Army AoA would be referred to as the "Initial Joint Requirement" and that the Army would procure 75 FCA and the Air Force will procure the remainder of the initial joint requirement. The Army and Air Force, in coordination with the Joint Staff, plan to conduct a follow-on Joint AoA over the next year or two to define the broader, full-joint force requirement or FCA/LCA fleet end-state for the two Services.

We are currently in the process of establishing a FCA/LCA Joint Program Office (JPO) that will become effective 1 October 2006, with the Army in the lead agency. The Services anticipate a JPO charter will be approved by the Services' Acquisition Executives prior to the Army reaching Milestone C on the FCA program. The Army still plans to begin fielding FCA to its aviation force in fiscal year 2008. The USAF will follow with the fielding of the LCA approximately 2 years later.

Over the past 90 days, the Services have crafted a Joint Memorandum of Agreement (MOA), which articulates the way ahead for the convergence of the Army FCA and Air Force LCA programs into a single Joint Cargo Aircraft (JCA) program. We anticipate that agreement will be approved by 1 May 2006. The draft MOA outlines the roles, missions, command and control relationships, and the path forward for merging testing, training, sustainment, and maintenance requirements of the JCA. We also know that the JCA will be a common airframe.

WOMEN IN COMBAT

20. Senator WARNER. Secretary Harvey and General Schoomaker, section 541 of the National Defense Authorization Act for Fiscal Year 2006 codified the DOD policy that has been in effect since October 1, 1994, which excludes women from assignment to units or positions—below the brigade level—whose primary mission is to engage in direct ground combat. That provision also required the Secretary of Defense to review current and future implementation of the women in combat policy, and to closely examine personnel policies associated with creating the Army's new modular combat units to ensure compliance with the ground combat exclusion rule. Are the Army's current policies for assignment of women consistent with the DOD rules that have been in effect since 1994 and which are now codified in section 541?

Secretary HARVEY and General SCHOOMAKER. The Army's movement to modular units poses no conflict with the assignment of women set in current policy. Women have and will continue to be an integral part of our Army team as they perform

exceptionally well in specialties and positions open to them in accordance with the DOD Direct Ground Combat Assignment Rule.

21. Senator WARNER. Secretary Harvey and General Schoomaker, will the full report reviewing the Army's current and future assignment policies be provided to Congress by the deadline of March 31, 2006?

Secretary HARVEY and General SCHOOMAKER. Our understanding is that the DOD plans to provide an initial reply to Congress by the end of this month; a final report that provides a comprehensive report which thoroughly examines the current policies on the assignment of women and analyzes implications of these policies for the future will be provided at a later date.

22. Senator WARNER. Secretary Harvey and General Schoomaker, does the Army intend to seek changes to the current policy excluding women from assignment to units whose primary mission is to engage in direct ground combat?

Secretary HARVEY and General SCHOOMAKER. No, after a careful review of the policy in 2005, we decided not to change the Army's policy that dictates the assignment of women soldiers. If, in the future, the Army determines that there is a need to seek a change to the policy, the Army will comply with all notification requirements in title 10, USC 652.

23. Senator WARNER. Secretary Harvey and General Schoomaker, what is the Army's policy on assignment of women to forward support companies, whose mission is to support units engaged in ground combat?

Secretary HARVEY and General SCHOOMAKER. Currently, women are assigned to units called Forward Support Companies, which are organic to the Brigade Support Battalions subordinate to the new BCT Unit of Action. These companies do not have a mission of direct ground combat but provide logistics support to maneuver units that are in direct ground combat.

24. Senator WARNER. Secretary Harvey and General Schoomaker, if women are assigned for forward support companies that are collocated with, or attached to, units that have a ground combat mission, how is such assignment consistent with current law and the 1994 policy?

Secretary HARVEY and General SCHOOMAKER. Forward support companies are not required to routinely collocate with units that have a direct ground combat mission. Accordingly, the assignment of women to forward support companies does not violate the DOD policy.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

FUTURE COMBAT SYSTEMS

25. Senator MCCAIN. Secretary Harvey, in the 2006 Defense Authorization Law, Congress instructed the Pentagon to report on every program that costs at least 50 percent more than initial projections. The provision was designed to tie programs to their original cost estimates, rather than updated cost and schedule baselines. The Pentagon has been allowed to change its baseline without invoking the penalty. For example, the Army's Boeing-led Future Combat Systems (FCS) program hasn't triggered an official breach despite a $161 billion cost estimate that is more than double its original baseline estimate. What plans do you have in place to ensure programs are held to their original baseline figures instead of allowing the current practice of rebaselining?

Secretary HARVEY. While the Army's implementation plans for this new amendment depend partly on the guidance from the Office of the Secretary of Defense, the Army's intent is to be in full, timely compliance with the law. Oversight of the program baselines will continue through milestone decision reviews and program executive officer (PEO) updates to the Army Acquisition Executive. Deviation reports using the new criteria outlined in the amendment will be reported using current processes and procedures.

While this amendment does not prohibit the rebaselining of programs, it does hold program managers accountable to the original baseline estimate. By keeping the original estimate as a data point in Selected Acquisition Reports (SAR), the entire DOD acquisition chain is sensitive to the cost growth of the entire program. This is an improvement of the current practice of rebaselining which does not retain the original baseline estimate in official reports.

With respect to the FCS program, the $161 billion figure cited in the question represents the total acquisition cost in then-year dollars, and was reported in the November 2005 SAR. The comparable original baseline figure is $92.2 billion, a 75-percent increase. When calculated using base-year dollars so that the rate of inflation (which is beyond a program manager's control) does not influence the result, the overall increase is 54 percent (from November 2005 SAR: SAR development baseline of $77.8 billion; acquisition program baseline objective of $120.15 billion).

26. Senator MCCAIN. Secretary Harvey, please fully describe why the FCS program has increased $600 million in this year's budget request and why the overall projected cost has nearly doubled while slipping in schedule.

Secretary HARVEY. There are multiple ways of interpreting the first portion of this question and it is not readily apparent to the Program Management Office how the $600 million figure was computed. The Army respectfully requests clarification of the $600 million to ensure that we provide an accurate response.

When comparing program costs, it is necessary to do so in constant base year dollars so that the impact of inflation does not skew the results. According to the November 2005 SAR and using program base year (2003) constant dollars, FCS research, development, test, and evaluation (RDT&E) costs have increased by approximately 48 percent and procurement costs by approximately 57 percent. While these are significant increases, it represents approximately half of the stated increase. RDT&E costs increased 18 percent due to the addition of previously deferred systems, 6 percent due to additional experimentation and technology/reliability maturation, 4 percent due to the additional efforts to spin out FCS capabilities to the current force, 17 percent due to the 4-year RDT&E schedule extension, and 3 percent due to updates in program cost estimates. The procurement costs increased 19 percent due to the addition of previously deferred systems, 18 percent due to changes in the FCS BCT organization (i.e., platform quantities), 11 percent due to platform capability enhancements, 2 percent due to the lengthened procurement schedule (i.e., procuring one and one half vs. two BCTs per year), and 7 percent due to updates in program cost estimates.

27. Senator MCCAIN. Secretary Harvey, what safeguards are in place to ensure taxpayer dollars are spent wisely?

Secretary HARVEY. The FCS System Development and Demonstration (SDD) Federal Acquisition Regulation (FAR)-based letter contract awarded in September 2005 (the letter contract is on schedule to be definitized on March 28, 2006), imposes more control and oversight over the LSI and its subcontractors than the Other Transaction Agreement. The FCS SDD FAR-based letter contract includes clauses that require compliance with the Procurement Integrity Act (PIA), Truth in Negotiations Act (TINA), and Cost Accounting Standards (CAS) requirements. The contract also allow government auditors access to contractor accounting records and requires that the contractor has an Earned Value Management System in place with regular reporting to the government. Moreover, the FAR-based letter contract and the resultant definitized contract restructure the fee arrangement to afford the Army greater control in controlling costs, performance, and schedule. These clauses reinforce the fiscal integrity of the contract negotiation and management process. Additionally, the Defense Contract Management Agency has the authority to administer certain contractor functions such as billing oversight, approving contractor management and management information systems, and quality control. The Program Management Office for FCS will utilize all available contract and program management tools to closely monitor the technical, cost, and schedule achievements of the program and make program adjustments as necessary to ensure the taxpayer's dollars are safeguarded.

ACQUISITION REFORM

28. Senator MCCAIN. Secretary Harvey and General Schoomaker, one of the recommendations of the recently released Defense Acquisition Program Assessment (DAPA) report, is to establish a dedicated four-star acquisition systems command at the Service level, which would report to the Service Chief and Senior Acquisition Executive of the military department. I would like to hear your thoughts regarding the recommendations of the DAPA panel, especially on the recommendation to create Service acquisition commands.

Secretary HARVEY and General SCHOOMAKER. The DAPA panel made the overall important finding that government-induced instability in the overall acquisition process ("Big A") creates a situation where senior leaders in the DOD and Congress

cannot anticipate the outcome of programs measured by cost, schedule, and performance. The report correctly attributes the majority of this instability to the capabilities determination and resourcing processes.

The DAPA report made a series of recommendations most of which are worth further investigation and perhaps implementation. The recommendation to create a Service Acquisition Command is not unlike what the Army had prior to 2001 where a number of program managers were under the Army Materiel Command. We moved to the current structure of all PEOs) and Program/Product/Project Managers (PMs) directly under the Army Acquisition Executive (AAE) to ensure that there was one focal point for Army acquisition and ensure that PMs were responsible and accountable as life cycle managers of their assigned programs. The current structure is in full compliance with the "two-level rule" as outlined in National Security Directive 219 dated April 1, 1986, and also ensures that the acquisition chain of command (i.e. accountability) is not diluted through a four-star acquisition command, but rather flows directly from the AAE to the PEOs and PMs.

29. Senator MCCAIN. Secretary Harvey and General Schoomaker, the Service Chiefs already have control of the budgets and requirements generation process. How will adding the Service Chiefs into the acquisition process improve the process?

Secretary HARVEY and General SCHOOMAKER. Under well-established public law, responsibility for the Headquarters, Department of the Army acquisition function resides solely in the Assistant Secretary of the Army for Acquisition, Logistics, and Technology, and the Department's acquisition process is ably executed by the dedicated Acquisition Corps professionals who work under his supervision. The Chief of Staff, Army and other Army Staff principals have a crucial lead role with respect to certain closely related activities such as requirements generation and validation, resource allocation, testing, and determination of fielding priorities. While always being receptive to exploring ways in which the Department can improve and streamline its processes, the Department is well-served by the current delineation of responsibilities.

30. Senator MCCAIN. Secretary Harvey and General Schoomaker, the report of the QDR stated that the DOD is focusing on bringing the needed capabilities to the joint force more rapidly, by fashioning a more effective acquisition system and associated set of processes. One of the recommendations is to integrate the COCOMs more fully into the acquisition process. What are your thoughts regarding the increased role of COCOMs in the acquisition process?

Secretary HARVEY and General SCHOOMAKER. We recognize and value the importance of COCOM participation and influence in the Department's requirements and budgeting processes and are taking steps to strengthen existing means available for that participation, and creating new ones as well. Central to this is a COCOM's IPL. The IPL details a COCOM's highest priority requirements across functional lines and defines shortfalls in key programs. In the past, the IPL was a fiscally unconstrained list but now includes detailed capability trade-off recommendations to inform funding choices. Moreover, the JFCOM has assumed a more prominent and proactive role in rationalizing and integrating capabilities across all unified and specified commands.

The Joint Staff also sponsors periodic visits to the COCOMs to engage in direct discussions on requirements and budget issues. They have begun to expand the participation in these discussions to a much broader set of participants from OSD as well. Now, representatives from OSD PA&E, Comptroller, Policy, and AT&L, among others, are there to discuss COCOM-specific issues relating to programming, budgeting, and acquisition. Also, senior leadership conferences are held throughout the year at junctures aligned with the budget process and provide the COCOMs similar opportunities to participate directly in formulating programs and budgets.

31. Senator MCCAIN. Secretary Harvey and General Schoomaker, what are your recommendations of how the Department should develop and address joint requirements?

Secretary HARVEY and General SCHOOMAKER. See response to question number 4.

EMERGENCY SUPPLEMENTAL SPENDING

32. Senator MCCAIN. Secretary Harvey, a major issue in the congressional debate on funding continuing military operations and reconstruction in Iraq and Afghanistan is whether military and peacekeeping operations should be funded with supplemental requests or via the regular authorization and appropriation process. Last

year, I urged the DOD and my colleagues on the Senate Armed Services Committee (SASC) to include the costs of current and future operations in Iraq and Afghanistan in the DOD's regular appropriations, arguing that these are now ongoing operations that should be planned for and funded in the annual defense budget.

It is a responsibility, not a privilege, that the SASC exercises oversight in the normal authorization process at the beginning of the budget debate. During the last 2 years the SASC has provided for limited authorization in bridge supplemental requests in the National Defense Authorization Bill. The DOD assesses the incremental cost of OIF at approximately $4.4 billion a month and OEF in Afghanistan at $800 million a month. As General Pace has appropriately stated in his testimony, "[w]e are in a long war." Do you think supplemental appropriations are the best vehicle for the Army for funding this long war?

Secretary HARVEY. Yes, as long as the theater of war remains a volatile environment and requirements are not predictable over the long term. With a stable environment and predictable costs, the Army would support funding in the base program.

END STRENGTH

33. Senator MCCAIN. Secretary Harvey, please rate the current levels of retention and recruitment for the total force. Have the Active and Reserve components met their goals for the year, and what is the outlook with regard to achieving future levels specified in the QDR?

Secretary HARVEY. The current recruiting and retention environment remains challenging. The Army is working to achieve all three components' fiscal year 2006 recruiting and retention goals. All three components have achieved their recruiting missions to date and are confident they will also meet their retention missions. Worldwide deployments and an improving economy directly affect recruiting and potentially affect retention. All components closely monitor leading indicators including historic recruiting and reenlistment rates, retirement trends, first-term attrition, and DOD and Army attitudinal surveys across both areas to ensure we achieve total success. Moreover, all components are employing positive levers including increased enlistment bonuses, force stabilization policy initiatives, updates to the reenlistment bonus program, targeted specialty pays, and policy updates to positively influence the Army's recruiting and retention programs. These efforts will continue to be a challenge and the Army continues to reshape its resourcing priorities to meet that challenge.

34. Senator MCCAIN. Secretary Harvey, what are your greatest recruitment and retention problems and how do you intend to resolve them?

Secretary HARVEY. The current recruiting environment remains a challenge. The global war on terror and a strengthening economy continue to impact military recruiting. Increased private-sector competition, an upward trend in those pursuing higher education, and negative trends in centers of influence recommending military service are contributing to an erosion of recruiter productivity and could create significant challenges in the fiscal year 2006 and beyond. With congressional help the Army is aggressively adjusting its resources to meet these challenges. The key issue remains to attract high quality men and women to serve as soldiers and meet future manning requirements. We are working to overcome the market effects of increased alternatives to youth and a decreasing propensity to enlist by increasing incentives, developing new programs, and reducing attrition. We must remember that this is not an Army issue alone but a national issue. While the Army retention mission is challenging, all components are confident they will meet their annual retention mission. Worldwide deployments and an improving economy potentially affect retention. All components closely monitor leading indicators including historic reenlistment rates, retirement trends, first-term attrition, Army Research Institute surveys, and mobilization/demobilization surveys to ensure we achieve total success. Moreover, all components are employing positive levers including force stabilization policy initiatives, updates to the reenlistment bonus program, targeted specialty pays, and policy updates to positively influence the retention program. Ultimately, we expect to achieve the Active Army, ARNG, and United States Army Reserve fiscal year 2006 retention missions.

35. Senator MCCAIN. General Schoomaker, the QDR reduces the authorized level of Army Guard and Reserve from 350,000 to 333,000—a 17,000 man reduction. Why would we reduce this authorization while we are engaged in operations in Afghani-

stan and Iraq, both of which require significant levels of Army and Reserve personnel?

General SCHOOMAKER.Prior to QDR 2006, the Army had developed a plan for 43 combat brigades and 75 support brigades in the Active component, 34 combat brigades and 72 support brigades in the ARNG, and 58 support brigades in the USAR. This provided up to 20 combat brigades with associated multi-functional and functional support brigades for steady state operations around the world. Additionally, the Army was rebalancing structure in the ARNG and USAR to establish transient, trainee, holdee, and student (TTHS) accounts of 8,000 and 20,500, respectively. QDR 2006 showed a lower requirement for combat brigades, but a greater requirement for brigades able to respond more immediately to meet defense support to civil authorities. Although consideration was made to reduce the ARNG Force Structure Allowance (FSA) to 324,000 with an additional 9,000 in the TTHS account during the QDR 2006, the decision at the end of the TAA 08–13 Force Program Review was to implement the Army End Strength Plan for the ARNG that builds toward an FSA of 342,000 with a TTHS of 8,000 by fiscal year 2011. This includes a total of 106 brigades within the ARNG whose mix of capabilities are being reworked collaboratively between the Army staff, the Chief of the National Guard Bureau, the Director of the ARNG, the Chief of the Army Reserve, and The Adjutants General Association of the United States Force Structure Committee. The right mix of capabilities within the 106 ARNG brigades will help the Army meet global war on terrorism demands while providing enhanced options to our civil authorities. Our goal is to build ARNG brigades that are fully manned, equipped, and trained to meet the full spectrum of operations, both in the United States and overseas.

36. Senator MCCAIN. General Schoomaker, should we not be seeking to increase these authorizations, as well as taking other steps that would increase Army end strength?

General SCHOOMAKER. No, we have not determined a need to increase Army end strength at this time. To sustain increased global commitments we are building the Active component (AC) force structure under a 30,000 temporary end strength increase above the 482,400 program. At the same time, we are restructuring our Reserve component forces within their authorized end strengths of 350,000 for the ARNG and 205,000 for the U.S. Army Reserve (USAR). Our goal is to grow the operational Army to 790,000 (to 355,000 soldiers within the AC, 306,500 soldiers within the ARNG, and 128,500 within the USAR). This growth reflects a 40,000 increase in the AC over the fiscal year 2004 baseline of 315,000 based on restructuring of its institutional force with planned military-to-civilian conversions and changes in the management of the individuals account. This growth in the Army's operational force also reflects the restructuring in the ARNG to build a Force Structure Allowance (FSA) of 342,000 with an individuals' account of 8,000 and the restructuring in the USAR to build an FSA of 184,500 with an individuals' account of 20,500. The combined effect of rebalancing skills to reduce stress in high demand capabilities within all of our three components, redistributing soldiers to create the right mix between our operational forces and our institutional structures, and growing our operational Army will increase our overall effectiveness.

37. Senator MCCAIN. Secretary Harvey, in today's Baltimore Sun it is reported that the Army is lowering its standards in order to make its recruiting goals. The report states that the Army is granting special recruiting waivers in order to admit individuals with past criminal misconduct or alcohol and illegal drug problems. Please tell me we are not allowing criminals into our ranks at the same time we are planning to cut our Reserve Forces and telling our honorable citizen-soldiers we no longer need them. What long-term problems do you foresee due to this course of action?

Secretary HARVEY. The Army is not granting special waivers or allowing criminals into its ranks. The Army has a sound process for conducting waivers that allows our citizens who have overcome mistakes, made earlier in their lives, to serve their country. The Army continues to use a strict waivers review process in which requests must be reviewed and a disposition rendered by the Recruiting Battalion Commander (a Lieutenant Colonel) or the Commanding General, U.S. Army Recruiting Command, depending on the level of the offense. After a thorough review, waivers are approved or disapproved based on their merits and the whole person concept. No consideration is given to percentages of waivers, constraints, or recruiting goals during this process. Drug dependence and alcoholism are permanent disqualifications from entry in the United States Army. The Army realizes the military service is not an alternative to the criminal justice system and should not be viewed as an alternative source of rehabilitation. The Army established a waivers process

to ensure potential soldiers who are qualified for entry are provided an opportunity to serve.

38. Senator MCCAIN. Secretary Harvey, I have long said that American forces are undermanned in Iraq. Other worldwide deployments and disaster relief missions here at home continue to tax the Service. Yet the Army seeks to reduce its authorized end strength. Please explain your rationale.

Secretary HARVEY. First, the force requirements in Iraq are established by the COCOM. The Army has been evaluating force requirements within the End Strength Plan approved in August 2005. Under this plan, Army end strength will be 482,400 in the Active component, 350,000 in the ARNG and 205,000 in the USAR. Within this total end strength of 1,037,400, the Army has an Operational Force of 790,000 across all three components. The Active component operational force will grow 40,000 to 355,000, due primarily to a plan to rebalance the Institutional Force (down from 104,000 to 75,000) and the TTHS account (down from 63,000 to 52,400). Within the ARNG, elimination of 33,500 of overstructure provides an operational force of 306,500 and establishes, for the first time, a TTHS account of 8,000. The USAR eliminated overstructure of 31,500 to provide an operational force of 128,500 and establish, also for the first time, a 20,500 TTHS account. The Army optimized this operational force by rebalancing capabilities across all three components, eliminating overstructure, and improving training readiness with the establishment of TTHS accounts in the Reserve components to ensure ready and predictable access to the right force at the right time to meet all worldwide requirements.

39. Senator MCCAIN. General Schoomaker, please explain why the Army has utilized stop-loss on more than 50,000 soldiers while simultaneously planning to draw down the Reserve component by 17,000 soldiers.

General SCHOOMAKER. Stop-loss policy is not about numbers but is a temporary measure that does not permanently affect the Army end strength and has not been a planning element in determining any potential cuts in authorized troop strength for the Active Army or the Reserve components. We have consistently stated since the onset of the global war on terrorism that the Army focus, indeed the charge, of Army deployments is to deliver to the COCOM trained and ready units, not individuals. RANDom and continuing unit losses caused by individually oriented separation, retirement, and replacement policies have the potential to adversely impact training, cohesion, stability, and readiness in the deploying units. Stop-loss is a means that effectively sustains a force, which has trained together, to remain a cohesive element throughout the unit's deployment. Our commitment to pursue the global war on terror and provide our warfighters with the cohesive, trained, and ready forces necessary to decisively defeat the enemy requires us to continue the Army's stop-loss program to attain the above goals. Consequently, any proposal to reduce Reserve component end strength or reduce the Reserve component participation in Operations Iraqi and Enduring Freedom will not in and of itself determine the level of stop-loss we will need to honor our contract with the American people to fight and win our Nation's wars.

The size of future troop rotations will in large measure determine the levels of stop-loss needed. The Army leadership fully understands that by executing stop-loss, the policy has to some degree disrupted the lives of soldiers and their families. To minimize the impact of stop-loss on our soldiers, the program only affects soldiers assigned at the unit's mobilization/deployment date minus 90 days, continues through the demobilization/redeployment date, plus a maximum of 90 days. Consequently, since reaching large scale application, the average monthly number of soldiers affected by stop-loss is approximately 13,000. It is also noted that many of the soldiers who were initially retained beyond their obligation by stop-loss have voluntarily elected to remain in the military and have reenlisted or extended. While it is not palatable to some, our ability to retain these fine soldiers and their expertise is contributing immeasurably to our continued success in the war on terrorism.

40. Senator MCCAIN. Secretary Harvey, there have been lengthy discussions about force reductions to the National Guard bringing them to an end strength of 333,000. I understand the Army Reserve is also facing a reduction from 205,000 to 188,000. Over 60 percent of the total Army's medical assets and 98 percent of its civil affairs assets are in the Army Reserve—both critical to stabilizing and nation-building; will the Army Reserve be funded to a level supporting an end strength of 205,000 or 188,000?

Secretary HARVEY. The Army is not reducing the size of the Army Reserve. The Army plans to program the Army Reserve to an end strength of 205,000 with a force

structure of about 184,500 and a TTHS account of 20,500. The Army plans to fund the Army Reserve up to 205,000, offset for historical participation, projected mobilization levels, and projected strength shortfalls.

ARMY POSTURE

41. Senator MCCAIN. General Schoomaker, the QDR stresses the need for "stabilization operations," which we used to call "nation building." To conduct such operations, our soldiers need considerable culture, mediation, and language skills. What specific steps has the Army taken to improve the individual soldier's abilities in these areas?

General SCHOOMAKER. Army training has been redesigned to provide soldiers and units with increased capabilities and skills relevant to current and future operations. The Army focuses individual training on 39 Warrior Tasks, grouped into Shoot, Move, Communicate, Fight, and Joint Urban Operations, and nine Battle Drills (39/9). To be combat ready every soldier, regardless of specialty, experience, or component, must be proficient in these skills. The Warrior Leader Course for junior Noncommissioned Officers (NCO) has expanded its situational awareness training exercise to 96 hours, giving soldiers more field time to practice troop-leading procedures, work on mission planning, and execute the mission to standard, followed by a thorough after-action review. Basic and Advanced NCO training in all of its progressive phases also builds on the 39/9 to teach leadership as it applies to Current Operating Environments (COE), including replicating Forward Operating Bases, live-fire convoy exercises, and reaction to IEDs. The Sergeants Major Academy provides a common core built around the 39/9 with emphasis on convoy operations, detainee operations, cultural awareness, and Joint Operations.

The Officer Education System (OES) also focuses on the 39/9 and now includes a 6-week field leadership course attended by lieutenants from all branches and components followed by their functional courses. Another change is resident Intermediate Level Education for all Active-Duty majors that prepares them for full spectrum operations in a Joint, Interagency, Intergovernmental, and Multinational environment. Advanced civil schooling opportunities have expanded by 200 per year in disciplines such as cultural awareness, regional knowledge, foreign language, governance, diplomacy, national security, and social sciences. This program will develop critical intellectual skills while providing long-term retention of quality officers. Cultural awareness has been incorporated into every phase of the Army's professional military educational system. Formal language training has also been increased and modified to include languages relevant to current and potential operations. Online language training (26 languages) is available to all Army personnel.

Our premier training facilities, two dirt Combat Training Centers that replicate the realistic operational environments of Iraq and Afghanistan, are where we blend our 39/9 and OES/NCOES changes together with unit/collective training at the Brigade/Battalion/Company level with real-time challenges.

Simulators and other training devices such as the Engagement Skills Trainer, Laser Marksmanship Training System, and Visual Combat Convoy Trainer address soldier skills under situations and conditions relevant to today's combat. In addition, upgraded ranges help to improve soldier skills with advanced technologies (that help in evaluating and promoting soldier and unit weapons proficiency) and actual urban terrain that also reflects the COE.

EVOLVING THREATS IN AFGHANISTAN

42. Senator MCCAIN. General Schoomaker, yesterday, February 13, four soldiers died in an IED attack in Afghanistan. There has been a spike in violence in Afghanistan in recent months, with insurgents there applying lessons learned from Iraq. What new steps are we taking to combat this threat?

Secretary HARVEY and General SCHOOMAKER. I have asked the Director, JIEDDO to respond to your concerns.

MODULARITY AND RESET FUNDING

43. Senator MCCAIN. Secretary Harvey and General Schoomaker, I understand the DOD has allocated $5 billion per year for modularity beginning with the fiscal year 2007 budget request. I think it's about time DOD funded modularity in the base budget rather than through supplementals. I understand that the Army will be requesting additional modularity funding in the upcoming supplemental request.

Can you tell us the amount of the request and will the requests include funding for National Guard equipment?

Secretary HARVEY and General SCHOOMAKER. The Army requested a total of $5.0 billion in fiscal year 2006 supplemental funds to support the transition to the modular force. This request is broken into two components. The fiscal year 2006 supplemental currently being considered by Congress contains $4.1 billion for our modular forces. Additionally, the Army received $900 million in supplemental funding with the fiscal year 2006 Title IX Bridge to support the modular force. The $900 million we received in Title IX and the $4.1 billion Congress is currently considering totals to $5 billion. Fiscal year 2006 supplemental funds contain a total of $2.2 billion for National Guard equipment. Of this amount, $1.5 billion supports the conversion of National Guard units to the modular force. The National Guard received $200 million in the fiscal year 2006 Title IX Bridge in support of modularity with $1.3 billion remaining in the current submission.

44. Senator MCCAIN. Secretary Harvey and General Schoomaker, how much of the $5 billion added to the Army by the Department for modularity is funded from within the Department of the Army?

Secretary HARVEY and General SCHOOMAKER. The Army programmed $6.6 billion for the Army modular force in fiscal year 2007. This amount includes the $5 billion the Department provided and an additional $1.6 billion the Army internally programmed to transform to a modular force. The funding the Department provided in fiscal year 2007 is programmed for equipment in support of the Army modular force. The remaining $1.6 billion programmed is primarily for equipment procurement but also provides funding for operations and maintenance.

45. Senator MCCAIN. Secretary Harvey and General Schoomaker, is the Army reset fully funded?

Secretary HARVEY and General SCHOOMAKER. The fiscal year 2006 supplemental request will be released by the President shortly, and will include over $8.5 billion for reset of Army equipment across all three components: Active, Guard, and Reserve. This will meet our highest priority needs to repair or replace damaged and worn equipment. If additional funds should be made available, we would be able to accelerate our reset efforts.

Reset costs for future years will be dependent on the level of commitment in theater, the activity level in theater, and the amount of equipment required each year because it is damaged or excessively worn. Unless one of these factors significantly changes, the Army expects the requirement to be $10–$13 billion per year through the period of conflict and 2 years beyond.

ARMY ACQUISITION

46. Senator MCCAIN. Secretary Harvey, the Government Accountability Office (GAO) reports that, since the Joint Tactical Radio System program entered systems development in 2002, the contractor has overrun cost estimates by $93 million—nearly 28 percent above what was planned. Although the program attempted to stabilize costs by adding approximately $200 million to the contract in January 2004, costs continued to grow steadily thereafter. In addition, the contractor has increasingly fallen behind schedule and has had to devote more resources than originally planned. In January 2005, the prime contractor estimated that the total costs for the "cluster" one development would be $531 million more than what was originally budgeted, reaching about $898 million at completion. However, according to program officials, since contract award, the prime contractor has not demonstrated strong cost estimating and cost management techniques, and it is difficult to estimate with any confidence what the overall program is likely to cost. What specific steps are you taking to ensure that future Army acquisition programs are both realistic in scope and affordable?

Secretary HARVEY. Implementation of Section 801 of the National Defense Authorization Act for Fiscal Year 2006, Public Law 109–163, will assist in ensuring that future Army acquisition programs are both realistic in scope and affordable. This requires certain certifications by the milestone decision authority (MDA) before program initiation at Milestone B. With this certification, the MDA attests that the:

1. technology is ready;
2. program is highly likely to accomplish its intended mission;
3. program is affordable and an analysis of alternatives has been completed;
4. JROC has accomplished its statutory duties; and

5. program complies with all relevant policies, regulations, and directives.

MAJOR GENERAL MILLER

47. Senator MCCAIN. General Schoomaker, Major General Geoffrey Miller, who ran Guantanamo from October 2002 to March 2004 and helped set up operations at Abu Ghraib, has asserted his Fifth Amendment, Article 31 right against self-incrimination in two court-martial cases involving the use of dogs during interrogations. I do not contest General Miller's right under the Constitution, but would you agree that he also has a duty as an officer, especially a general officer, to take responsibility for his actions and orders?

General SCHOOMAKER. The evidentiary portion of one of the two courts-martial in which General Miller declined a defense interview has concluded. While available to testify, General Miller was not called as a witness by either the defense or the government. The second court-martial is scheduled to convene on May 22, 2006. On March 28, 2006, General Miller met with the defense counsel in the second court-martial and answered all questions posed to him. If General Miller's testimony is determined to be relevant at that trial, as with any soldier, General Miller will be required to appear.

The Department of the Army Inspector General (DAIG) independently investigated the allegations made against General Miller concerning detainee operations. After a thorough and impartial evaluation of the evidence, the DAIG determined the allegations to be unsubstantiated. After multiple reviews, the DAIG report of investigation has been approved by the Army leadership. Most recently, on March 28, 2006, General Miller again met with the DAIG and answered their questions under oath.

48. Senator MCCAIN. Secretary Harvey and General Schoomaker, do you believe, given everything we know now, only low-level personnel were responsible for detainee abuse at Abu Ghraib, Guantanamo Bay, in Afghanistan, and elsewhere?

Secretary HARVEY and General SCHOOMAKER. The Army investigates allegations of detainee abuse without regard to the rank or position of those alleged to be involved. Our professional investigators go where the evidence leads. When the evidence indicates wrongdoing, commanders take appropriate action under the Uniform Code of Military Justice and established policy and regulations.

The U.S. Army Criminal Investigation Command has conducted over 600 investigations into allegations regarding detainee operations. The investigations include allegations reported both inside and outside detention facilities. Thus far, allegations have resulted in adverse actions (including courts-martial, non-judicial punishment, and adverse administrative actions) against over 250 soldiers. Approximately 17 percent of the adverse actions have been brought against commissioned officers, who, as a category, make up about 13 percent of the force in theater.

The Army has conducted numerous separate investigations, inspections, and reviews concerning detainee operations. Each report has established that abuses did not result from promulgated interrogation policies and procedures and were not directed, sanctioned, or encouraged by senior leadership. The Army will continue to investigate aggressively all allegations of detainee abuse and continue to hold those who commit misconduct accountable for their actions.

SPECIFIC GUIDANCE FOR IMPLEMENTING MCCAIN AMENDMENT

49. Senator MCCAIN. Secretary Harvey and General Schoomaker, Deputy Secretary England has issued a high-level memo directing the implementation of the detainee legislation that became law this winter. This memo is less than a page in length, and merely restates the provisions—that the Army Field Manual shall become the uniform standard for interrogation, and that cruel, inhumane, and degrading treatment is barred. What specific guidance has been given to soldiers, military police, interrogators, translators, intelligence officers, medical personnel, etc., at Guantanamo and throughout Iraq and Afghanistan?

Secretary HARVEY and General SCHOOMAKER. DOD Directive 3115.09, DOD Intelligence Interrogations, Detainee Debriefings, and Tactical Questioning, was issued on November 3, 2005. It consolidates and codifies existing departmental policies, including the requirement for humane treatment during all intelligence interrogations, detainee debriefings, or tactical questioning to gain intelligence from captured or detained personnel. It further assigns responsibilities for intelligence interrogations, detainee debriefings, tactical questioning, and supporting activities conducted by DOD personnel.

The U.S. Army Training and Doctrine Command added additional blocks of instructions on the Geneva Convention and Law of War to all programs of instruction.

The U.S. Army Intelligence Center and School (USAICS) has updated their interrogation training program of instruction to ensure all training is in full compliance with the Army Field Manual (FM 34–52) and emphasized legal, policy, and regulatory requirements for humane treatment of all detainees, as well as prohibitions against cruel, inhumane, and degrading treatment in the conduct of interrogation operations. USAICS' mobile training teams have deployed to provide reinforcement training to both deployed forces and "next deploying" units throughout the United States.

50. Senator MCCAIN. Secretary Harvey and General Schoomaker, have these individuals received directives with instructions?

Secretary HARVEY and General SCHOOMAKER. The Under Secretary of Defense issued DODD 3115.09, DOD Intelligence Interrogation, Detainee Debriefings, and Tactical Questioning on November 3, 2005. It consolidates and codifies existing departmental policies, including the requirement for humane treatment during all intelligence interrogations, detainee debriefings, or tactical questioning to gain intelligence from captured or detained personnel. It further assigns responsibilities for intelligence interrogations, detainee debriefings, tactical questioning, and supporting activities conducted by DOD personnel. USD(I) is also updating DODD 2310, the DOD Detainee Program. This directive revises policy and responsibilities within the DOD for a Detainee Program to ensure compliance with the laws and policies of the United States, the law of war, including the Geneva Convention of 1949. A memorandum on Medical Program Principles and Procedures for the Protection and Treatment of Detainees in the Custody of the Armed Forces of the United States was also issued. The memorandum reaffirmed the historic responsibility of all health care personnel of the Armed Forces (to include physicians, nurses, and all other medical personnel including contractor personnel) to protect and treat, in the context of a professional treatment relationship and established principles of medical practice, all detainees in the custody of the Armed Forces during armed conflict.

51. Senator MCCAIN. Secretary Harvey and General Schoomaker, has the Department developed regulations to implement the legislation?

Secretary HARVEY and General SCHOOMAKER. Army Regulation 350–1, Army Training and Leader Development, February 13, 2006, provides specific regulatory guidance concerning Law of War training and integration of detainee operations training into other appropriate training events.

52. Senator MCCAIN. Secretary Harvey and General Schoomaker, how are the new rules being communicated down the chain of command?

Secretary HARVEY and General SCHOOMAKER. The new rules are being communicated through the directives, Army regulations, and field manuals. The U.S. Army Intelligence Center and School is also training commanders and leaders, plus soldiers, airmen, sailors, and marines on the new rules through mobile training teams. U.S. Army Training and Doctrine Command has added additional blocks of instructions on the Geneva Convention and Law of War to all programs of instruction. All interrogators conducting interrogation operations receive Geneva Convention training every 90 days.

JUSTICE DEPARTMENT ANALYSIS OF CRUEL, INHUMANE, AND DEGRADING PROHIBITION

53. Senator MCCAIN. Secretary Harvey and General Schoomaker, in the Senate Judiciary Committee last week, Attorney General Alberto Gonzales was asked whether the newly-passed prohibition on cruel, inhumane, and degrading treatment unconstitutionally interferes with the President's power as Commander in Chief. The Attorney General responded that he could not answer that question, because "we have not done that analysis." What is your current, operative understanding of the law we passed?

Secretary HARVEY and General SCHOOMAKER. That part of the Detainee Treatment Act of 2005 relating to cruel, inhuman, or degrading treatment or punishment provides that "no individual in the custody or under the physical control of the United States Government, regardless of nationality or physical location, shall be subject to cruel, inhuman, or degrading treatment or punishment." The Act defines the term cruel, inhuman, or degrading treatment or punishment as the "cruel, unusual, and inhumane treatment or punishment prohibited by the Fifth, Eighth, and Fourteenth Amendments to the Constitution of the United States, as defined in the

United States Reservations, Declarations and Understandings to the United Nations Convention Against Torture and Other Forms of Cruel, Inhuman or Degrading Treatment or Punishment done at New York, December 10, 1984."

54. Senator MCCAIN. Secretary Harvey and General Schoomaker, are DOD employees prohibited from engaging in cruel, inhumane, and degrading treatment in all cases, even if ordered otherwise—even if ordered otherwise by the President?

Secretary HARVEY and General SCHOOMAKER. Questions regarding the impact of such hypothetical action are more appropriate for response by DOD. However, I note that current DOD policy which was published by the Deputy Secretary of Defense following passage of the Detainee Treatment Act of 2005 and which applies to soldiers and Army civilian employees, requires that they "ensure that no person in the custody or under the physical control of the DOD, regardless of nationality or physical location, shall be subject to cruel, inhuman, or degrading treatment or punishment."

PRESIDENT'S SIGNING STATEMENT

55. Senator MCCAIN. Secretary Harvey and General Schoomaker, when the President signed the defense bill, he issued a statement indicating that he would construe it "in a manner consistent with the constitutional authority of the President to supervise the unitary executive branch and as Commander in Chief and consistent with the constitutional limitations on the judicial power. . ." In your understanding, does this mean that the President could authorize an exemption to the legislative prohibitions?

Secretary HARVEY and General SCHOOMAKER. Questions regarding the impact of such hypothetical action are more appropriate for response by DOD.

56. Senator MCCAIN. Secretary Harvey and General Schoomaker, is there any circumstance in which a Department employee could legally engage in cruel, inhumane, or degrading treatment?

Secretary HARVEY and General SCHOOMAKER. Current DOD policy and the Detainee Treatment Act of 2005 prohibit cruel, inhuman, or degrading treatment, as that term is defined in the statute. Questions regarding the impact of such hypothetical action are more appropriate for response by DOD.

OFFICER TRAINING

57. Senator MCCAIN. Secretary Harvey, I understand the Army Reserve is the executive agent of the Reserve component's Officer Basic Course (OBC). With the National Guard currently authorized to recruit to the 350,000 end strength, I anticipate there will be an increase in the number of OBC seats required for these new officers. Has this program been sufficiently funded to accommodate the influx of new officers needing initial military education? If not, what plan do you have to ensure that new officers brought into the system are provided seats or funding to get them into OBC rapidly?

Secretary HARVEY. There are 2,285 Reserve component (RC) soldiers scheduled to attend the OBC in fiscal year 2007 (1,125 soldier mission for ARNG and 1,160 soldier mission for Army Reserve). Fiscal year 2007 OBC resources currently support 847 seats for the RC with $23.1 million in Reserve Personnel, Army (RPA) appropriation funding. Additional seats are required to support the current shortage of company grade officers and the influx of new officers for the RC. Fiscal year 2007 current estimated shortfall for OBC is $39.2 million. Both the ARNG and the Army Reserve have shortages in Company Grade officers which impact deploying units.

Any additional increase in OBC seats supporting an ARNG officer influx above the projected 1,125 ARNG mission would increase the estimated shortfall.

QUESTIONS SUBMITTED BY SENATOR JEFF SESSIONS

OPERATION AND MAINTENANCE ACCOUNT CUTS

58. Senator SESSIONS. Secretary Harvey, the various cuts to the Army's operation and maintenance accounts (OMA) are, if you haven't been briefed, about to have a significant impact at installation and depot level across any number of programs. While I appreciate the rationale behind the recently announced 1 percent Government-wide cut (which impacted Army operation and maintenance by -$238.98 million), I also realize that if equally distributed this particular cut will have a minor

impact on most installations/depots. What concerns me, however, is the cumulative impact OMA cuts are having on Army Materiel Command and the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASALT) accounts and programs at this time. Hence, I would like an explanation to the following: What is the base OMA requirement and the current level of Army wide OMA installation funding particularly at my three Alabama Army installations?

Secretary HARVEY. The OMA requirements for installation base support is $12.4 billion. The current level of funding is $8.8 billion, or 71 percent of requirements. For Fort Rucker, Anniston Army Depot, and Redstone Arsenal, the requirement is $256.1 million. The current level of funding for these installations is $180.7 million or 71 percent of requirements.

59. Senator SESSIONS. Secretary Harvey, what is the cumulative impact of current and projected OMA cuts directed at ASALT PMs and your PEOs? Has anyone analyzed the cuts across the various mission areas to see the cumulative damage?

Secretary HARVEY. Over the past few years the Army has encountered many challenging issues regarding funding requirements for our PEOs and PMs. We have been forced to make tough tradeoffs to maintain support for the war, while concurrently trying to modernize our weapon systems. The Army has realigned funding to meet operational priorities and has undertaken Lean Six Sigma, implemented other efficiencies initiatives, and I deferred or suspended low priority requirements to garner resources to offset some of our shortfalls. Although there is no cumulative assessment of the OMA cuts, we carefully monitor key readiness indicators in area such as sustainment, operational tempo, and force protection to identify emerging issues requiring fiscal adjustments. Balancing our worldwide commitments has not been easy and the Army appreciates the assistance it has received from Congress through base and supplemental funding.

60. Senator SESSIONS. Secretary Harvey, what is the managerial rationale behind these cuts to ASALT ground and aviation programs when the Army is at war and Congress continues to fund the Army at extraordinarily high levels?

Secretary HARVEY. The Army has made a careful assessment of its capabilities prior to recommending program cuts. As the Army transforms to a modular force, the resulting force structure changes have precipitated adjustments to some key programs. The Army has assumed some risk with the ground systems but has realized slight growth in aviation as part of the aviation modernization strategy. The Army has realigned funding to meet operational priorities and has implemented other efficiencies initiatives and deferred or suspended low priority requirements to garner resources to offset some of our shortfalls. However, the leadership focus remains on fielding and sustaining full spectrum capabilities that are self-contained to provide increased flexibility and force availability.

61. Senator SESSIONS. Secretary Harvey, what is the current shortfall in Installation Management Agency (IMA) funding to installations in Alabama?

Secretary HARVEY. The current fiscal year 2006 OMA shortfall for Alabama installations is $75.4 million. However, fiscal year 2006 funding levels are preliminary. Installations may receive additional funding during the year of execution.

62. Senator SESSIONS. Secretary Harvey, most importantly, what is your strategy to restore the required level of OMA funding to our installations since we discussed little today at the posture hearing suggesting that the senior Army leadership is unaware that many Army and specifically Alabama installation and depot employees face termination in the near-term as a result of the shortages which exist in the aforementioned OMA installation and depot accounts?

Secretary HARVEY. The Army leadership is committed to its program of Installations as Flagships of Readiness. To that end, the Army is working to increase base support funding to ensure quality of life for soldiers, while maintaining a high rate of readiness for our power projection platforms. The Army has recently undertaken an ambitious effort to realign funds on the order of $1.3 billion to support our installations. Additionally, $400 million of supplemental reset dollars was recently released to the Army Materiel Command of which the Anniston Army Depot (ANAD) received $50 million The ANAD funds will support several programs to include the M88 Recovery Vehicles, Ml13 Family of Vehicles, M992 Field Artillery Ammunition Supply Vehicles (FAASV), M9 Armored Combat Earthmover (ACE) Vehicles, and various small arms programs. Additionally, funds continue to be provided to ANAD in support of the Abrams M1A1 AIM XXI Program on a month-to-month basis to prevent production breaks at General Dynamics Land Systems (GDLS) and the potential lay-off of over 100 GDLS employees. Actions continue within the Army to

identify required resources to fund these requirements in the coming months. Because of potential funding/workload fluctuations part of the Army's strategy has been to hire term, temporary, and contractor personnel when appropriate along with the judicious use of overtime to allow the depot workforce to be responsive to these types of adjustments. To date, all reductions associated with OMA decrements have been against contractor positions. One hundred forty-seven contractor personnel at Redstone Arsenal, Alabama have or will be released by March 31, 2006. There have been no reductions in force taken against Department of the Army civilians either at ANAD or Redstone as a result of insufficient funding or workload, and none are currently planned.

DISABLED SOLDIER SUPPORT

63. Senator SESSIONS. Secretary Harvey, last year Army Vice Chief of Staff General Dick Cody appeared before our committee and discussed a program called Disabled Soldier Support System (DS3) which was to provide severely wounded soldiers and their families with an advocacy system and followup personal support as they return to civilian life or Active-Duty.

Since that time the Army has changed the name to the Army Wounded Warrior Program (AW2), providing the same support system as DS3. Though I would tell you I neither think we are going as fast as we should to capture all eligible soldiers into AW2 nor are we being as comprehensive in our outreach to them.

In addition to AW2, I note with pleasure that the Army has also created a mentorship program—Army Knowledge Online (AKO) Mentorship Community and the Freedom Team Salute (FTS). In fact, I witnessed your acknowledgment of our colleagues—Senators Akaka and Inhofe last week at our caucus breakfast.

These are good additions to AW2, but I think the Army needs to better link our local communities in this effort. Would you support a grassroots mentorship and job creation program like that proposed by a group of citizens in Huntsville, Alabama which was directly linked to your AW2 program with the expressed mission of committing to the long term career development for veterans and their spouses?

Secretary HARVEY. As you mentioned, the Huntsville/Redstone Arsenal (Alabama) "Still Serving Veterans" organization is an excellent example of a specific community's desire to stand with and support our Nation's most severely wounded warriors and their families. AW2 has had the great honor to assist in similar grassroots efforts in both the private and Federal sectors.

We applaud the efforts of each of these communities and employers across the Nation and their deep desire to help the Nation's severely wounded veterans and look forward to working with them in this honorable task in the future.

AW2 is committed to fulfilling that portion of the Warrior Ethos which states "Never leave a fallen comrade" and ensuring that our severely wounded soldiers and their families receive the care, support, and assistance they rightly deserve. We understand and advocate that a soldier's successful reintegration into their community cannot be complete without the involvement of that community.

AW2 is prepared to support initiatives at any level, the caveat being that any effort needs to be appropriately vetted and clearly demonstrate to be in the best interests of soldiers and families. Organizations closely linked to AUSA or VA approved Veterans Service Organizations are such examples. Obviously, AW2 would not support organizations who demonstrate questionable practices or are prohibited from doing business with the Army or DOD, or organizations that give the perception that they take advantage of soldiers.

AW2 has requested in its fiscal year 2006 budget $375,000 for transition and employment assistance specialists who are assisting soldiers that are leaving the Army through the Walter Reed Army Medical Center (WRAMC) transition center. These specialists provide outplacement services (connecting AW2 soldiers with employers and working to get them hired). Additionally, soldiers receive hands on support and work closely with the WRAMC Army Career and Alumni Program.

AW2 continues to work closely with the community of San Ramon, California, and their Sentinels of Freedom program. This program provides an AW2 soldier with a 4-year scholarship, an apartment, vehicle, employment training, and most importantly the involvement of the community. The Sentinels of Freedom are preparing to offer this package to a second AW2 soldier within the coming months.

Numerous Federal agencies have used specific hiring authorities to extend Federal employment opportunities to AW2 soldiers. Within the Department of the Army, AW2 has supported the efforts of the Army Materiel Command, TRADOC, and the Missile Defense Command in either retaining soldiers on Active Duty or proving Federal employment to medically retired AW2 soldiers. The Veteran's Ad-

ministration has hired medically retired AW2 soldiers into full time Federal civilian employment. AW2 continues to work closely with the Department of Transportation's "American Hero Support Program" to provide employment to AW2 soldiers primarily at State departments of transportation.

AW2 is currently working with the Disney Corporation to develop an internship program titled "Casting for Heroes". This program is working closely with AW2 to place former soldiers in numerous positions within the Walt Disney parks and resorts.

64. Senator SESSIONS. Secretary Harvey, one such organization has emerged called Still Serving Veterans (SSV). I hope you will embrace what they offer and tie their efforts to AW2 as an extension of your vision. Together we can and will help our young veterans and their families with a quality of life they deserve. Will you visit with them when you visit Redstone Arsenal the next time?

Secretary HARVEY. I met with the SSV organization during a recent trip to Redstone Arsenal in March 2005. As you have mentioned, the SSV organization is an excellent example of a specific community's desire to stand with and support our Nation's most severely wounded warriors and their families. I was impressed by their dedication and commitment to helping these soldiers, and commended them for their work. As a result, during the annual Civilian Aide to the Secretary of the Army (CASA) Conference in April, I directed the CASAs to establish similar programs around the country in their States.

QUESTIONS SUBMITTED BY SENATOR JOHN THUNE

FUTURE CARGO AIRCRAFT

65. Senator THUNE. Secretary Harvey, it is clear from the Army's 2006 posture statement that the Army is undergoing a transformation which will make it a more flexible and more powerful force. Part of being flexible is having the ability to move men and supplies in theater. What role does the Army wish to play in the development of the new FCA?

Secretary HARVEY. As part of the Comanche reinvestment strategy the Army chose to pursue a replacement FCA to replace its aging C–23, C–26s, and C–12 aircraft. The FCA program was briefed to Congress on 7 April 2005.

For more than 2 years the Army has been in the process of pursuing a FCA. The FCA has been vetted through the Joint Capabilities Integration and Development System (JCIDS) process and the Army has a Joint Requirements Oversight Council (JROC) approved Initial Capabilities Document (ICD) JROCM 061–05, dated 21 March 2005, and a Capabilities Development Document (CDD) JROCM 303–05. All of these requirements were vetted with the other Services, specifically the Air Force. Since the Key West accords, DOD policy has consistently authorized the Army to procure and provide aircraft to meet its tactical intratheater lift requirements within Army organic force structure/lift assets. The Army is not trying to replace the Air Force or compete with their roles and missions; but the Air Force does not perform missions in the tactical spectrum down to what we call "the last tactical mile". Historically, tactical wheeled vehicles and helicopters have performed that role. Based on the modularity of BCTs, the distributed non-linear battlefield, combined with the logistics concept of support changing to a push system, the Army needs additional intratheater tactical lift capability. The Air Force agrees with this Army identified gap. This gap is the movement of "time sensitive, mission critical resupply and key personnel transport" from the initial staging base or port of debarkation to the BCT.

The Army anticipates being the lead agency in a FCA/LCA Joint Program Office (JPO) that will become effective 1 October 2006. The Services anticipate a JPO Charter will be approved by the Service's Acquisition Executives prior to the Army reaching Milestone C on the FCA program. The Army still plans to begin fielding FCA/LCA to its aviation force in fiscal year 2008. The USAF will follow with the fielding of the FCA/LCA approximately 2 years later.

66. Senator THUNE. Secretary Harvey, how many do you need at your disposal?

Secretary HARVEY. The Army's Analysis of Alternatives (AoA) defined a low risk requirement of 145 FCA. On 8 February 2006, the Army and Air Force agreed that the quantity identified in the Army AoA of 145 would be referred to as the "Initial Joint Requirement" and that the Army would procure 75 FCA and the Air Force will procure the remainder of the initial joint requirement. The Army and Air Force in coordination with the Joint Staff plan to conduct a follow-on joint AoA over the

next year or two to define the broader, full joint force requirement or fleet end-state for the Services.

67. Senator THUNE. Secretary Harvey, does the Army want to train pilots to fly these aircraft and if so, will this mission remain in the National Guard like the current C–23 and C–12 missions?

Secretary HARVEY. The current strategy calls for the manufacturer to initially conduct aircrew training. As the system enters full rate production, further evaluation will be given to the training strategy in light of the program's joint nature. The Services have also agreed to conduct a business case analysis as part of the joint training strategy determination that will identify the most feasible, affordable, and effective strategy for training aircrew members. Currently, the Army plans to field the FCA exclusively to the Reserve component (ARNG and Army Reserve).

RECRUITING

68. Senator THUNE. General Schoomaker, first quarter recruiting numbers for the Army in fiscal year 2006 were good news. In the first quarter, the Army recruited 11,511 for the Active-Duty; 5,740 for the Reserve; and 13,466 for the Army Guard. What steps is the Army taking to ensure it can continue meeting its recruiting requirements through fiscal year 2006 and what do you believe is the reason for this initial success after missing the recruiting goal in fiscal year 2005?

General SCHOOMAKER. The current recruiting environment remains very challenging. The global war on terror and a strengthening economy continue to impact military recruiting. Increased private sector competition, an upward trend in those pursuing higher education, and negative trends in centers of influence recommending military service are contributing to an erosion of recruiter productivity.

The Army has been successful in its year-to-date recruiting efforts due to resources committed in fiscal year 2005 and the Army's continuing efforts to shape its fiscal year 2006 Recruiting Action Plan early. Future recruiting success has also been made possible with the aid of Congress and its passage of the National Defense Authorization Act (NDAA) for Fiscal Year 2006, authorizing several critical initiatives. These include increasing the maximum enlistment bonus from $20,000 to $40,000 for the Regular Army and from $10,000 to $20,000 for the Reserve components, authorizing a pilot $1,000 referral bonus program for all three Army components, increasing the maximum enlistment age to 42 (current Army policy is limited at 40 for all three components), increasing the maximum term of service from 6 to 8 years, and providing temporary recruiting incentives authority for new programs for all three Army components.

To provide early success in fiscal year 2006, the Army has increased the number of recruiters and adopted the DOD standards for the trainability indicators (ASVAB Test Score Categories). The key issue remains to attract high quality men and women to serve as soldiers and meet future manning requirements. We are working to overcome the market effects by increasing incentives, developing new programs, and reducing attrition. We must remember that this is not just an Army issue, but a national issue.

QUESTIONS SUBMITTED BY SENATOR EDWARD M. KENNEDY

TACTICS, TECHNIQUES, AND PROCEDURES

69. Senator KENNEDY. General Schoomaker, during the hearing you indicated that the Multi National Coalition—Iraq Commander had requested the Joint IED Neutralizer (JIN) not be deployed to Iraq pending development of tactics, techniques, and procedures. What is the status of the Army's development of these tactics, techniques, and procedures (TTPs)? When do you anticipate having these TTPs sufficiently developed to allow deployment of the JIN?

General SCHOOMAKER. I have asked the Director, JIEDDO, to respond to your concerns.

70. Senator KENNEDY. General Schoomaker, how can the process be improved so we can more rapidly deploy equipment that has been developed and procured on an accelerated timeline?

General SCHOOMAKER. I have asked the Director, JIEDDO, to respond to your concerns.

71. Senator KENNEDY. General Schoomaker, for urgently needed capabilities to save the lives of servicemembers, shouldn't we develop the TTPs in parallel with fielding the capability?

General SCHOOMAKER. I have asked the Director, JIEDDO, to respond to your concerns.

72. Senator KENNEDY. General Schoomaker, will you provide the military utility statement for the JIN system to the committee?

General SCHOOMAKER. I have asked the Director, JIEDDO, to respond to your concerns.

REPAIR, REPLACEMENT, AND RECAPITALIZATION COSTS

73-75. Senator KENNEDY. Secretary Harvey and General Schoomaker, during the hearing we discussed an Army handout that showed a bill of $36 billion to repair, replace, and recapitalize the force. Notwithstanding the assumptions of this handout on when the drawdown would begin, or how long it would last, this is a sizable sum of money. To put this in perspective, can you provide the committee information on how many tracked and wheeled vehicles have been placed out of service due to battle damage in Iraq?

What is the Army's plan to repair or replace these vehicles?

How long do you anticipate this to take and how much do you expect it to cost?

Secretary HARVEY and General SCHOOMAKER. Regarding "repair," the Army uses battlefield damage assessment and repair (BDAR) procedures to return disabled equipment rapidly to combat or to enable the equipment to self-recover. BDAR is the commander's responsibility and is accomplished by the operator and crew. Equipment that is damaged beyond the commander's capability to repair becomes a battle loss to the commander and must be evacuated out of the tactical engagement area for repair. Depending on the extent of damage, the equipment may be repaired at a field maintenance unit or at a sustainment maintenance activity such as a forward repair activity, an installation maintenance activity or a depot. A commander's losses are immediately replaced with other assets. We do not track battle losses repaired at the operational level.

A piece of equipment that cannot be repaired or is uneconomical to repair at any level becomes a battle loss to the Army and is dropped from the Army's inventory. These items are replaced through procurement. As a result of OIF and OEF, Army losses of tracked and wheeled vehicles include: 18 Abrams tanks, 74 Bradleys, 22 Strykers, and 915 High Mobility Multipurpose Wheeled Vehicles (HMMWVs). Replacing the 18 Abrams tanks costs approximately $90 million; replacing 74 Bradleys costs approximately $176 million; and replacing 22 Stryker vehicles costs about $44 million. Replacement time for these systems is approximately 18–24 months, since they require long-lead items for production. Replacements for HMMWV losses are projected at $198 million. Since replacing battle losses is our first priority for distribution of the ongoing HMMWV production, these systems are generally replaced immediately.

EQUIPMENT SHORTFALLS

76. Senator KENNEDY. Secretary Harvey and General Schoomaker, GAO criticized the Pentagon last year for not having a strategy to end equipment shortfalls. Do you have a strategy for identifying force protection requirements and developing solutions to fill the gaps?

Secretary HARVEY and General SCHOOMAKER. Our overarching strategy is to foster an adaptive culture and maintain the agility in our systems/processes necessary to keep pace with a thinking enemy. We must recognize that when our forces are successful in achieving superiority against an enemy's preferred tactics and weapons, we will be confronted with new combinations. Army organizations have partnered to rapidly develop, assess, and field solutions to capability gaps identified by force commanders.

Army organizations such as the Rapid Equipping Force and Asymmetric Warfare Group work directly with the deployed forces to collect intelligence on threat capabilities and begin the development of either doctrinal or materiel countermeasures. Collaboration with the JIEDDO provides focused support to warfighting commanders for this critical component of force protection. The U.S. Army Armament Research, Development and Engineering Center and the U.S. Army Test and Evaluation Command have streamlined technical development and operational assessment processes to ensure rapid integration of solutions into the forces in contact.

The U.S. Army Training and Doctrine Command (TRADOC) leads Army-wide integration of these force protection solutions by incorporating successful tactics and materiel into the training base as well as ongoing assessments focused on development of protection capabilities for the future force.

77. Senator KENNEDY. Secretary Harvey and General Schoomaker, what actions have you taken to anticipate threats and force protection needs more effectively?

Secretary HARVEY and General SCHOOMAKER. The Army is striving to foster an adaptive culture and maintain the agility in our systems/processes necessary to keep pace with a thinking enemy. We recognize that it is impossible to anticipate, or resource to, all possible contingencies. We also know that when our troops are successful in achieving superiority against an enemy's preferred tactics and weapons, we will be confronted with new combinations. Our goal is to be able to react to the changing threats quickly and thus force the enemy into increasingly less effective modes of operation.

Increased communication between deployed forces and the institutional Army is critical to improving our ability to react to the changing threat environment. We have instituted regular video-teleconferences and key leader visits forward to ensure that field commanders have access to air concerns and share insights with the senior decisionmakers. Additionally, TRADOC, the U.S. Army Materiel Command, Corps of Engineers, the U.S. Army Intelligence Support Command, and other support organizations have established liaison elements in theater with reachback capability to pull information forward and focus home station analysis and mission support planning.

78. Senator KENNEDY. Secretary Harvey and General Schoomaker, what is the Army process for evaluating battle damaged vehicles to determine design weaknesses or opportunities for improvement to prevent future losses?

Secretary HARVEY and General SCHOOMAKER. [Deleted.]

79. Senator KENNEDY. Secretary Harvey and General Schoomaker, how many of these vehicles were damaged or destroyed by IEDs?

Secretary HARVEY and General SCHOOMAKER. [Deleted.]

80. Senator KENNEDY. Secretary Harvey and General Schoomaker, what should we do to improve their survivability?

Secretary HARVEY and General SCHOOMAKER. [Deleted.]

SOLDIER BENEFITS

81. Senator KENNEDY. Secretary Harvey and General Schoomaker, during the hearing there was considerable discussion about strain on the Army and the potential need for increased end strength. At one point you responded that even if the Army increased end strength, it would be difficult to achieve in view of recruiting challenges. If this is the case, then isn't it in our interest to make our best efforts to retain the force, particularly the mid-grade NCOs and officers so critical to leading the soldiers?

Secretary HARVEY and General SCHOOMAKER. The Army is retaining soldiers at exceptionally high levels. Since 2002, we have exceeded our total Army retention goals every year, culminating with 106 percent of our combined (AC, USAR, and ARNG) overall Army goal in 2005. In a time of war, and with the pace of current operations, this is a significant indicator of the quality of leadership within our ranks, the fact that soldiers believe in what they are doing and value the traditions of service to the Nation. Moreover, all components are employing positive levers including force stabilization policy initiatives, updates to the reenlistment bonus program, targeted specialty pays, and policy updates to positively influence the retention of our soldiers, especially the midgrade noncommissioned officers.

Active component officer retention has taken on renewed interest not because of an increase in officer loss rates, but because of a significant force structure growth. As a result of the new structure, the Army is short roughly 3,500 Active component officers, primarily senior captains and majors. Since it takes 10-years to promote an officer to major, we are confronted with the challenge of retaining more officers than we've done in the past.

The Reserve component is also experiencing shortage of officers. To date, we are experiencing a shortage of roughly 11,000 captains. This isn't because of force structure changes, but instead is a result of many years where our officers haven't been

completing the necessary civilian (e.g. baccalaureate degree) or military education (completion of their basic course).

The Army is being proactive and we are working several initiatives to retain more of our best and brightest officers. These initiatives include higher promotion rates, earlier promotion pin-on points, expanded graduate school opportunities, branch and posting for Active service, and establishment of an officer critical skills retention bonus. In addition, we are implementing better management programs for encouraging officers to complete their civilian and military education.

82. Senator KENNEDY. Secretary Harvey and General Schoomaker, in that case, it would seem that we would want to maintain the benefits that Congress has worked, in a bipartisan manner, to establish. If we want to retain these leaders, why isn't it appropriate to increase the TRICARE cost-share for some retirees?

Secretary HARVEY and General SCHOOMAKER. Congress' and the DOD's decision to make no upward adjustments in beneficiary out-of-pocket costs for over 11 years was very helpful to military families. We believe now is the time to begin to act in order to preserve the comprehensiveness of the military health benefit for all categories of beneficiaries into the future. The DOD designed the proposed cost-shares to ensure no out-of-pocket increases for soldiers, minimal changes in pharmacy copayments for Active-Duty family members, and to renorm retiree cost-shares to 1995 levels. Further, the DOD agreed that we should tier retiree cost-shares so junior enlisted retirees do not have to pay the same cost-shares as officers. Delaying these adjustments will only force more extreme increases in the future and have the potential to consume a larger portion of the budget that is needed for modernization and readiness programs.

83. Senator KENNEDY. Secretary Harvey and General Schoomaker, don't you think the soldiers who are making career decisions will see a change in their retirement benefits as breaking the faith with them?

Secretary HARVEY and General SCHOOMAKER. A recent survey by the U.S. Army Research Institute (ARI) suggests that retirement benefits and the continuation of benefits may affect retention. Of the top six reasons for enlisted soldiers thinking of, or planning on, leaving the Army before retirement, number six was retirement benefits. While the report indicates retirement benefits as a factor that may affect retention, we have no detailed data that quantifies the impact of changes in TRICARE costshares on retention. The conclusion seems logical based upon this and anecdotal evidence that suggests retirement benefits are important to retention and any perceived erosion in benefits could, in fact, negatively impact retention. To mitigate the negative impacts these changes may have on retention, we have to do a good job of educating soldiers and retirees on the need for these changes. We believe we can overcome the negative impacts of these proposals by demonstrating that TRICARE will remain a superb health benefit for all soldiers, Active and retired, and their families. Even after these changes, TRICARE will remain a very affordable healthcare option for retirees. Without these changes we risk an erosion of the Department's ability to invest in readiness, modernization, and training due to increased healthcare costs.

RECRUIT QUALIFICATION

84. Senator KENNEDY. General Schoomaker, in your testimony, you mentioned that only 30 percent of the age cohort for recruiting is eligible to join the Army. The Army has a variety of qualifications for new enlistees. Which qualifications are most commonly lacking in the other 70 percent?

General SCHOOMAKER. It is estimated that the 17–24 year old recruiting market is 32.1 million of which 30 percent are fully eligible and 15 percent are eligible with waiver. Of the remaining 55 percent, 11.2 million (35 percent) are disqualified for moral, dependent, and/or overweight reasons and 6.4 million (20 percent) are disqualified for medical reasons.

ARMY LABORATORY PERSONNEL

85. Senator KENNEDY. Secretary Harvey, Army research labs (like the Natick Soldier Center) are making great contributions to the development of new technologies and capabilities that we are currently fielding in Iraq and Afghanistan. Systems like new body armor, up-armored vehicles, robots, and sensors are all growing from research done by government scientists in defense labs.

Congress has tried to support the laboratories by granting them the authority to develop unique, flexible personnel systems that allow them to successfully compete with high tech industries for talented scientists and engineers. These are known as laboratory personnel demonstration programs and have been considered highly successful.

I am concerned that the implementation of the National Security Personnel System (NSPS) on these laboratories may adversely affect the labs' ability to keep the best possible workforce.

Have you asked your lab directors for their views on the possible implementation of NSPS on the laboratories and how it will affect their ability to perform their critical missions?

Secretary HARVEY. Yes, we have held two meetings with our laboratory directors to obtain their views and to consider their comments/questions on the NSPS. The NSPS PEOs participated in these sessions and they were well received by Army laboratory directors. There has been an open dialogue with Army laboratory directors and their representatives and the Office of the Assistant Secretary for Acquisition, Logistics, and Technology regarding their views of the impact of NSPS implementation. While the details of NSPS implementation are not yet finalized, we are hopeful that the NSPS will incorporate many of the flexibilities and authorities currently enjoyed by our laboratory demonstrations. Section 9902(c) of title 5, U.S.C. provides that the NSPS will apply to the designated DOD STRLs on or after October 1, 2008, only to the extent that the Secretary of Defense determines that the flexibilities provided by NSPS are greater than those under the STRL demonstration project authority. The Natick Soldier Center, although not currently designated as a demonstration laboratory, has recently made application for that status. In the end, we want all of our laboratories to continue to be able to recruit and retain the best possible scientific and technical workforce possible, whether as a continuing laboratory demonstration or as a part of the NSPS.

86. Senator KENNEDY. Secretary Harvey, have you done a comparative analysis for the Army on whether the NSPS system or the current lab personnel demonstration program systems provides the labs with more flexibility in attracting and retaining the finest possible workforce?

Secretary HARVEY. The Army has not completed a separate, formal comparative analysis between NSPS and laboratory demonstration systems. Rather, the Army has participated in the Secretary of Defense's effort in response to Section 1107 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (Public Law 108–375), that required the development of a plan for a comparative evaluation of the flexibilities of the authorities provided to the Secretary of Defense for STRLs and for NSPS. The section 1107 report has been coordinated with the Army and jointly developed by the Under Secretary of Defense (Acquisition, Technology, and Logistics) and the Under Secretary of Defense (Personnel and Readiness). The report is in coordination within the DOD and it is expected to be released shortly.

As background, the Army, along with the Office of the Secretary of Defense (OSD) and the other components, has worked closely with NSPS authorities since 2003. The Army ensured STRLs and acquisition demonstration participation in the NSPS planning and design. For example, OSD led cross-component workgroups in 2003 to identify "best practices" from the demonstration experiences. The results of this effort were also used to help frame the OSD NSPS legislative language that was approved in the National Defense Authorization Act for Fiscal Year 2004. Since that time, Army has worked closely with the STRLs, acquisition communities, and NSPS program office in developing the DOD NSPS regulations, implementing issuances, and supplementing Army policies. Every authority (e.g. pay for performance, pay banding, staffing, and compensation considerations) that the demonstration projects include has been thoroughly analyzed, discussed, and considered in the design of NSPS.

87. Senator KENNEDY. Secretary Harvey, when you complete that analysis, will you share the results with Congress?

Secretary HARVEY. Yes. The section 1107 report will be given to Congress after the coordination within the DOD is complete. The comparative analysis and evaluation described in the pending section 1107 plan to support the Secretary of Defense determination is currently planned for 2008, but it is an event-driven process. Once the Secretary's determination is made, Congress will be provided a copy of the results of the evaluation.

QUESTIONS SUBMITTED BY SENATOR JOSEPH I. LIEBERMAN

RECRUITING

88. Senator LIEBERMAN. Secretary Harvey and General Schoomaker, by my count, 2005 was the Army's worst year for recruiting since 1999. Last year, the Army fell short of its goal by about 6,600 new recruits. You have stated that the Army is not having a recruiting crisis, since it has met its goals for the last 7 months. However, the Army has backloaded its recruiting targets to rely heavily upon the third and fourth quarters of the year. Although it makes sense to focus recruiting in the summer months, this shift also adds high risks if recruiting in the summer months does not materialize. I am concerned because in the past, higher retention rates have made up the recruiting shortfalls, but reenlistment rates have sagged recently as well. Concerning this issue, I have several questions about recruitment and retention I would like to ask: Can you give me exact numbers of monthly recruiting targets and tell me how the Army is progressing towards its full-year goal of recruiting 80,000 new soldiers? How does the number of recruits enlisted so far compare to this time last year?

Secretary HARVEY and General SCHOOMAKER. Monthly recruiting targets for fiscal year 2006 are as follows: October is 4,700, November is 5,600, December is 700, January is 8,100, February is 6,000, March is 5,200, April is 5,400, May is 5,400, June is 8,600, July is 10,450, August is 10,050, and September is 9,800. The total mission is 80,000.

As of the end of January 2006, the Army was at 104 percent of its year-to-date recruiting target. At the same time in fiscal year 2005, the Army had recruited 22,305 new recruits as compared to 19,859 in fiscal year 2006. However, the increased production is most evident in the number of contracts written, which includes soldiers who have reported for duty and those who are still waiting to ship later in the year. As of the end of January 2006, the Army had written 5,500 more contracts than at the same time in fiscal year 2005. This is a 28 percent increase due to the increased number of recruiters, higher incentives, new initiatives, and improved marketing/advertising. Therefore, even though the number of accessions is fewer than at this time last year, the Army is better postured to achieve its mission of 80,000 new recruits than we were at this time last year.

89. Senator LIEBERMAN. Secretary Harvey and General Schoomaker, is the Army experiencing an erosion of the percentage of soldiers reenlisting?

Secretary HARVEY and General SCHOOMAKER. The Army is retaining soldiers at exceptionally high levels. Since 2002, we have exceeded our total Army retention goals every year, culminating with 106 percent of our combined (AC, USAR, and ARNG) overall Army goal in 2005. In a time of war and with the pace of current operations, this is a significant indicator of the quality of leadership within our ranks, the fact that soldiers believe in what they are doing and value the traditions of service to the Nation. The Active Army retained 69,512 soldiers in fiscal year 2005, finishing the year at 108 percent of mission, up from 107 percent in fiscal year 2004. The Army Reserve finished fiscal year 2005 at 102 percent, up from 99 percent in fiscal year 2004, and the ARNG finished fiscal year 2005 at 104 percent, up from 99 percent in fiscal year 2004. All components are employing positive levers including force stabilization policy initiatives, updates to reenlistment bonus programs, targeted specialty pays, and policy updates to positively influence the retention program. Ultimately, we expect to achieve fiscal year 2006 retention success in the Active Army, the ARNG, and the United States Army Reserve. Thus far, the Active Army has achieved 109 percent of the year-to-date mission, while the Army Reserve has achieved 91 percent of the year-to-date mission and the ARNG has achieved 106 percent of their year-to-date mission.

90. Senator LIEBERMAN. Secretary Harvey and General Schoomaker, do you agree with the conclusions of a RAND Corporation study, released in December 2005, which found that personnel shortages have led to an unwieldy "operations tempo" and job burnout?

Secretary HARVEY and General SCHOOMAKER. While the Army is deploying thousands of soldiers every year, there are certain specialties that are experiencing a higher personnel deployment tempo than others based on increased demands for those specialties in theater combined with shortages in the inventory. The Army monitors soldiers through the use of surveys and has concluded the number and frequency of deployments and time away from family, to include long garrison work hours, is the number one factor impacting retention. Although many soldiers choose not to reenlist for the reasons cited above, the Army's overall retention rate remains

high. Since 2002, we have exceeded our total Army retention goals every year, culminating with 106 percent of our combined (AC, USAR, and ARNG) overall Army goal in 2005. The Active Army retained 69,512 soldiers in fiscal year 2005, finishing the year 108 percent of mission. The Army Reserve finished the year 102 percent of mission and the ARNG finished at 104 percent of mission. All three components are on track for fiscal year 2006 mission accomplishment.

PROMOTION/RETENTION CORRELATION

91. Senator LIEBERMAN. Secretary Harvey and General Schoomaker, in 2005, the Army promoted 97 percent of all eligible captains to the rank of major. This percentage is up from the historical average of 70 percent to 80 percent. The Army also promoted 86 percent of eligible majors to the rank of lieutenant colonel last year, in comparison to the historical average of 65 percent to 75 percent. I know that the Army has taken great pride in the competitiveness of its promotions. Although our servicemen and women are the best and brightest in the history of the Army, I am concerned that the higher rates of promotion are partially a response to the higher numbers of officers who are resigning from the Army and the need to create more combat units without an overall expansion. For example, lieutenants and captains left the Army in 2005 at a rate of 8.6 percent, up from 6.3 percent in 2004. The rate of exit in 2005 for lieutenant colonels was 13.7 percent, the highest in a decade. Is the increased promotion rate a reflection of the fact that many of our officers, when faced with a third year-long combat tour in Iraq, are deciding not to stay?

Secretary HARVEY and General SCHOOMAKER. Company grade loss rates (lieutenant and captain) for fiscal year 2005 was 8.55 percent, slightly below the Army average of 8.64 percent (fiscal years 1996–2004). First quarter, fiscal year 2006 company grade loss rates were 8.4 percent. Immediately following September 11, 2001, company grade loss rates were at historical lows: 7.08 percent and 6.29 percent respectively. The 3 years prior to September 11, 2001, company grade loss rates averaged 9.8 percent.

The average loss rate for the past 10 years for colonel, lieutenant colonel, and major was 16.93 percent, 11.67 percent, and 7.4 percent respectively. The fiscal year 2005 loss rates for colonel, lieutenant colonel, and major were 17.9 percent, 13.7 percent, and 7.0 percent, respectively. Like the company grade loss rates following September 11, 2001, the loss rates for field grade officers dropped significantly. Current loss rates for these grades are back in line with pre-September 11, 2001, rates.

The overall authorizations for the Active component category have increased by over 3,500 officers. This has increased requirements for promotion. While current promotion rates are higher than the historical average, officers who are not deemed fully qualified by the board members are not selected for promotion.

RECRUITING PRACTICES TARGETED AT HISPANICS

92. Senator LIEBERMAN. Secretary Harvey and General Schoomaker, as the cochair of the Senate Democratic Hispanic Task Force, I'd like to ask a few questions about the Army's efforts to increase the recruitment of Latinos. I believe that the Army's dedication to increasing the numbers of Hispanics in the Army's Active-Duty Force is important, since Hispanics historically have been underrepresented in our military. To achieve the goal of recruiting more Hispanics into our Armed Forces, I am concerned about press reports which call into question the tactics recruiters are using with Hispanics. Although recruiters do not lie to potential recruits and their families, there are complaints that they may not tell the entire story or avoid explaining the intricacies of the process. Furthermore, there is concern that Hispanics in the military do not ascend into leadership positions. Currently, Hispanics only comprise 4.7 percent of the military's officer corps, although they make up 10.8 percent of the Army's Active-Duty Force. Can you comment on your recruiting practices targeted at Hispanics?

Secretary HARVEY and General SCHOOMAKER. As America becomes more diverse, the Army is working hard to keep pace and offer opportunities for everyone. The Army is working hard to increase the number of Hispanic recruits. The Army, during this fiscal year, added more than $10 million to its recruiting budget this year for advertising aimed at Hispanic audiences. The Army is running ads in Spanish and English in publications with high Hispanic readership, as well as running ads on several major Spanish-speaking television networks in the United States and Puerto Rico.

The Army also participates in conferences of major Hispanic professional and cultural organizations. We give presentations and set up booths so interested individ-

uals can meet with Hispanic servicemembers and learn about opportunities in the Army. Additionally, the Army participates in the annual conferences of such organizations as the League of United Latin American Citizens, the Hispanic Engineering National Achievement Awards Convention, the United Council of LaRaza, and the Mexican American Engineers Society.

93. Senator LIEBERMAN. Secretary Harvey and General Schoomaker, to what extent has the Army investigated allegations of misconduct in the recruiting process?

Secretary HARVEY and General SCHOOMAKER. We take all allegations of recruiter impropriety seriously, and despite violations from time to time, recruiters continue to uphold Army values and understand the importance of recruiting with integrity. The United States Army Recruiting Command (USAREC) conducts these investigations in order to maintain a force of recruiters who recruit with honesty and integrity every day. USAREC investigates each allegation, and takes appropriate actions based on the result of the investigation. Historically, data shows that USAREC identifies and reports over 80 percent of allegations through its checks and balances.

It is unfortunate that some recruiters occasionally take shortcuts in order to help some young people answer the call to duty. The USAREC philosophy is to achieve our recruiting mission by recruiting everyday with honesty and integrity.

There are 6,484 Active Army recruiters, 1,863 Army Reserve recruiters, and 5,047 ARNG recruiters in cities and towns across America. The vast majority of them embody the Army values of loyalty, duty, respect, selfless service, honor, integrity, and personal courage.

94. Senator LIEBERMAN. Secretary Harvey and General Schoomaker, what were the findings of such investigations?

Secretary HARVEY and General SCHOOMAKER. At the conclusion of a thorough investigation into each allegation by an investigating officer and a legal review by a judge advocate or civilian attorney advisor, a commander makes the factual decision to substantiate or unsubstantiate the allegation. The commander reviews each investigative file individually and decides if a particular allegation is proven by a preponderance of the evidence. The commander takes into consideration rebuttal statements submitted by the respondent, the investigating officer's recommendation, and the recommendation of the reviewing judge advocate or civilian attorney-advisor. Either a brigade commander or the commanding general makes the decision to substantiate or unsubstantiate an allegation. Once this decision is made, the deciding commander determines an appropriate disposition on a case-by-case basis. USAREC regulations and policies differentiate cases requiring commanding general action from those the brigade commanders can act upon.

In fiscal year 2005, there were 835 allegations received. Of these, 825 are closed with 123 (14.9 percent) closed as substantiated. There were 364 recruiting personnel who received some form of admonishment and 42 recruiters relieved based upon these allegations. To put this in perspective, 0.20 percent of the recruiting force was relieved for allegations of recruiting impropriety.

95. Senator LIEBERMAN. Secretary Harvey and General Schoomaker, what is being done in the Army to encourage Hispanics to move into leadership roles within the Army?

Secretary HARVEY and General SCHOOMAKER. The Army's Equal Opportunity (EO) policy does not target one ethnicity over any other. Conversely, the Army seeks the best and most qualified personnel for each and every position.

QUESTIONS SUBMITTED BY SENATOR JACK REED

ARMY SCIENCE AND TECHNOLOGY PROGRAMS

96. Senator REED. Secretary Harvey, the Army's request for science and technology (S&T) programs is actually down by $16 million with respect to last year's request, as well as down over $1.3 billion with respect to the 2006 enacted level. How is this reduction consistent with the need to continue the Army's transformation?

Secretary HARVEY. With the Army fully engaged in the global war on terror, we are consistently challenged to satisfy the resource demands to sustain current operations while simultaneously maintaining our S&T investments in the most important technologies to enable capabilities for the future modular force. While the fiscal year 2007 request is very slightly below last year's request (less than 1 percent), we believe that our request for $1.7 billion in S&T funding represents a significant

investment that is focused on satisfying priority needs of the future modular force while presenting opportunities to spiral new technologies into the current force.

97. Senator REED. Secretary Harvey, what areas of S&T are underfunded as a result of this request?

Secretary HARVEY. The Army S&T program is adequately funded consistent with ability to mature technologies synchronized with acquisition program funding to accept new technology into current programs in development or sustainment.

98. Senator REED. Secretary Harvey, what areas of S&T have been reduced in investment with respect to the 2006 request and why were these areas reduced?

Secretary HARVEY. The appearance of reduced investment in S&T funding for selected programs often reflects accomplishing desired maturation and transition of technology. Examples from 2006 include the successful completion of a major S&T program, compact kinetic energy missile and the successful transition of non line-of-sight launch system (NLOS–LS) technologies to the NLOS–LS SDD phase of this acquisition program.

99. Senator REED. Secretary Harvey, please provide a prioritized list of unfunded S&T opportunities that can be used as the committee considers the fiscal year 2007 budget request.

Secretary HARVEY. Although the Army S&T program is adequately funded, if Congress were to provide additional S&T funds, we would pursue additional research in the areas of: 1) alternatives to current approaches for increased tactical wheeled vehicle survivability; 2) advanced tracking and fire control for mobile counter rockets and mortar systems; 3) additional novel warhead interceptor concepts for active protection against kinetic energy munitions; and 4) alternative battery chemistries to increase the energy density and reduce weight.

PROMOTION RATES

100. Senator REED. Secretary Harvey, I am concerned with reports of junior officer attrition with simultaneous officer promotion rates significantly greater than historical averages. Last year 97 percent of eligible captains were promoted to major. With promotion rates there is no process of ensuring only the best officers are promoted. How is the Army ensuring only qualified officers are being promoted?

Secretary HARVEY. The Secretary of the Army, in his instructions to the promotion board, directs that the board select officers who will make the greatest contribution to our Army in the years ahead. In all cases the board satisfies itself that an officer is qualified professionally and morally, has demonstrated integrity, is physically fit, and is capable of performing the duties expected of an officer with his or her career field and skill qualifications in the next higher grade. While current promotion rates are higher than the historical average, officers who are not deemed fully qualified by the board members are not selected for promotion.

BIOMETRICS

101. Senator REED. General Schoomaker, I understand that you are the Executive Agent for DOD biometrics with responsibility delegated to the Army Chief Information Officer. Biometrics technologies will play a key role in developing new tools to defeat terrorists. What are you requesting in the fiscal year 2007 budget for research, development, procurement, and operation of biometric technologies?

General SCHOOMAKER. The Secretary of the Army is the Executive Agent for DOD biometrics, with responsibility delegated to the Army Chief Information Officer (G–6). The total Army funding request in fiscal year 2007 for biometrics and intelligence analysis support to biometrics is $132.7 million. The total Executive Agent investment for biometrics technology development request in fiscal year 2007 is $14.5 million (research, development, test, and evaluation appropriation), procurement $1.4 million (other procurement, Army appropriation) and operations $11.8 million (operations and maintenance Army appropriation). The Army G–2 investment for intelligence related research and development is $4 million, $13 million for operations maintenance Army and $8 million for other procurement, Army. The U.S. Army Intelligence and Security Command requested $80 million: operations and maintenance Army appropriation for contractor analysis $50 million; contractor forensics $10 million; and software and equipment $20 million.

SPECIAL OPERATIONS FORCES—CIVIL AFFAIRS

102. Senator REED. General Schoomaker, it is my understanding that one element of the QDR-based plan for the Army is to move Reserve Civil Affairs (CA) components from Special Operations Command (SOCOM) and put them under the command of regular Army units.

However, I understand that some special operators are concerned that conventional Army officers commanding these CA components may not understand their special capabilities. This could have a negative impact on Reserve CA professional advancement and readiness, as conventional officers would write their fitness reports, and might assign them conventional duties instead of taking advantage of their unique skills. There is also concern about whether they would be equipped to the same standard as Active-Duty CA.

Can you confirm that Reserve CA units will be placed under conventional Army commands? If so, how would you prevent this from having the negative impacts I mentioned that are feared by some special operators?

General SCHOOMAKER. One of the recommendations identified in the QDR is for the Army to rebalance the CA and psychological operations (PSYOP) forces. To accomplish this, the Army is growing the size of the CA and PSYOP forces by more than 3,700 positions in order to provide a greater depth of capability for both Special Operations Forces (SOF) and conventional forces. We are also realigning the USAR CA and PSYOP forces from U.S. Army Special Operations Command to the U.S. Army Reserve Command to better support the modular conventional force organizations at all levels. Based on the level of support required, the Army Force Generation model will be used to identify and align the appropriate USAR unit with a conventional force organization prior to operational deployment. This allows the CA and PSYOP units to train with and fully integrate into the supported unit. By integrating CA and PSYOP into the supported unit early, those soldiers will also become adept at including the civil-military aspect into all of their operations from mission planning through execution. The Active component CA and PSYOP units will primarily support SOF units and missions. This realignment provides the correct force mix and enhances CA and PSYOP support to the full spectrum of Army missions.

103. Senator REED. General Schoomaker, would SOCOM continue to equip Reserve CA units or would these units have to compete with all the other Army specialties or units for equipment? If so, would they be equipped to the same standard as Active-Duty CA under SOCOM?

General SCHOOMAKER. The Army will continue equipping Reserve CA units in accordance with Army resourcing priorities in support of the Army Campaign Plan and Army force generation requirements. We will transfer the funding stream for equipping Reserve CA units from the U.S. Army Special Operations Command to the U.S. Forces Command. The Army will transform CA units into two types that are designed and equipped to fully integrate, communicate, and operate with the forces they support. Active CA units will be designed to support unconventional forces, and Reserve CA units will be designed to support conventional forces. Reserve and Active CA units will receive the same level of modernization for common equipment. Reserve CA units will not receive equipment that is unique to supporting unconventional forces because their mission design will not require it.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. AKAKA

CORROSION CONTROL

104. Senator AKAKA. Secretary Harvey, I am concerned that the expenditures necessary to develop the Army's FCS is diverting funds necessary to adequately maintain equipment currently in use, particularly with regard to corrosion control. Many of these advanced technologies will not be available for several years but the Army needs reliable equipment, today, in order to properly conduct its current operations. Will you commit to providing all necessary funding for the Army's current corrosion control program?

Secretary HARVEY. The Army will use corrosion prevention technologies (CPTs) in fiscal year 2007 and beyond, to protect tactical vehicles, aircraft and missile and armaments systems and support equipment. Promising technology categories include clear water rinse systems, cable connector covers to extend the life of wiring harnesses, nondestructive testing to identify hidden corrosion while it is inexpensive to repair, and preventive maintenance treatments to increase corrosion resistance of tactical vehicles and support equipment. Approximately 11,000 tactical vehicles

were completed in fiscal year 2005 and approximately 800 aircraft (one-third of Army's fleet) have undergone corrosion prevention during reset.

The Army's largest investment is in standardized processes to control corrosion at the Corrosion Control Centers. These centers are installed at a cost of approximately $2 million. Baseline operations costs are projected at $1.5 million per site ($0.5 million for facilities and $1.0 million for equipment applications) per year. Fixed facilities currently exist at Schofield Barracks, Hawaii; Fort Hood, Texas; Fort Polk, Louisiana; and Fort Bragg, North Carolina. Mobile application facilities exist at eight additional sites. Corrosion prevention treatments are also applied during reset and depot maintenance at Army depots and contractor sites. Discussions have been held to establish more Corrosion Control Centers.

GAO reports have shown that the return on investment/cost avoidance for corrosion prevention efforts is at least 4 to 1. The Army's CPT efforts will ensure that the Army efficiently meets the equipment readiness goals needed to sustain current and future contingency operations.

WASTE PREVENTION

105. Senator AKAKA. Secretary Harvey, the Army is requesting funding and authorities for Army business transformation initiatives which, you argue, will free human and financial resources for more compelling operation needs. Can you tell me specifically how these initiatives will address the issue of award and incentive fees being paid out to contractors who have not met their performance goals?

Secretary HARVEY. In light of the recent GAO report addressing the payment of award and incentive fees, the Department has issued a new policy memorandum dated March 29, 2006, Award Fee Contracts (FAR 16, DFARS 215, and DFARS 216). The recently issued guidance was a direct result of several of the recommendations from the GAO. Specifically, 1) award fees should be linked to identifiable interim outcomes, discrete events or milestones; 2) award fees must be commensurate with contractor performance; and 3) rollover of award fees should be used on an exception basis and adherence to strict guidance govern their usage. This new policy will apply to all contracts incorporating award and/or incentive fees clauses including any contracts supporting the various business transformation initiatives pursued by the Army.

106. Senator AKAKA. Secretary Harvey, what can you commit to doing right now in order to prevent further waste of taxpayer dollars?

Secretary HARVEY. As an immediate step, I have ordered the largest deployment of Lean Six Sigma ever attempted. This effort is underway with training, education, and process selection. Projects will be both centrally sponsored for crosscutting initiatives as well as command specific; a combined top-down and bottom-up approach to accelerate the transformational effect. The result will be reduced cost and cycle time while increasing quality, production, and reliability.

On a more systemic basis, our business transformation initiatives include Continuous Process Improvement using the Lean Six Sigma methodology, Business Situational Awareness, Organizational Analysis and Design, and Professional Development.

Business Situational Awareness is the product of timely and accurate information to support policy and resource allocation systems. These enterprise information solutions will provide Army leaders clarity on systems and processes where today it is difficult to observe.

Organizational Analysis and Design examines functions and structure of organizations, then redesigns and realigns organizational elements as necessary to accomplish the mission/work assigned. This analysis, design, and alignment will reduce redundancies and ensure organizations can effectively and efficiently fulfill the needs of our warfighters.

Professional Development of Army leaders is critical to successful business transformation and the Army is examining ways to broaden the education, training, and experience of our officers and civilians to meet the complex challenges of leading the Army business enterprise. This initiative area will help educate and develop leaders of Army enterprises so that they are fully prepared for the challenges of leading the Army's complex business organizations.

To ensure these efforts are successful and to highlight their importance, I have appointed Michael Kirby to lead this endeavor as the Deputy Under Secretary of the Army for Business Transformation.

RESERVE DEPLOYMENTS

107. Senator AKAKA. Secretary Harvey, according to the Army's 2006 posture statement one of your goals is to implement a strategy of one operational deployment in 6 years for the Reserve component. Do you anticipate that these deployments will extend beyond the 24 consecutive months currently authorized by law for the involuntary activation of members under partial mobilization?

Secretary HARVEY. No, deployments under the Army Force Generation model would not exceed the limits of existing law. The Army Force Generation is a training and readiness model that would generate a continuous output of trained and ready forces that will support one operational deployment in 6 years for the Reserve component. The model does not change the length of operational tours.

108. Senator AKAKA. Secretary Harvey, what support services will be available to the family members of reservists who are on extended employment keeping in mind that they may not live within close proximity to any military facilities?

Secretary HARVEY. The Army Reserve is constantly evaluating the programs that support our soldiers' families. Several initiatives and partnering ventures reflect Army Reserve leadership and family programs.

The Army Reserve has 141 family programs employees providing services to Reserve component soldiers and their families. They are responsible for monthly contact with unit leaders and our family readiness groups (FRO). Some of the family programs are:

- Army Family Team Building (AFTB) is designed to provide skills and knowledge for living within the unique framework of Army life. This training improves personal and family preparedness; which in turn, enhances overall Army readiness.
- Operation READY (Resources for Educating About Deployment and You) curriculum is a series of training modules, videotapes, and resource books published for the Army as a resource for staff in training Army families who are affected by deployments.
- Army Reserve Family Programs web portal provides service and vital information around the clock from anywhere in the world. It is a one-stop site for information and referral to military and community resources. The portal contains up-to-date information on benefits and entitlements, news and new programs. There are links to information from free financial planning, nearest locations for identification card issuance/renewal, DOD healthcare, the Red Cross, and Military OneSource. Military OneSource is available 24-hours a day, 7-days a week, toll-free 1–800–464–8107.

We continue to capitalize on technology that's readily available in the soldier's home, or from the local library, a family member's work, or Internet cafes located in the neighborhood. A new Army-wide initiative, known as the virtual FRO, designed to support and improve how information is passed to families when soldiers are deployed, was launched October 1, 2005, on the Internet. The virtual FRO is designed to replicate the major components of an FRO but in a virtual context.

There are several initiatives underway in the Army Reserve to provide premium support our Children and Youth Services. Some of the projects they are participating in are as follows:

- Community-based child care enables families to access an array of child care options regardless of physical location. Child care fees are reduced up to 25 percent of the participating family's local rate.
- Operation Military Kids focuses children of mobilized parents. It will include building community networks of support and creating broader understanding of the challenges of military life and separation throughout the communities and States. Operation Military Kids teams in various States will be trained in understanding military culture.
- Operation Proud Parents raises the quality standards at selected Boys and Girls Clubs of America (B&GCA).
- Operation Child Care is a nation-wide initiative to provide short-term "respite and reunion child care" for children of servicemembers returning from OIF and OEF during R&R leave. Care is coordinated through the National Child Care Resource and Referral Association.
- Families who live near a military installation can participate in Operation: Military Child Care. This initiative provides installation based child care available during soldiers' R&R leave. This allows families a "night out" and day-time opportunities to attend to personal business.

The National Military Family Association's Operation Purple offers summer camps around the country. The camps were made possible by a grant from Sears as part of the Sears American Dream Campaign. The program allowed youth from all branches of service to interact and learn from each other in an effort to help deal with deployment-related stress.

The Military Child Education Coalition has designed training for educators of military children. The training focuses on the issues that Army Reserve and National Guard youth face when a parent is mobilized and deployed. The training will be piloted in Texas starting in October. Additionally, several States have requested information and are developing their own training modules.

I cannot talk about family readiness without mentioning our Army Reserve Strong Bonds workshops (marriage enrichment weekends) for soldiers and their spouses after deployment. All Regional Readiness Commands and Direct Reporting Commands receive funding through the office of the command chaplain to host their own events. Additionally, chaplains are available to soldiers and their families for counseling and support.

We continue to look for ways to maintain a broad based approach to ensure our family members are cared for with a variety of opportunities while their soldiers are deployed.

109. Senator AKAKA. Secretary Harvey, what impact do you believe these extended deployments of members of the ARNG, in particular, will have on a State's ability to respond to natural disasters or civil disorders?

Secretary HARVEY. The main mission of the National Guard is homeland defense. The President, Governors, Congress, and the Secretary of Defense have clearly insisted that the Guard be fully prepared to engage in homeland defense and to support homeland security missions while simultaneously engaged in combat overseas; in fact, they insist that the National Guard be more accessible than they have ever been in the past. Congress further enhanced the Guard's domestic homeland defense and security mission capability in the National Defense Authorization Act for Fiscal Year 2005, by amending title 32 of the U.S. Code to authorize the funding of homeland defense activities by the National Guard, upon approval of the Secretary of Defense. The National Guard is committed to the Governors—the State Commanders in Chief—that each State will have sufficient capabilities under their control to meet their needs to respond to natural disasters or civil disorders. Those capabilities include key assets for command, control, and immediate response—the Joint Force Headquarters, Civil Support Teams, rapid reaction forces, medical, aviation, decontamination, and engineering units.

BUDGET REDUCTION IMPACT ON ARMY NATIONAL GUARD

110. Senator AKAKA. Secretary Harvey, it is my understanding that the Army was asked to reduce its budget by $11 billion. Is this correct, and how much of the reduction can be associated to the National Guard?

Secretary HARVEY. That is correct. Up to 48 percent of the reduction or $5.4 billion of the total Army reduction of $11 billion is associated with the ARNG. This reduction cuts both ARNG end strength and force structure. Force structure is reduced by six BCTs (four heavy and two light), one combat aviation brigade, and two division headquarters. It reduces end strength by 17,100, down to 332,900. This end strength reduction includes 906 Army Guard and Reserve (AGR) full-time personnel and 1,777 military technicians. The fiscal years 2008–2011 funding reductions exceed the end strength cut of 17,100, which equates to a reduction of 23,000 soldiers, reducing the funded end strength to 324,000 in fiscal years 2008–2011. The Army is reexamining these reductions and has committed to full funding of the ARNG up to an end strength of 350,000. To do this, the Army is evaluating options to restore funding in fiscal years 2007–2011 through the ongoing budget and program objective memorandum cycles.

111. Senator AKAKA. General Schoomaker, you assert that one of the significant contributions of the Army's FCS is that it will immediately place advanced technologies into use through the use of "spin outs" in roughly 2-year increments. How does the Army plan to minimize the risks of this sort of spiral development such as development cost over-runs and schedule push-backs due to unknowns in latter stage requirements?

General SCHOOMAKER. The management structure for the spin out activities significantly mitigates the risks in that it incorporates a disciplined systems engineering process to ensure that spin out technologies are managed according to an ap-

proved acquisition strategy and baseline. These technologies are being brought to maturity in conjunction with the FCS program and are subject to the FCS program risk management process. FCS has established a robust and intensively managed risk program that proactively and aggressively identifies, assesses, and monitors risks. Mitigation plans for addressing and controlling identified risks are developed as part of this process. Risks are closely monitored through a variety of program management tools such as regular risk reviews, program status reviews, EVMS reports, "graybeard" panels, experiments, demonstrations, etc. In order to provide an appropriate level of management visibility for spin outs, two Project Management Offices have been established, one within PM FCS to manage the integration readiness of spin out technologies and another within PEO Ground Combat Systems to manage the introduction of these capabilities into existing vehicle fleets. These two organizations are already working very closely to facilitate a seamless process of technology maturation, interface development, production, and fielding.

One of the primary issues to be addressed in this process is to determine whether the identified spin out technologies are mature and suitable for insertion into the current force. We may very well determine that some technologies are not mature to the point where they can be fielded to the force in the established 2-year increments. Immature technologies would continue to be developed within the core FCS program and readied either for a later current force insertion or a later spin out increment. Systems are developed, tested, designed, evaluated, and integrated through a series of bench, field and simulated experiments and tests. As an additional risk mitigation measure, we will use the Evaluation BCT to train, test, and learn how to use the candidate spin out technologies in an operational environment. This coordinated and comprehensive management approach inherently mitigates the cost and schedule risk to the Army.

QUESTIONS SUBMITTED BY SENATOR E. BENJAMIN NELSON

BODY ARMOR

112. Senator BEN NELSON. General Schoomaker, in the Army posture statement on page 16, there is a chart that shows where the Army stands on properly equipping soldiers with body armor. As of January 2006, the posture statement reads that "all soldiers and DOD civilians in theater are equipped; total of 693,000 body armor sets are fielded; plus 173,000 Deltoid Axillary Protector sets issued". Can the Army state then that every soldier in Iraq and Afghanistan is properly equipped with the right body armor?

General SCHOOMAKER. Yes, the Army can state that every soldier in Iraq and Afghanistan is properly equipped with the right body armor. The posture statement was correct at the time and the Army has continued to field enhancements to the body armor ensemble. As of February 14, 2006, the Army has fielded a total 754,345 sets of body armor and 172,860 sets of the Deltoid Axillary Protector. The Army also began fielding side plates on January 31, 2006. The Army expects to field 230,000 sets of side plates in theater by December 2006.

113. Senator BEN NELSON. General Schoomaker, is it also true that every soldier who is scheduled to leave for Iraq or Afghanistan is properly equipped with body armor?

General SCHOOMAKER. All deploying soldiers are properly equipped with a set of body armor prior to deployment.

114. Senator BEN NELSON. General Schoomaker, do you hear from any commanders or soldiers in Iraq or Afghanistan that there are still soldiers who are not properly equipped with body armor? After all, it was just over a year ago that the phrase "hillbilly armor" was used to describe the scavenging of parts for supplemental body armor.

General SCHOOMAKER. No, we do not hear from commanders or soldiers in Iraq or Afghanistan that there are still soldiers not properly equipped with body armor. Every commander at every level knows that we do not deploy soldiers into harm's way without a complete set of body armor. This has been a success story for the Army, and as new technology becomes available, the Army is rapidly testing, developing, and fielding IBA enhancements to our soldiers.

115. Senator BEN NELSON. General Schoomaker, have all parents, family members, and others who may have purchased additional body armor for their loved ones who are serving in Iraq or Afghanistan been reimbursed by the Army? Section

332 of the National Defense Authorization Bill for Fiscal Year 2006 states that this authority expires on April 1, 2006.

General SCHOOMAKER. Since November 2005, soldiers have been filing claims seeking reimbursement for qualifying items that they purchased themselves or that were purchased on their behalf. As these claims are received and processed, the Department of the Army has been making prompt reimbursement payments to these soldiers to the fullest extent permitted under the National Defense Authorization Act and the DOD's implementing guidance. All soldiers who have filed, and in the future file qualifying reimbursement claims, will be reimbursed by the Army.

Under the DOD guidance, soldiers may file their claims for reimbursement anytime up until October 3, 2006. The April 1, 2006, date referenced in the question is the purchase deadline date for which private purchases may qualify for reimbursement, not the date on which the authority to provide reimbursement expires, as suggested by the question. The authority to make reimbursement payments will continue until all claims filed by October 3, 2006, are finally processed.

116. Senator BEN NELSON. General Schoomaker, is there anything else, in terms of personal protection, which our soldiers are lacking that this committee could provide? For instance, are any soldiers lacking the best helmets to protect against high concussion head injuries from bomb blasts to vehicles?

General SCHOOMAKER. No, the Army's programs more than adequately address the requirements for providing individual protection in combat zones. Force protection is the Army's number 1 priority. We are currently pure fleeting operational forces with Enhanced Small Arms Protective Inserts, Deltoid Axillary Protectors, and side plates to complete every IDA ensemble. Force protection items are also fielded to deploying forces under the Rapid Fielding Initiative (RFI) program, to include the Advanced Combat Helmet.

From a philosophical standpoint, the equipment we have today is better than what we had yesterday, and what we will have tomorrow will be better than what we are fielding to today's soldiers. We face an evolving enemy who is absolutely committed to taking us on at any vulnerability that he can identify. We will continue to improve force protection relentlessly. I am convinced that what we have today is the state-of-the-art. This continuous evolution of the force protection that we provide our soldiers is absolutely essential.

QUESTIONS SUBMITTED BY SENATOR MARK DAYTON

IMPACT OF BRIGADE REDUCTIONS

117. Senator DAYTON. General Schoomaker, how is the reduction of ARNG combat brigades from 34 to 28 going to affect operational tempo or rate of deployment, for the remaining combat brigades?

General SCHOOMAKER. The rebalancing the Army is undertaking is aimed at reducing stress on both Active and Reserve components, improving the responsiveness of the overall force to achieve National Security Strategy goals, and improving the readiness and deployability of units. These efforts will ultimately ensure predictable deployment cycles for Army forces of one rotation every 3 years for the Active component and one rotation every 6 years for the Reserve component.

FUNDING FOR POTENTIAL END STRENGTH

118. Senator DAYTON. Secretary Harvey, the administration has pledged to fund an end strength of up to 350,000 in the ARNG. If the National Guard fulfills its recruitment and retention goals and achieves an end strength of 350,000, up from its current 333,000, how much money, on an annual basis, will be required to fund this difference in personnel?

Secretary HARVEY. The table below outlines funding necessary to resource the ARNG at an end strength of 350,000 provided mobilizations continue as anticipated, approximately 40,000 mobilized annually. The National Guard Personnel, Army and Medicare-Retired contribution, Army is specifically needed to pay the additional 17,100 ARNG soldiers and provide the required Defense Health Program funding. Additional funding is needed in operations and maintenance and military construction to continue providing the necessary support to the soldiers. Current negotiations are ongoing regarding equipment/investment (procurement) restoral, and the total dollar amount depends on the final outcome of force structure adjustments.

It is important to note that current funding levels in fiscal years 2008–2011 will only support an ARNG end strength of 324,000 not 333,000.

[In millions of dollars]

	Fiscal Year					
	2007	2008	2009	2010	2011	2007–2011
NGPA	$188.8	$536.1	$554.7	$567.1	$579.9	$2,426.6
Medicare—ret. HFC (NGPM)	62.4	66.4	70.7	75.3	80.1	354.9
OMNG	219.6	252.1	292.8	323.8	332.1	1,420.4
MCNG	0.0	80.3	30.6	88.7	42.6	242.1
ARNG specific Procurement	318.0	111.5	0.0	106.6	413.2	949.3
Total	$788.8	$1,046.4	$948.9	$1,161.5	$1,447.8	$5,393.3

ARNG funded end strength: fiscal year 2006-350,000, fiscal year 2007-333,000, fiscal year 2008-324,000.

[Whereupon, at 4:58 p.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2007

THURSDAY, FEBRUARY 16, 2006

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

PRIORITIES AND PLANS FOR THE ATOMIC ENERGY DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY AND TO REVIEW THE FISCAL YEAR 2007 PRESIDENT'S BUDGET REQUEST FOR ATOMIC ENERGY DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY AND THE NATIONAL NUCLEAR SECURITY ADMINISTRATION

The committee met, pursuant to notice, at 9:34 a.m., in room SD–106, Dirksen Senate Office Building, Senator John Warner (chairman) presiding.

Committee members present: Senators Warner, Sessions, Talent, Graham, Cornyn, Thune, Levin, Reed, and Clinton.

Committee staff members present: Charles S. Abell, staff director; Leah C. Brewer, nominations and hearings clerk; and John H. Quirk V, security clerk.

Majority staff members present: Lynn F. Rusten, professional staff member; Kristine L. Svinicki, professional staff member; and Richard F. Walsh, counsel.

Minority staff members present: Richard D. DeBobes, Democratic staff director; Madelyn R. Creedon, minority counsel; Bridget W. Higgins, research assistant, and Gerald J. Leeling, minority counsel.

Staff assistants present: Jessica L. Kingston, Benjamin L. Rubin, and Jill L. Simodejka.

Committee members' assistants present: Jeremy Shull, assistant to Senator Inhofe; Arch Galloway II, assistant to Senator Sessions; Russell J. Thomasson, assistant to Senator Cornyn; Stuart C. Mallory, assistant to Senator Thune; Elizabeth King, assistant to Senator Reed; and William K. Sutey, assistant to Senator Bill Nelson.

OPENING STATEMENT OF SENATOR JOHN WARNER, CHAIRMAN

Chairman WARNER. Good morning, Mr. Secretary. We understand that you have a commitment with the President down at the White House so we are going to make it possible for you to make

those commitments, and I will ask unanimous consent myself to include my statement in the record as stated in full. But, we are pleased to see you this morning, and I do recollect the last time you were here, a year ago, or thereabouts, you had been in the office 2 weeks, so this morning we expect you to be fully up to speed.

Secretary BODMAN. I was here a year ago, sir. I think your recollection is accurate. Two weeks is about right, and I hope you'll find me up to speed, sir.

Chairman WARNER. I'll cover some of the points in my opening statement.

[The prepared statement of Chairman Warner follows:]

PREPARED STATEMENT BY SENATOR JOHN WARNER

The committee meets this morning to receive testimony from Secretary of Energy Samuel Bodman on his plans and priorities for the Department of Energy's (DOE) national security programs. The committee will also receive testimony on the President's budget request for the atomic energy defense activities of the DOE and the National Nuclear Security Administration for fiscal year 2007.

I welcome our distinguished witness, the Secretary of Energy. Last year at this time, when you appeared before the committee, you had been "on the job" as Secretary less than 2 weeks. As you now realize, the challenges of the job you hold are formidable. I would like to take a few minutes to highlight some of these challenges that are of particular concern to me.

One of the most solemn responsibilities you have as Secretary of Energy, in conjunction with the Secretary of Defense, is to certify to the President of the United States on an annual basis that the nuclear weapons stockpile of this Nation is reliable, safe, and secure. Currently, the DOE relies on the science-based Stockpile Stewardship program to maintain the credibility of our nuclear weapons stockpile, without underground nuclear testing.

Congress looks to you to ensure that this program remains on track, and to request the funds you need to get the job done. We also look to you to tell us if any significant problems arise with respect to the safety and reliability of the stockpile that would require a resumption of live testing. Your assurance, along with that of the Secretary of Defense, that the stockpile remains safe, secure, and reliable is critical to the national security interests of our country.

To further support the goal of a reliable stockpile, DOE has undertaken a feasibility study of what has been termed the "Reliable Replacement Warhead." This study—being conducted at the direction of Congress and in consultation with the Department of Defense will, when completed, represent this Nation's foremost thinking on how to sustain our nuclear deterrent into the future with a high level of technical confidence and at an affordable cost. I encourage you, Mr. Secretary, to address your objectives for this study during your testimony this morning.

Another significant challenge for the DOE is the Environmental Management program, which is tasked with the cleanup of our defense nuclear sites. Although DOE expects to have completed cleanup at 87 of the 114 sites under the program by the end of fiscal year 2006, many of the most complex and costly sites remain. I encourage you, Mr. Secretary, to address how DOE is working to complete the remaining environmental cleanup work on schedule and on budget.

Finally, I look forward to hearing from you about DOE's current programs and future plans to advance the President's nuclear nonproliferation agenda. I note that the DOE's fiscal year 2007 request of $1.7 billion for defense nuclear nonproliferation represents a 7-percent increase over last year's request. This clearly reflects the high priority the President places on countering the threat of proliferation of weapons of mass destruction, as well as the DOE's growing role in that effort.

In particular, I hope you will update us on the status and plans for the mixed oxide (MOX) plutonium disposition program in Russia and in the United States—a program which has experienced significant schedule delays and rising costs; on implementation of the Global Threat Reduction Initiative; and on the other major programs focused on eliminating excess nuclear materials in the former Soviet Union and around the globe, and reducing the potential that such material could get into the hands of terrorists.

Mr. Bodman, we thank you for your continued service to the Nation as the Secretary of Energy. We look forward to your testimony.

Chairman WARNER. Senator Levin.

STATEMENT OF SENATOR CARL LEVIN

Senator LEVIN. Mr. Chairman, I'll also reserve most of my points for questions as well and put my statement in the record. I just want to welcome Secretary Bodman. I do wish, however, that you would, Mr. Secretary, in your opening comments, address at least a couple of issues. One is the recommendations that were made I think 8 months ago by the Department of Energy (DOE) Advisory Board that did a comprehensive study conducted at the request of Congress to make recommendations to improve and consolidate the nuclear weapons complex. If you could comment on the status of those recommendations.

Also, if you would address the issue of the DOE Advisory Board, which is now being disbanded apparently by you and abolished. Something similar happened to an advisory board at the National Nuclear Security Administration (NNSA) a few years back, so we have this pattern which is troubling where we have these controversial, technically complex issues without these outside balanced advisory boards, in both cases involving the DOE.

If you could address that in your opening statement, and I'll save the rest of my opening statement comments and weave those into my questions.

[The prepared statement of Senator Levin follows:]

PREPARED STATEMENT BY SENATOR CARL LEVIN

Good morning Mr. Secretary. It is a pleasure to welcome you to the Senate Armed Services Committee this morning. We look forward to discussing with you the many complex and controversial issues that fall within the purview of the Department of Energy (DOE).

Approximately two thirds of the Department's budget is funded in the defense accounts and thus falls within the oversight and authorization jurisdiction of this committee.

You have been Secretary of Energy for just a year and this is the first budget request for the Department that you have developed. This morning I look forward to hearing your views on the DOE, its budget proposals, and the problems and successes that you have identified in the Department over the past year.

Key defense-funded programs in the Department are the Environmental Cleanup, Restoration, and Waste Management programs; the Nuclear Weapons programs; and the Nonproliferation programs.

As part of the Department's fiscal year 2007 budget request, you introduced a new proposal that cuts across all of the DOE programs. This new proposal, the Global Nuclear Energy Partnership, is described in the budget material as "a comprehensive strategy to increase U.S. and global energy security, encourage clean development around the world, reduce the risk of nuclear proliferation, and improve the environment." Three key elements of this proposal are: (1) increased use of nuclear power reactors; (2) reprocessing of spent nuclear fuel; and (3) establishment of a global nuclear fuel services program that would provide nuclear reactor fuel and take back spent nuclear fuel. This is a controversial and complex proposal, with significant nuclear proliferation ramifications, which we need to understand fully.

The Quadrennial Defense Review and the 2001 Nuclear Posture Review both discuss the notion of "responsive infrastructures." I hope you will discuss what is a responsive nuclear weapons infrastructure, and is the Department moving to put this infrastructure in place.

A series of recommendations for improving and consolidating the nuclear weapons complex, thus presumably making it more responsive, were included in a comprehensive study, conducted at the request of Congress, by the DOE Advisory Board. Apparently there has been no action to implement the study, even though it was completed more than 8 months ago. I hope you will address that study's recommendations so we can understand any reviews that you are conducting or participating in, in response to or to implement the Advisory Board study.

Also, I hope you will explain to this committee why you have disbanded and abolished the Department of Energy Advisory Board. Several years ago the National

Nuclear Security Administration also disbanded its advisory board. This is a troubling trend for an agency that deals with so many controversial and technically complex issues. I am interested in the rationale for your action and why the DOE doesn't need advisory boards.

I also look forward to your discussion of the nuclear weapons stockpile stewardship program, the environmental programs and the nonproliferation programs of the Department.

Again, thank you Mr. Secretary for appearing before the committee today.

Chairman WARNER. Senator Sessions, do you have a comment or two you'd like to make?

Senator SESSIONS. I have a statement, but if you prefer I'll just hold that off as you have. I'm concerned about where we are in some of these matters. A good portion of this budgetary item will require the Strategic Forces Subcommittee.

Chairman WARNER. Senator Reed, would you likewise withhold opening remarks?

Senator REED. Yes, sir.

Chairman WARNER. Secretary, please begin. We have a vote. I think it is at 10:30. Thank you.

STATEMENT OF HON. SAMUEL W. BODMAN, SECRETARY OF ENERGY

Secretary BODMAN. Thank you, Mr. Chairman, Senator Levin, I'm very pleased to be here this morning to talk to you about the administration's priorities for nuclear weapons, threat reduction programs, and the DOE's environmental cleanup program. All this is spelled out in detail in my written testimony.

I want to just take a couple of minutes to share some of the highlights. First, our budget request supports the NNSA's three fundamental national security missions. These are first to assure the safety and reliability of the U.S. nuclear weapons stockpile while at the same time transforming that stockpile and the infrastructure that supports it.

Second, to reduce the threat posed by nuclear proliferation and third, to provide reliable and safe nuclear reactor propulsion systems for the United States Navy. To pursue these missions the budget proposals total $9.3 billion in fiscal year 2007. This supports the requirements of the Stockpile Stewardship Program consistent with the administration's Nuclear Posture Review (NPR) and the revised stockpile plan submitted to Congress in June 2004.

Approximately $1.4 billion in fiscal year 2007 is requested for the directed stockpile work with regard to the integrity of our facilities, information systems, and infrastructure. The budget also requests $665 million to fund the requirements of the design basis threat.

To support the Department's effort to contain and roll back the proliferation of dangerous materials, as well as technology and know-how, the budget proposal is $1.7 million for nuclear nonproliferation and threat reduction programs.

In addition to funding the national security missions of the NNSA, our budget seeks to fulfill our environmental commitments with a request of $5.8 billion to clean up legacy waste sites that were involved in the development of nuclear chemistry and physics.

We recently announced the completion of cleanup at Rocky Flats in Colorado with the reform of our nuclear weapons plant located just outside of Denver. In fiscal year 2006, DOE will also complete

the environmental cleanup of the Fernald and Columbus sites in Ohio, the Sandia National Laboratory in New Mexico, and several smaller sites as well. There is a lot more, Mr. Chairman, that I could go into, but I'm sure we will get into the details that are of interest to the Senators.

Before I close, I would like to mention a couple of things about the balance of the Energy Department program. In the President's State of the Union address, he announced two initiatives, the American Competitive Initiative and the Advanced Energy Initiative, which aimed to ensure that America remains at the forefront of an increasingly competitive world by pursuing transformational new technologies, and by increasing investment in clean energy sources that will transform our transportation sector. In fact, this should have an impact on our whole society.

As part of the Advanced Energy Initiative our budget request includes $250 million to begin investments in the Global Nuclear Energy Partnership, which may be of interest to this committee. This is a groundbreaking new international effort to expand safe, emissions-free nuclear power while enhancing our ability to keep nuclear technology and material out of the hands of those who would seek to misuse it.

If I may, sir, before concluding, address Senator Levin's questions. The Secretary of Energy Advisory Board (SEAB) report to improve the nuclear weapons complex is something that we take very seriously. It's the so-called Overskei report, I believe you're referring to, named after the Chairman, or at least that's what we have come to call it. The NNSA is working on a very comprehensive response to it. Many of the things recommended in there are efforts that are already ongoing; for example, the new type of warhead that we are trying to design, the so-called reliable replacement warhead, is one of those items.

There are other issues where we will see very large expenses in terms of trying to consolidate all of our highly enriched uranium and other special nuclear materials in one site, so that I think will be a problem. We will have a complete report, comprehensive report for you, I would think within the next couple of months.

Second, the SEAB, the decision regarding SEAB, that's more a reflection of me, frankly. I tend to operate with fewer specific advisors and more people who were there on the payroll doing the work. I have talked to the Chairman of SEAB and I have explained to him that I don't have a regular series of things that I would like them to do, but I feel quite confident that the Chairman, the Vice Chairman, and other members of the committee will be very happy to be responsive if we have specific matters that we need to take up, and we can simply reform it. I just do not want to feel, frankly, the pressure that I was feeling to identify areas to put them to work.

It's a very diverse group, and something that I felt was in the best interest of the Department, so that's a decision that I made. Mr. Chairman, I'd be happy to take questions.

[The prepared statement of Secretary Bodman follows:]

PREPARED STATEMENT BY HON. SAMUEL W. BODMAN

Chairman Warner, Senator Levin, and members of the committee, thank you for the opportunity to appear before you today to discuss the administration's priorities for nuclear weapons, threat reduction programs, and Department of Energy's (DOE) environmental cleanup program.

ADVANCING AMERICA'S NATIONAL SECURITY

Let me first address national security programs under the National Nuclear Security Administration (NNSA). NNSA's fiscal year 2007 budget request supports three fundamental national security missions:

- assure that the U.S. has a safe, secure, reliable and effective nuclear weapons stockpile while at the same time transforming that stockpile and the infrastructure that supports it;
- reduce the threat posed by nuclear proliferation; and
- provide reliable and safe nuclear reactor propulsion systems for the U.S. Navy.

NUCLEAR WEAPONS PROGRAMS

The Department is committed to ensuring the long-term reliability, safety, and security of the Nation's nuclear deterrent. Stockpile stewardship is working; the stockpile remains safe and reliable. This assessment is based not on nuclear tests, but on cutting-edge scientific and engineering experiments and analysis, including extensive laboratory and flight tests of warhead components and subsystems. Each year, we are gaining a more complete understanding of the complex physical processes underlying the performance of our aging nuclear stockpile.

To assure our ability to maintain essential military capabilities over the long term, however, and to enable deeper cuts in the stockpile through reduction of Reserve warheads, we must make progress towards a truly responsive nuclear weapons infrastructure, as called for in the Nuclear Posture Review (NPR). The Department is moving down the path towards realizing its vision for a transformed nuclear weapon stockpile and infrastructure which are enabled by its Reliable Replacement Warhead Program and its initiative for a responsive infrastructure.

Success in realizing this vision for transformation will enable us to achieve over the long term a smaller stockpile, one that is safer and more secure, one that offers a reduced likelihood that we will ever again need to conduct an underground nuclear test, one that reduces NNSA and Department of Defense (DOD) ownership costs for nuclear forces, and one that enables a much more responsive nuclear infrastructure. Most importantly, this effort can go far to ensure a credible deterrent for the 21st century that will reduce the likelihood we will ever have to employ our nuclear capabilities in defense of the Nation.

The NPR, and follow-on assessments, have resulted in a number of conceptual breakthroughs in our thinking about nuclear forces, breakthroughs that have enabled concrete first steps in the transformation of those forces and associated capabilities. Very importantly, the NPR articulated the critical role of the defense research and development (R&D) and manufacturing base, of which a responsive nuclear weapons infrastructure is a key element, in the New Triad of strategic capabilities. We have worked closely with DOD to identify initial steps on the path to a responsive nuclear weapons infrastructure.

What do we mean by "responsive nuclear weapons infrastructure" and what is it that we want it to do? By "responsive" we refer to the resilience of the nuclear enterprise to unanticipated events or emerging threats, and the ability to anticipate innovations by an adversary and to counter them before our deterrent is degraded. Unanticipated events could include complete failure of a deployed warhead type or the need to respond to new and emerging geopolitical threats. The elements of a responsive infrastructure include the people, the science and technology base, and the facilities and equipment to support a right-sized nuclear weapons enterprise. But, more than that, it involves a transformation in engineering and production practices that will enable us to respond rapidly and flexibly to emerging needs. Specifically, a responsive infrastructure must provide capabilities, on appropriate timescales and in support of DOD requirements, to:

- Dismantle warheads;
- Ensure needed warheads are available to augment the operationally deployed force;
- Identify, understand, and fix stockpile problems;
- Design, develop, certify, and begin production of refurbished or replacement warheads;

- Maintain capability to design, develop, and begin production of new or adapted warheads, if required;
- Produce required quantities of warheads; and
- Sustain underground nuclear test readiness.

The combination of the Reliable Replacement Warhead (RRW) and a responsive infrastructure—each enabled by the other—may genuinely be transformational. The reduced stockpile the President approved in 2004 still retains a significant number of non-deployed weapons as a hedge against technical problems or geopolitical changes. As we began to implement the concepts of the NPR, however, we and DOD recognized that if we could devise a truly responsive infrastructure, we could eliminate many of these hedge weapons. Once we demonstrate that we can produce warheads on a timescale in which geopolitical threats could emerge, we would no longer need to retain extra warheads to hedge against unexpected geopolitical changes. Once we can respond in a timely way to technical problems in the stockpile, we may no longer need to retain extra warheads as a hedge against such problems.

As we and the DOD take the first steps down this path, we clearly recognize that the "enabler" for transformation is our concept for RRW. The RRW would relax Cold War design constraints that maximized yield to weight ratios and, thereby, allow us to design replacement components that are easier to manufacture, are safer and more secure, eliminate environmentally dangerous materials, and increase design margins, thus ensuring long-term confidence in reliability and a correspondingly reduced chance we will ever need to resort to nuclear testing. This provides enormous leverage for a more efficient and responsive infrastructure.

Transformation will, of course, take time. We are starting now with improving business and operating practices, both in the Federal workforce and across the nuclear weapons complex, and through restoring and modernizing key production capabilities. Full infrastructure changes, however, may take a couple of decades.

But let me take you forward 20 or 25 years when the administration's emerging vision for the nuclear weapons enterprise of the future has come to fruition. The deployed stockpile—almost certainly considerably smaller than today's plans call for—has largely been transformed. RRWs have relaxed warhead design constraints imposed on Cold War systems. As a result, they are more easily manufactured at fewer facilities with safer and more environmentally benign materials. These replacement warheads have the same military characteristics, are carried on the same types of delivery systems, and hold at risk the same targets as the warheads they replaced, but they have been re-designed for reliability, security, and ease of maintenance. Confidence in the stockpile remains high, without nuclear testing, because the RRW design offers substantially increased performance margins and because of our deeper understanding of nuclear phenomena enabled by the stockpile stewardship program and the R&D tools that come with it.

By 2030, according to our vision, the deployed stockpile will be backed up by a much smaller non-deployed stockpile than today. The United States has met the responsive infrastructure objective that for a relatively minor problem, we are able to repair warheads and begin to redeploy them within 1 year. The elimination of dangerous and toxic materials like conventional high explosives and beryllium has made this possible and obviated the need for large numbers of spare warheads to hedge against reliability problems.

The world in 2030 will not have gotten more predictable than it is today. We still will worry about a hedge against geopolitical changes and attempts by others to instigate an arms race. But that hedge is no longer in aging and obsolete spare warheads but in the responsive infrastructure. Once again we have met the goal established in 2004 of being able to produce sufficient additional warheads well within the time of plausible geopolitical change.

The 2030 responsive infrastructure will provide capabilities, if required, to produce weapons with different or modified military capabilities if required. The weapons design community that was revitalized by the RRW program will be able to adapt an existing weapon within 18 months and design, develop, and begin production of a new design within 3–4 years of a decision to enter engineering development—goals that were established in 2004. Thus, if Congress and the President direct, we will be able to respond quickly to changing military requirements.

Security remains important in our future world. But the transformed infrastructure has been designed with security in mind. More importantly, new, intrinsic features built into the growing number of RRWs have improved both safety and security. In short, the vision I am setting forth is of a world where a smaller, safer, more secure and more reliable stockpile is backed up by a robust industrial and design capability to respond to changing technical, geopolitical or military requirements.

This isn't the only plausible future of course. But it is one we should strive for. It offers the best hope of achieving the President's vision of the smallest stockpile

consistent with our Nation's security. It provides a hedge against an inherently uncertain future. That's why we are embracing this vision of transformation. We should not underestimate the challenge of transforming the enterprise, but it is clearly the right path for us to take.

Progress on Stockpile and Infrastructure Transformation

Let me return to today and describe recent progress on transformation:

- Last year, the DOD and DOE jointly initiated an RRW competition in which two independent design teams from our nuclear weapons laboratories—Lawrence Livermore National Laboratory (LLNL) and Los Alamos National Laboratory (LANL) both in partnership with Sandia—are exploring RRW options. A competition of this sort has not taken place in over 20 years, and the process is providing a unique opportunity to train the next generation of nuclear weapons designers and engineers. Both teams are confident that their designs will meet established requirements and be certifiable and producible without nuclear testing. The program is on schedule—preliminary designs will be provided this March. After that, an intensive, in-depth peer process will lead to selection of a preferred option that will be considered for engineering development.
- An intensive effort is also underway to establish our detailed vision for the future nuclear weapons complex, and to identify pathways leading to that vision. As part of this effort, we have reviewed the recommendations from the Secretary of Energy Advisory Board (SEAB) Nuclear Weapons Complex Infrastructure Task Force (NWCITF) report, and the recommendations of other advisory bodies including the Defense Science Board. The major challenge is to find a transition path to the future that is both affordable and feasible while continuing to meet the near-term needs of the current stockpile. We will report in more detail on this effort later this spring.
- Transformation does not apply only to people, scientific tools and facilities. Today's business practices—for example, the paper work and procedures by which we authorize potentially hazardous activities at our labs and plants—are unwieldy and have had a major impact on our ability to carry out certain programmatic work at our sites. We must improve the way we manage risk including rigorous analysis of the costs and benefits associated with the methods and means of ensuring safe and secure nuclear operations.

Other accomplishments that will facilitate near term support to the nuclear stockpile include:

- We have restored tritium production with the irradiation of special fuel rods in a Tennessee Valley Authority (TVA) reactor, and anticipate that we will have a tritium extraction facility online in fiscal year 2007 in time to meet the tritium needs of our stockpile.
- We have restored uranium purification capabilities at our Y–12 plant, and are modernizing other capabilities, so that we can meet demanding schedules of warhead refurbishment programs, including, significantly, the B61 and W76 life extension programs which are scheduled to begin production in 2006 and 2007 respectively.
- We are on track to deliver a certified W88 pit to the stockpile in 2007. We were disappointed, however, that Congress declined to fund planning for a modern pit production facility in fiscal year 2006. As a result, we did not seek funding for this facility in fiscal year 2007, although we remain convinced that increased pit production capacity is essential to our long-term evolution to a more responsive nuclear weapons infrastructure. In coming months, we will work with Congress to identify an agreed approach to fund long-term pit production capacity. In the meantime, we plan to increase the Los Alamos pit manufacturing capacity to 30–40 pits per year by the end of fiscal year 2012. This production rate, however, will be insufficient to meet our assessed long-term pit production needs.
- We have taken steps to recruit and retain a strong workforce with the right skills for the focused mission.
- We are devoting substantial resources to restoring facilities that have suffered from years of deferred maintenance.

Nuclear Weapons Program Budget Breakdown

The fiscal year 2007 request supports the requirements of the Stockpile Stewardship Program consistent with the administration's NPR and the revised stockpile plan submitted to Congress in June 2004. Our request places a high priority on accomplishing the near-term workload and supporting technologies for the stockpile

along with the long-term science and technology investments to ensure the capability and capacity to support ongoing missions.

Over $1.4 billion in fiscal year 2007 is requested for the Directed Stockpile Work that will ensure that the Nation's nuclear weapons stockpile is safe, secure and reliable.

The NNSA is accelerating efforts for warhead dismantlement and consolidation of special nuclear materials across the nuclear weapons complex. Both of these efforts will contribute to increasing the overall security at NNSA sites.

In our fiscal year 2007 budget, $1.9 billion is requested for campaigns, which focus on scientific and technical efforts and capabilities essential for assessment, certification, maintenance, and life extension of the stockpile and have allowed NNSA to move to "science-based" stewardship.

Specifically, $424.7 million for the Science and Engineering Campaigns provides the basic scientific understanding and the technologies required to support the workload and the completion of new scientific and experimental facilities. We will maintain the ability to conduct underground nuclear tests at the Nevada Test Site.

The Readiness Campaign, with a request of $206.0 million, develops and delivers design-to-manufacture capabilities to meet the evolving and urgent needs of the stockpile and support the transformation of the nuclear weapons complex into an agile and more responsive enterprise.

With a request of $618.0 million for the Advanced Simulation and Computing Campaign, we will be able to remain on schedule to develop computational tools and technologies necessary to support continued assessment and certification of the refurbished weapons, aging weapons components, and a Reliable Replacement Warhead program without underground nuclear tests. As we enhance our computational tools to link the historical test base of more than 1,000 nuclear tests to computer simulations, we can continue to assess whether the stockpile is safe, secure, reliable and performs as required while reducing the need for underground nuclear testing.

The $451.2 million request for the Inertial Confinement Fusion Ignition and High Yield Campaign is focused on the execution of the first ignition experiment at the National Ignition Facility (NIF) in 2010 and provides facilities and capabilities for high-energy-density physics experiments in support of the Stockpile Stewardship Program. To achieve the ignition milestone, $254.9 million will support construction of NIF (includes the NIF Demonstration Program) and $168.7 million will support the National Ignition Campaign. The ability of NIF to assess the thermonuclear burn regime in nuclear weapons via ignition experiments is of particular importance. NIF is the only facility capable of probing in the laboratory the extreme conditions of density and temperature found in exploding nuclear weapons.

The Pit Manufacturing and Certification Campaign request of $237.6 million continues work to manufacture and certify the W88 pit in 2007 and to address issues associated with manufacturing future pit types including the Reliable Replacement Warhead and increasing pit production capacity at Los Alamos National Laboratory.

In fiscal year 2007 we are requesting $2 billion to provide for the maintenance and operation of existing facilities, remediation and disposition of excess facilities, and construction of new facilities to enable NNSA to move toward a more supportable and responsive infrastructure. Of this amount, $291 million is for Facilities and Infrastructure Recapitalization, $1.4 billion is for Readiness in Technical Base and Facilities (RTBF) Operations and Maintenance, and $281 million is for RTBF Construction.

The Secure Transportation Asset, with a request of $209.3 million, safely and securely transports nuclear weapons, weapons components, and special nuclear materials.

Security and the Design Basis Threat

Securing our people, our nuclear weapons and weapons-usable materials, our information, and our infrastructure from harm, theft or compromise is my highest priority. The job has become more difficult and costly as a result of two factors: the increased post-September 11 threat to nuclear warheads and associated fissile materials coupled with the primacy of "denying access" to these key assets—a much more rigorous security standard than establishing "containment" of the asset. The Department will meet the requirements of the 2003 Design Basis Threat (DBT) by the end of this fiscal year. NNSA's budget request of $665.7 million for security will ensure continued implementation of these DBT requirements and position the Department to respond to emerging 2005 DBT requirements. The current DBT, approved in November 2005, revised the high-level security requirements from which site-specific implementation plans are being finalized. Funds in fiscal year 2007 will be used, among other things, to upgrade protective forces weapons, training and equipment; harden storage structures; improve earlier detection and assessment of intrusion;

consolidate nuclear material; and install additional delay mechanisms and barriers around critical facilities in order to protect them from evolving threats. Funding for NNSA security programs has increased by almost 400 percent during this administration, which is a strong indicator of the priority Congress and the administration place on our security mission.

NONPROLIFERATION AND THREAT REDUCTION PROGRAMS

Let me now turn to our nuclear non-proliferation and threat reduction programs. Acquisition of nuclear weapons, Weapons of Mass Destruction (WMD) capabilities, technologies, and expertise by rogue states or terrorists pose a grave threat to the United States and international security. Our nonproliferation and threat reduction programs designed to combat this threat, implemented by the NNSA, are structured around a comprehensive and multi-layered approach. The administration's request of $1.726 billion to support NNSA activities to reduce the global weapons of mass destruction proliferation threat represents a 6.9 percent increase over the budget for comparable fiscal year 2006 activities.

This increase demonstrates the President's commitment to prevent, contain, and roll back the proliferation of nuclear weapons-usable materials, technology, and know-how. The Department works with more than 70 countries to secure dangerous nuclear and radioactive materials, halt the production of new fissile material, detect the illegal trafficking or diversion of nuclear material, and ultimately dispose of surplus weapons-usable materials. We are also working with multilateral organizations such as the International Atomic Energy Agency (IAEA) and the Nuclear Suppliers Group (NSG) to further strengthen nuclear safeguards and improve the nuclear export control regulatory infrastructure in other countries. This multi-layered approach is intended to identify and address potential vulnerabilities within the nonproliferation regime, reduce the incentive for terrorists and rogue states to obtain WMD, and limit terrorists' access to deadly weapons and materials. The following is a status update on a number of the Department's key nonproliferation programs.

Plutonium Disposition

The administration's fiscal year 2007 Fissile Material Disposition budget request is $638 million. $551 million of this total will be allocated toward disposing of surplus U.S. and Russian plutonium, and $87 million will be allocated toward the disposition of surplus U.S. highly enriched uranium. The plutonium disposition program, the Department's largest nonproliferation program, plans to dispose of 68 metric tons (MT) of surplus Russian and U.S. weapons-grade plutonium by fabricating it into mixed oxide (MOX) fuel for use in civilian nuclear power-generating reactors. DOE has made significant progress in implementing the plutonium disposition program in the past year. The U.S. and Russia successfully completed negotiations of a liability protocol for the program, and senior Russian government officials have assured the United States that this protocol will be signed in the near future. DOE has been also been working to validate the U.S. MOX project cost and schedule baseline as part of our project management process, and we will have a validated baseline in place before construction begins. DOE received authorization to begin construction of the MOX facility from the Nuclear Regulatory Commission, began site preparation work for the MOX facility at the Savannah River Site, and implemented a number of improvements to strengthen the management of the MOX project. Current plans call for construction of the U.S. MOX facility to start in 2006, with operations to start in 2015. The administration's budget request supports continuing this work in fiscal year 2007, which will be a peak construction year. Russia has also made progress by beginning site preparation activities for its MOX facility. Now that the liability issue is nearing resolution, high-level U.S.-Russian discussions are taking place to confirm the technical and financial details for the Russian program.

Global Threat Reduction Initiative (GTRI)

The GTRI represents the Department's latest effort to identify, secure, recover, and/or facilitate the disposition of vulnerable nuclear and radioactive materials worldwide that pose a threat to the United States and the international community. Since the creation of GTRI in May 2004, there have been a number of successes. Under our radiological threat reduction program, we have completed security upgrades at more than 340 facilities around the world. As a result of the agreement reached in Bratislava between Presidents Bush and Putin on enhanced nuclear security cooperation, we have established a prioritized schedule for the repatriation of U.S.-origin and Russian-origin research reactor nuclear fuel located in third countries. As part of our nuclear materials threat reduction efforts under GTRI, we conducted four successful shipments in 2005 to repatriate Russian-origin highly en-

riched uranium (HEU) from the Czech Republic (two shipments), Latvia, and Uzbekistan, in addition to several successful shipments to repatriate U.S.-origin spent nuclear fuel from Japan, the Netherlands, Sweden, Greece, and Austria. In fiscal year 2006, GTRI converted research reactors in the Netherlands, Libya, and the Czech Republic from the use of HEU to the use of low-enriched uranium (LEU) fuel, and also in fiscal year 2006 completed physical security upgrades at priority sites housing dangerous materials in Ukraine and Kazakhstan. The administration's fiscal year 2007 budget request of $107 million for GTRI supports major objectives, examples including; the acceleration of the recovery and/or disposal of eligible Russian origin materials in the Russian Research Reactor Fuel Return Program and the conversion of domestic research reactors under the Reduced Enrichment for Research and Test Reactors Program, with a total of seven conversions in fiscal year 2007.

Materials Protection, Control, and Accounting (MPC&A)

For more than a decade, the United States has worked cooperatively with the Russian Federation and other former Soviet republics to secure nuclear weapons and weapons material that may be at risk of theft or diversion. As a result of the agreement reached at Bratislava, we agreed to accelerate security upgrades at Russian sites holding weapons-usable materials and warheads. The Bratislava agreement provided for a comprehensive joint action plan for cooperation on security upgrades of Russian nuclear facilities at Rosatom and Ministry of Defense sites and cooperation in the areas of nuclear regulatory development, sustainability, secure transportation, MPC&A expertise training, and protective force equipment. A number of milestones for this cooperative program are on the horizon, and the fiscal year 2007 budget ensures that sufficient funding will be available to meet these milestones. Security upgrades for Russian Rosatom facilities will be completed by the end of 2008—2 years ahead of schedule. Cooperation with the nuclear warhead storage sites of the Russian Strategic Rocket Forces and the Russian Ministry of Defense sites will also be completed by the end of 2008. By the end of fiscal year 2007, we will have provided security upgrades at more than 80 percent of all the nuclear sites in Russia at which we now plan cooperative work.

The administration's budget request will enable us to expand and accelerate the deployment of radiation detection systems at key transit points within Russia and accelerate installations of such equipment in five other priority countries to prevent attempts to smuggle nuclear or radiological materials across state borders. Through our Megaports initiative, we are deploying radiation detection capabilities at three additional major seaports in fiscal year 2007 to pre-screen cargo containers destined for the United States for nuclear and radiological materials, thereby increasing the number of completed ports to 13. The International Material Protection and Cooperation fiscal year 2007 budget request of $413.2 million supports meeting all of the accelerated completion dates and objectives.

Elimination of Weapons Grade Plutonium Production (EWGPP)

The EWGPP program is working toward complete shut down of the three remaining plutonium production reactors in Russia at Seversk and Zheleznogorsk. These reactors currently produce enough material for several nuclear weapons per week. The overall EWGPP plan is to permanently shutdown and replace the heat and electricity these reactors supply to local communities with energy generated by fossil fuel plants by December 2008 in Seversk and December 2010 in Zheleznogorsk. The first validated estimate of total program cost—$1.2 billion—was determined in January 2004. After extensive negotiations with Russia, we achieved $200 million in cost savings. Also, pursuant to the authority provided in the Ronald W. Reagan Defense Authorization Act for Fiscal Year 2005 to accept international funding, we have received pledges of $30 million from six Global Partnership participants. Construction of the fossil fuel plant at Seversk started in late 2004, and the start of construction of the fossil fuel plant at Zheleznogorsk was recently approved. The fiscal year 2007 budget request of $207 million keeps both construction projects on schedule.

Nonproliferation and Verification Research and Development

This effort includes a number of programs totaling a budget request of $269 million in fiscal year 2007 that make unique contributions to national security by researching the technological advancements necessary to detect and prevent the illicit diversion of nuclear materials. The Proliferation Detection program advances basic and applied technologies for the nonproliferation community with dual-use benefit to national counterproliferation and counterterrorism missions. Specifically, this program develops the tools, technologies, techniques, and expertise for the identification, location, and analysis of the facilities, materials, and processes of

undeclared and proliferant WMD programs. The Proliferation Detection program conducts fundamental research in fields such as radiation detection, providing support to the Department of Homeland Security (DHS) and the Intelligence Community. The Nuclear Explosion Monitoring program builds the Nation's operational sensors that monitor the entire planet from space to detect and report surface, atmospheric, or space nuclear detonations. This program also produces and updates the regional geophysical datasets enabling operation of the Nation's ground based seismic monitoring networks to detect and report underground detonations.

Nonproliferation and International Security

Through this program the Department provides technical and policy expertise in support of U.S. efforts to strengthen international nonproliferation institutions and arrangements, foster implementation of nonproliferation requirements through engagement with foreign partners, and provide for transparent and verifiable nuclear reductions. Key policy challenges that will be addressed in fiscal year 2007 include efforts to strengthen the IAEA safeguards system, block and reverse proliferation in Iran and North Korea, and augment cooperation with China, India, and Russia. The fiscal year 2007 budget request for Nonproliferation and International Security is $127.4 million.

We need to remain cognizant of the linkage between a future that encourages broader use of nuclear energy in meeting rising energy demands around the world, and one that places a premium on nonproliferation and counterterrorism performance. No one nation can address these future challenges alone. No one nation has a monopoly on nuclear technology or on the ideas or proposals that will mitigate the threats posed by proliferation and terrorism. We will therefore continue to welcome the contributions and proactive cooperation of others who share our vision of a better future, one that enjoys the benefits of nuclear energy and one that is better protected from the dangers of theft or diversion of sensitive nuclear materials and technologies.

NAVAL REACTORS PROGRAM

Also contributing to the Department's national security mission is the Department's Naval Reactors program, whose mission is to provide the U.S. Navy with safe, militarily effective nuclear propulsion plants and ensure their continued safe, reliable and long-lived operation. Nuclear propulsion plays an essential role in ensuring the "forward presence" of the Navy around world to respond anywhere America's interests are threatened. The program has a broad mandate, maintaining responsibility for nuclear propulsion from cradle to grave. Over 40 percent of the Navy's major combatants are nuclear-powered, including aircraft carriers, attack submarines, and strategic submarines, which provide the Nation's most survivable deterrent. The administration is requesting $795 million to support the program's ongoing work on power plant technology, reactor safety, materials development and servicing and evaluation.

ENVIRONMENTAL MANAGEMENT (EM)

The Department's mission of remedying the environmental legacy of the Cold War is inherently challenging and innately beneficial to our country. The Office of EM is striving to regain momentum in the cleanup program, after encountering significant project management, regulatory, and legal challenges.

The program has made significant progress in the last 4 years in shifting focus from risk management to risk reduction and cleanup completion, an achievement not possible without the strong leadership and support of this committee. In fact, this last year we physically completed the cleanup of the Rocky Flats site in Colorado, produced 250 canisters of vitrified high level waste in South Carolina, and began the decontamination and decommissioning of the last remaining centrifuge facilities in Tennessee. This year alone, we expect to complete cleanup at up to nine sites. But over the last year, despite our commitment, EM performance has met with long-term mixed results for longer term cleanup.

Overly optimistic assumptions and unrealized technology advancements have led us to the slower progress we are experiencing. One of the most visible projects on which our progress has slowed is the Waste Treatment Plant at Hanford. The Waste Treatment Plant project is the largest, most complex construction project in the Nation and has encountered design and construction setbacks. We remain committed to fix the problems correctly, complete the project, and begin operations to treat the radioactive waste at the site. Other examples of slowing cleanup progress include delays in start of construction in South Carolina and delays in sludge cleanup from spent nuclear fuel basins in Washington.

We have not lost sight of the mission, nor the will to complete the EM mission in a manner that is protective of the environment and public while demonstrating fiscal responsibility. The fiscal year 2007 budget request reflects a balance of risk reduction and cleanup completion with other Departmental and national priorities. Overall, our request puts a high priority on tank waste treatment and radioactive waste disposition.

The fiscal year 2007 EM budget request is $5,828 million, a decrease of $762 million from the fiscal year 2006 appropriation, an indicator of the success we have demonstrated with the completion and closure of Rocky Flats in Colorado and several other sites.

At the Savannah River Site, this request will support ongoing stabilization of the site's stored nuclear materials, including funding for a container surveillance capability and consolidating the site's own plutonium into a single location. The request also provides for management and disposition of tank waste, including funding for design and construction of the Salt Waste Processing Facility.

This budget request will make possible a ramp up in construction of key components of the Waste Treatment Plant, and continues safe management of the underground tanks and waste retrievals from single shell tanks at Hanford. This request increases funding for the Advanced Mixed Waste Treatment Project in Idaho to support shipments of transuranic waste to the Waste Isolation Pilot Plant and the construction of the Sodium Bearing Waste Facility to treat tank waste. This request reflects an increase to support the critical path to closure for the East Tennessee Technology Park in Oak Ridge.

In addition, the request supports ongoing cleanup at NNSA sites like Nevada Test Site, Pantex Plant, and Lawrence Livermore-Site 300. It also supports transuranic waste disposal operations and complex-wide integration, including the first full year of remote-handled waste disposal at the Waste Isolation Pilot Plant in New Mexico.

This budget request also will continue to focus on our risk reduction and cleanup completion mission, with our goal to complete cleanup of eight more sites by 2009.

LEGACY MANAGEMENT

The Legacy Management (LM) program was established to provide a long term solution to the environmental legacy created by the Cold War. As the Office of EM completes its cleanup activities, certain aspects of the Department's responsibilities at those sites remain. These include remedy surveillance and maintenance, long-term groundwater pump and treat operations, records management, and the oversight of pensions and post-retirement benefits for contractor personnel. A long-term commitment to manage the resources and activities beyond the completion of active remediation is required. The activities of the LM program ensure that these Departmental responsibilities are addressed and EM is able to concentrate its efforts on cleanup and risk reduction.

Over the past year, LM and EM have been working in close cooperation to ensure the timely and effective transition of the three major EM closure sites: Rocky Flats, Colorado; Mound, Ohio; and Fernald, Ohio. EM and LM have established transition teams for each site consisting of subject-matter experts from different fields, such as environmental and regulatory compliance, community outreach, records management, and worker benefits. The goal of the teams is to have a seamless transition of sites from EM to LM.

Legacy Management's fiscal year 2007 budget request is just over $200 million. In fiscal year 2007, EM will transfer post closure management responsibility, work scope and budget target to LM for Rocky Flats, Fernald, and the Nevada Offsites. Due to additional cleanup of Operable Unit-1 at the Mound site, transfer of Mound from EM to LM will occur at a later date.

The significant increase in the LM budget in fiscal year 2007 is for pension contributions and the payment of post-retirement benefits for contractor retirees at Rocky Flats and Fernald. This request, previously included in the EM budget, constitutes just over $100 million of LM's total budget request. LM has also included $10 million associated with the ongoing management and administration of those pension and post-retirement benefits.

Long-term surveillance and maintenance will ensure protection of human health and the environment at legacy management sites. The fiscal year 2007 request for the long term surveillance and maintenance program is $45 million. The funding requested for fiscal year 2007 will allow LM to monitor and conduct long-term treatment of 94 sites in accordance with legal, contractual, and regulatory agreements. The $18 million increase reflects the added responsibility of the sites transferred from EM to LM—Rocky Flats, Fernald and the Nevada Offsites, as well as additional sites transferred to LM from private uranium mining and milling operations

under the Uranium Mill Tailings Radiation Control Act and sites from the U.S. Army Corps of Engineers associated with the Formerly Utilized Sites Remedial Action Program.

Finally, in an effort to communicate the significant costs associated with managing records and information associated with these sites, LM has chosen to separate the roughly $9 million for this purpose from the long-term surveillance and maintenance cost to make it more visible in this year's budget.

ENVIRONMENT, SAFETY, AND HEALTH

The Office of Environment, Safety, and Health (EH) is committed to protecting the safety and health of DOE workers, the public, and the environment by integrating safety and health awareness into all departmental activities. The office is also responsible for Price-Anderson enforcement and funding radiation health studies.

The budget request for fiscal year 2007 is $109.9 million, approximately 6 percent above the fiscal year 2006 appropriation. The budget is broken into Other Defense Program Activities ($80.8 million) and Energy Supply and Conservation Activities ($29.1 million).

In fiscal year 2007, EH will continue its commitment to protecting our environment by: continuing to ensure DOE compliance with the National Environmental Policy Act; guide and assist DOE programs and sites as they shift from development and documentation to implementation of the Environmental Management Systems; assist DOE sites in implementing the Department's Environmental Compliance Management Improvement Plan; and, continuing to guide and assist the implementation of DOE's requirements for public and environmental radiation protection.

The Department, and I personally, consider protecting worker safety to be of paramount importance.

On February 2, 2006, I announced a new safety rule which will require all nonnuclear DOE contractors to comply with applicable OSHA safety and health standards. Also, as applicable on a site-by-site basis, contractors will also be responsible for meeting additional health and safety consensus standards such as the American Conference of Governmental Industrial Hygienists; the National Fire Protection Association; the American National Standards Institute; and, the American Society for Mechanical Engineers. The new rule also establishes investigative procedures and fines for contractors who fail to meet safety and health requirements, with a potential fine of up to $70,000 per violation, per day. DOE nuclear workers are already protected under the Atomic Energy Act, which allows the Department to take enforcement actions against contractors who violate nuclear safety rules.

Environment, Safety, and Health Programs in fiscal year 2007 will continue to promote the health and safety of DOE's workforce and the communities surrounding DOE sites. The Former Worker Medical Surveillance Program provides medical evaluations to former DOE workers who may be subject to health risks as a result of exposures during their work at DOE. EH will also continue its ongoing health activities such as: the Radiation Effects Research Foundation's program, which conducts epidemiologic studies and medical surveillance of the survivors of the atomic bombings in Hiroshima and Nagasaki; and, provide special medical care for a small cohort of radiation exposed individuals in the Marshall Islands.

ADVANCING AMERICA'S ECONOMIC AND ENERGY SECURITY

Finally, I would also like to mention some exciting new Presidential initiatives announced in the State of the Union that involve the rest of the Department of Energy. The Department's budget for fiscal year 2007 follows the blueprint laid out by the President's new initiatives, the American Competitiveness Initiative and the Advanced Energy Initiative. The $23.5 billion budget request seeks to address America's short-term energy needs while positioning our country for the future. The budget request makes bold investments to improve America's energy security while protecting our environment, puts policies in place that foster continued economic growth, spurs scientific innovation and discovery, and addresses and reduces the threat of nuclear proliferation.

The Department's fiscal year 2007 budget features $250 million to begin investments in the Global Nuclear Energy Partnership (GNEP). GNEP is a comprehensive strategy to enable an expansion of nuclear power in the U.S. and around the world, to promote non-proliferation goals; and to help resolve nuclear waste disposal issues.

The Energy Information Administration projects that over the next 25 years, demand for electricity in the United States alone will grow by over 40 percent. Nuclear power is an abundant, safe, reliable, and emissions-free way to help meet this growing demand for energy throughout the world. As part of the GNEP strategy, the

United States will work with key international partners to develop and demonstrate new proliferation resistant technologies to recycle spent nuclear fuel to reduce waste. To help bring safe, clean nuclear power to countries around the world, the international GNEP partners will also develop a fuel services program to supply developing nations with reliable access to nuclear fuel in exchange for their commitment to forgo developing enrichment and recycling technologies.

Thank you. This concludes my formal statement. I would be pleased to answer any questions you may have at this time.

Chairman WARNER. Thank you, Mr. Secretary. We'll proceed with a 6-minute round for the members present and I'm going to yield my position to the chairman of the subcommittee.

Senator SESSIONS. Thank you, Mr. Chairman. You're very gracious. Mr. Secretary, I have great admiration for you, and I've enjoyed talking with you, and I know you've had now a year under your belt and are beginning to grasp some of the magnitude of the programs that we are dealing with. You also are charged with a lot of leadership responsibilities in reducing our addiction to foreign oil, to use the President's word, and I appreciate that.

But, I serve as chairman of the Strategic Forces Subcommittee, which amazingly has jurisdiction over 60 percent of the entire Department of Energy budget. This full Armed Services Committee has jurisdiction over 66 percent of the DOE budget.

Now, I've started to take a very serious look at the DOE programs authorized by the committee. The largest of these programs clearly are the weapons activities and the environmental management programs. In the Strategic Forces Subcommittee this year, Senator Bill Nelson, my ranking member, and I will be holding a hearing on March 7, where we will hear very detailed testimony from two DOE program officials about the fiscal year 2007 budget in these areas: weapons activities and environmental management.

Today, rather than address those details, I'd like to describe in broad terms my concerns about these programs and the DOE budget overall.

In my view, the amount of funding provided by Congress for DOE "atomic energy defense activities," that's what the budget account is called, is very large. Last year, Congress provided $16.2 billion for DOE defense activities. For fiscal year 2007, DOE has requested $15.8 billion. That is a small reduction. The $16 billion per year this committee authorizes for the DOE, though, represents a very large investment.

I've asked my staff to find the total budget for the last 20 years that has been spent on DOE atomic energy defense activities. The number is approximately $230 billion. We are in a situation, Mr. Secretary, where we have not added new warheads to the nuclear stockpile in over a decade.

We are not producing new warheads. We do not have the capability to manufacture many of the essential components of warheads such as plutonium pits. We have a decaying production complex, much of which has already been closed down, the rest of which is so old and contaminated that workers have to wear anti-contamination suits to go in them for routine matters.

We have treaties which require to us dismantle warheads at a faster and faster rate, yet we do not have enough space at facilities that we have left to do the work or to store the dismantled parts, nuclear and non-nuclear.

We have national laboratories that do a lot of gee-whiz science, but I'm not convinced this is all related to national security defense issues. But, it is paid for out of defense accounts. We have an environmental management (EM) program that doesn't seem to be managing very well, frankly.

We have projects such as the waste treatment project at Hanford, and the years when this project was running, it had a cost overrun of approximately $5 billion to $6 billion. That's the overrun. This project had essentially zero oversight from DOE headquarters personnel. That was before your time. In fact, DOE personnel apparently routinely accepted weekly status reports from the contractor claiming the contractor was perfectly on target for schedule and cost, something we now know to be untrue. DOE environmental cleanup budgets and commitments appear to be driven oftentimes by the most vocal outside groups. They seem to be setting standards and directing the investment.

Compliance agreements, many of which were made years ago, may have seemed like a good idea at the time, but technology and reality tend to intervene over the years. It has not been, in my opinion, based on careful analysis of real environmental situations, which ones pose the greatest risk and how much cleanup could be on each side and what priority.

So, Mr. Secretary, I think your challenge is a pot of billions of dollars there. If we could save just a billion or so a year, that would be real helpful. My question is exactly: Are the American people getting their money's worth from these programs? Is it time for Congress to call for a review of the entire DOE expenditure for those programs for both efficiency and value to the Government?

Secretary BODMAN. Senator, you have just accurately described the challenges that I confronted when I arrived, as the chairman said, 1 year ago. I wouldn't say, sir, that I agree with every one of your specific comments, but your general comments I think are well taken. This Department has not been known for its managerial expertise in my view.

There were certainly lapses, the most noted of which you've already mentioned, namely the vitrification plant at Hanford where it was clear that there were problems with respect to the contractor and the kind of reporting that the contractor was doing. There were problems with respect to the Department and the way the Department was overseeing and providing guidance to the contractor. To answer your question directly, if I look backward and ask were the American taxpayers getting their money's worth in some of these programs? I would say no, sir. The American taxpayer was not.

My job, as I see it, is to rectify that situation, and I am in the midst of attempting to do that, and I have shut down the activities with respect to the two most important parts of the vitrification plant at Hanford. We have had a complete review. I have met three times with the chief executive of the contractor. We now have quarterly, personal, face-to-face meetings scheduled. The next one will be in April. I am very satisfied with the changes that we have made in the leadership of the environmental management activities at the Department to take a much more hands-on attitude, apparently.

I do not know what went on before. I can't comment on that, but apparently a much more hands-on attitude. I do believe we have the, if one had to make a judgment, do you retain the contract or do you try to find a new one, I have made the judgment that we should retain the contract. At least that's my preliminary judgment depending on their response. They seem to be responding very well. So I feel that we are well on our way to improving the situation. We have an estimate to complete this. You're quite right that it's $5 to $6 billion more. It was $5 billion plus before, it's $10.9 billion today as an estimate to complete, and I will tell you that I think there are reasons, specific reasons to believe that it may be higher than that.

This is a very significant source of environmental problems that's been inflicted on the environment in Hanford, in and around the river there, and I need to fix it. That's been the job I believe that I've been given by the President and by the Senate committee who confirmed me. I am comfortable that we are making progress. I am not comfortable that we are at this point in time on top of everything.

Senator SESSIONS. Thank you. I appreciate your bringing to bear all your vast managerial skills to bring these matters under control, and we'll be continuing to follow up in our subcommittee.

Secretary BODMAN. I'm sure you will, sir.

Chairman WARNER. Thank you very much, Senator.

Senator Levin.

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

Chairman WARNER. You're welcome again.

Senator LEVIN. Secretary Bodman, 5 years ago Howard Baker and Lloyd Cutler, serving on the task force on Russia, issued a report on the DOE's nonproliferation programs with Russia. One of the key findings of their report was the most urgent unmet national security threat to the United States today was the danger that weapons of mass destruction in Russia could be stolen and sold to terrorists or hostile nation states and used against American troops abroad or citizens at home.

Now here we are 5 years later. They recommended that we spend $3 billion each year to secure the Russian weapons grade materials. We are not spending anywhere near that. The DOE has increased its spending to broaden the scope of nonproliferation programs in the last 5 years, but not relative to that most significant challenge, which is the Russian nuclear material challenge.

I am wondering if you could give us your brief view on the state of the play of our program with Russia, is it just a financial limitation? Is that why we have not carried out the Baker-Cutler recommendation? Also, what is the G–8 doing to support its commitment to provide $10 billion over 10 years to address nonproliferation issues?

Secretary BODMAN. I'm not familiar specifically with the report to which you refer. I am, of course, familiar with our efforts with respect to Russia. We have a number of programs, and are doing everything that I could imagine that we should be doing to ameliorate the situation. I do not believe that we have any major problems with respect to the amount of funding that has been made

available. By and large, this Congress has been quite responsive to requests.

We do have a program that calls for the return of nuclear materials that have been shipped out of Russia to other countries and are now located in laboratories all over the world, to return those materials and replace them with low enriched uranium at the sites that are referred to. We have a similar program in the United States, and the idea is that we have sought to work with the Russians in parallel. The Russians, of course, are a sovereign nation, and we do not dictate to them what they do and what they do not do.

Senator LEVIN. Are we spending all the money that we really need to be spending to address that challenge?

Secretary BODMAN. Would I do it faster if I had the power to spend money? I probably would, but I'm not dealing with a country that I control. I'm dealing with a country that Mr. Putin has responsibility for.

Senator LEVIN. Is that where limits come from, or financial resources here at home?

Secretary BODMAN. I think it's much more, sir, in the responsiveness and receptivity in Russia. They have been responsive and they are, I don't want to say that they have not. They have been. But, it's measured and it takes time. Sir, even despite Senator Sessions' comments about how poorly we have operated, and I don't dispute his comments, the Russian bureaucracy makes us look pretty speedy. There are issues with respect to getting decisions made there.

But I feel that we are doing everything that I can see. These are the professional nonproliferation people.

I have intervened to come to know Mr. Khristenko, who is the new head, Mr. Putin's newly designated person to manage their nuclear affairs. I'll be meeting him personally next month. I have spoken with him on the phone and will talk to him hopefully tomorrow. That's also scheduled. So I think we are making progress, but we have, for example, had the so-called Mixed Oxide (MOX) program which I know Senator Lindsey Graham is very interested in. This is the use of plutonium in Russia, and the creation of a metal oxide fuel that can be used in commercial reactors both in the U.S. and in Russia. We have had 2 years delay on that while we have argued over the terms of liability, and we finally have resolved that matter last summer. We then negotiated final terms, and it is working its way.

As of now as I sit before you, Senator Levin, I do not have a signed piece of paper that says the Russians have signed off on this, but I'm hopeful. Our interlocutors on the other side indicate that everything is fine and that this is how long it takes to get things done.

Senator LEVIN. Mr. Secretary, you made reference to the Global Threat Reduction Initiative (GTRI) which is a series of programs that secure U.S.-origin highly enriched uranium fuel at research reactors around the world, take back the spent fuel and then try to convert that fuel into low enriched uranium.

Secretary BODMAN. That's both Russian and U.S. reactors. So it's both.

Senator LEVIN. Right. That's an excellent program, but the funding for that program is restricted quite severely. It's my understanding it is about $100 million in your request, and my question is this. Is that program injured by a lack of money specifically? Are there countries with research reactors that use U.S. origin highly enriched uranium fuel that want to return that fuel and close down and convert their reactors to low enriched uranium fuel that can't do so because of lack of funds in that program?

Secretary BODMAN. I do not know. I'd be happy to get you an answer to that specific question.

Senator LEVIN. Thank you. Senator Collins and I proposed in the energy bill passed by Congress last August a provision which was adopted to develop procedures for acquiring oil for the Strategic Petroleum Reserve in order to minimize the cost to the taxpayers of filling that reserve and minimizing the effect on oil prices.

Has the DOE implemented that provision?

Secretary BODMAN. I do not know the answer to that either.

Senator LEVIN. My time is up.

Secretary BODMAN. I would be happy to get that answer.

Senator LEVIN. I appreciate that, for the record.

[The information referred to follows:]

The Global Threat Reduction Initiative (GTRI) program is not injured by a lack of money. The administration's fiscal year 2007 request of $106.8 million fully funds the operational priorities of the GTRI. We have developed comprehensive metrics and a prioritization model that identifies the highest threats, considers our ability to address those threats over time, and, thus, allows us to align our priorities over the fiscal years accordingly. The administration's fiscal year 2007 budget request fully addresses those priorities.

The Reduced Enrichment for Research and Test Reactors (RERTR) program has sufficient funding to convert all targeted civil research reactors that use U.S. origin fuel that have also demonstrated a long-term mission and the ability to fund their day-to-day operating costs. The goal of the RERTR program is to support the conversion of civil research reactors to the use of low enriched uranium (LEU). The RERTR program works to ensure that conversion does not exact a financial or scientific penalty on a facility and uses its incentive funding to defray the additional cost that may result from conversion activities. The RERTR program funding is not used, however, to cover the cost of continued operation of the facility. In other words, the facility needs to demonstrate that it has a long term mission and it must be responsible for funding the day-to-day costs of operating the facility.

The Foreign Research Reactor (FRR) Spent Nuclear Fuel (SNF) Acceptance program works with the research reactor operator after its decision to shutdown or convert. A reactor is eligible to participate in the program on the condition that it agrees to convert its core and return the highly enriched uranium (HEU) SNF. The FRR SNF Acceptance program is considered an incentive for the RERTR program. In accordance with GTRI's prioritization models, the program has initiated communication with several research reactors to assist in reactor conversion and/or repatriation of HEU fuel, such as South Africa, Turkey, Austria, Jamaica, and Mexico.

The Notice of Proposed Rulemaking for acquisition of crude oil for the Strategic Petroleum Reserve will be published in the Federal Register on April 24, 2006. The procedures include provisions for acquisition through several means, including direct purchase, by transfer of royalty oil from the Department of the Interior, and by receipt of premium barrels resulting from deferral of scheduled deliveries of petroleum for the reserve.

In accordance with the direction provided in the Energy Policy Act of 2005, the Department developed the procedures with consideration to maximize the overall domestic supply of crude oil; avoid incurring excessive cost or appreciably affecting the price of petroleum products to consumers; minimize costs in acquiring the oil; protect national security; and avoid adversely affecting market forces and supply levels.

The public will have 30 days after publication to submit comments to the Department. After consideration of all of the comments received, the Department will publish a final rulemaking.

Chairman WARNER. Mr. Secretary, I would observe—I appreciate your acknowledgment of what you know and what you don't know. We are all in that boat. Sometimes some of us maybe lack the courage to admit it. I appreciate your wanting to look into it.

Senator LEVIN. Can I just comment on that? I agree with your comment, by the way, Mr. Chairman. The Secretary of Defense sometimes says, "You don't know what you don't know." You do know what you don't know, and we appreciate that.

Chairman WARNER. I want to return to Senator Levin's first question about the Cutler-Baker report. That has to be a priority that I urge you to put at the very, very top. Because in this exceedingly troubled world, and the desire for countries to access some knowledge and indeed the materials to foster their own goals to join the nuclear club or have possession of dirty bombs and the like, we really have to put a lot of emphasis on that. I'm going to ask you to go back and look at that Howard Baker report, study it and provide for the record your own assessment of the validity of the goals as they are compared to the facts facing us today. Maybe some of those goals would be changed. What the Department did in compliance thus far with the recommendations, and what in your judgment remains to be done to fulfill the objectives of that report.

I remember it quite well. It was an exceedingly valuable contribution at that time when the level of concern was great, but I'm personally speaking for myself and I think my colleagues know this. We think it's a high priority.

Secretary BODMAN. Sir, I did not want to suggest that this matter is not a high priority. It is a very high priority in the Department. It has been. It seems to me that the greatest threat to our country is the potential for proliferation of material and I assure you I believe and we allocate our time and effort——

Chairman WARNER. Your point is well taken.

Secretary BODMAN. I have not read that specific report and I would be happy to do that and respond to your request, sir.

Chairman WARNER. For the record we are making this morning.

Secretary BODMAN. Happy to do it.

[The information referred to follows:]

The 2001 Baker-Cutler Report reviewed the Department of Energy's nonproliferation programs in Russia and made a series of recommendations including acceleration of programs, increases in funding, improved access to sensitive Russian sites and the creation of a high-level position to oversee all nonproliferation programs government-wide.

Since the Report, the NNSA has made significant progress in securing sites with weapons usable material and nuclear warheads in Russia. The Bush-Putin Joint Statement on Nuclear Security at Bratislava in February 2005 elevated our dialogue to a national level and has moved our cooperation to one of a shared partnership. This Statement includes for the first time a comprehensive joint action plan for the cooperation on security upgrades of Russian nuclear facilities at Rosatom and Ministry of Defense sites and cooperation in the areas of nuclear regulatory development, sustainability, secure transportation, Materials Protection Control and Accounting (MPC&A) expertise training and protective force equipment.

As a result, cooperation on physical protection of sensitive nuclear sites in Russia was accelerated and all upgrades are expected to be completed by the end of 2008. Hence, we have increased efforts to transition sites at which upgrades are completed into a sustainability phase that will eventually be taken over completely by the Russian Federation. In support of the sustainability of physical protection upgrades, we are also working consistent with the Bratislava statement to promote a strong nu-

clear security culture in Russia and share best practices in handling nuclear materials.

Additionally, since the report, the DOE has requested substantial budget increases for DOE nonproliferation programs. The fiscal year 2001 appropriation was approximately $914 million and the request in the fiscal year 2007 President's budget request is $1.7 billion. However, we must keep in mind that just throwing money at the threat will not always be the solution. There is still no agreement to cooperate at the two serial production enterprises despite numerous overtures by the United States. The Russian side maintains that those sites are too sensitive to receive foreign assistance for security and that they themselves will address any security needs at those sites. However, we have made access gains at other sensitive facilities in the Rosatom weapons complex, and have had a major access breakthrough regarding warhead storage sites. Progress in this area has been facilitated by reciprocal visits by Russian officials to the most sensitive facilities in the DOE complex.

Furthermore, the dangers associated with nuclear proliferation are a constantly evolving and dynamic threat. We have remained vigilant in our efforts and continue to focus on material protection, control and accounting (or MPC&A) measures in order to adequately secure previously at risk material. Notably, since 2001, DOE has dramatically expanded its radiation detection program at land crossings in Russia and countries of the former Soviet Union and at major seaports.

Moreover, the Bush-Putin Joint Statement on Nuclear Security at Bratislava requires periodic reports to the Presidents on progress—providing sustained high level oversight of these important programs.

Chairman WARNER. The Stockpile Stewardship Program is subject to this committee. It's our job to monitor the safety and validity and potential that these weapons still maintain for fulfilling those strategic objectives that we have established. An awful lot of money is being put in that program. My understanding is it's up to $6 billion in the budget before you today.

In your assessment of the status of that program, do you feel that it is fully operational today? If not, when do you hope to have it fully operational? As our stockpile continues to age, and as noted by my colleague from Alabama, we are not acquiring new weapons, what recommendations do you have for the future?

Secretary BODMAN. First, I believe, sir, that the Stockpile Stewardship Program is satisfactorily managed today. This is a matter that I have spent a lot of my personal time investigating, and I've also had Dr. Orbach, who is the head of the Department of Energy's Science Office, who will manage the increase in scientific research that I mentioned, that I alluded to in my preliminary remarks.

Ray is a physicist, former chancellor of the University of California at Riverside, a great business professor. He too was an outsider, looked at the Stewardship Program, and has been involved with me side-by-side in looking at things like the National Ignition Program out at Livermore, where the commitment there, or the intention there is to, in a laboratory, create an environment that comes very close to simulating the innermost workings of a nuclear weapon at ignition.

The Stewardship Program has led this Department to create and then develop some of the most remarkable science that I have ever seen. I am trained in this field and perhaps you know, I'm a little out of date, as I would hasten to add. But, I do have training in engineering and chemistry and physics, but the work that has been done is quite exceptional. I have looked in detail at whether we should come as a part of this budget to fund the new ignition facility or continue funding that very elaborate process that goes on.

I believe we should continue it. Each laboratory, they divide up the weapons among them and they look very hard at issues that might be created by the aging of these materials. These are materials, forgive my lecturing you, which by their definition, they're radioactive, they change with time by definition, and therefore, understanding the metallurgy and the details of that is very important. They do that. They do it very well.

I have sat with them and probably spent 6 or 8 hours with all of the directors of those laboratories in preparation for receipt from them of letters which are scheduled to arrive within a month, certifying the efficacy of the stockpile. I am then required to cosign——

Chairman WARNER. I'm fully aware of all that. Your assessment is that program is fully up and running as designed?

Secretary BODMAN. Yes, sir.

Chairman WARNER. It is effectively giving you the data on which you as Secretary can make the reports to Congress and to the President and to the Nation regarding the safety of these weapons and the viabilities of these weapons to fulfill our future requirements?

Secretary BODMAN. Yes, sir.

Chairman WARNER. Thank you very much. Let's talk about the Reliable Replacement Warhead (RRW). You were doing a study on that, to analyze the approach to warhead design and maintenance which could potentially eliminate many of the most costly and hazardous materials that are used in the current stockpile. What role do you believe such a RRW might play in shaping the nuclear stockpile in the future? How can it complement the Stockpile Stewardship Program?

Secretary BODMAN. I think, sir, that the RRW is crucial to the Stewardship Program. Inherent in what I said before related to the efficacy or viability of the stockpile, the materials in there change with time. They were designed at a time when no one expected a cessation of testing, and therefore, they were not designed to be devices that would have a lot of tolerance and flexibility. They were designed such that they would be put into place and that they would work, which they did. They were tested. It wasn't a problem.

Here we have a situation where we are not allowed, as you are well aware, to test the devices. Therefore having a design that essentially would replicate the same military effect of the weapon on the one hand, yet create a device that would be much more easily certified by future secretaries of Energy and Defense, is the goal. There is a competition now related to a single weapon. I think it's the W76 where Lawrence Livermore and Los Alamos are developing competing approaches to the design of a RRW, a strategy if you will. That would be pulled together, a judgment will be made, and I'm sure will be made known to your committee as to what the results are. But that's ongoing, and will be forthcoming soon.

Chairman WARNER. Now, in your discourse with allies, namely France and Great Britain, and given that these programs are designed primarily for the safety of the storage of these weapons and the safety of the people of Los Alamos, and the safety of the community in proximity where these weapons are stored, is there any commonality, misfortune of a weapon to be somehow accidentally

in other nations that would impact our own census back here in the United States very heavily?

Secretary BODMAN. Yes, there is. There is definite exchange. There is a community of people who exist around the world.

Chairman WARNER. That's what I want to know.

Secretary BODMAN. I have met members of the British community who have come through. I'm certainly engaged with members of the Russian community who are engaged in these matters. I have not personally met with the French, but I do believe that there is a good exchange of information. It is not to say that there is a commonality.

These devices were developed in different times with different assumptions, but if you will, the nuclear culture that must exist in terms of the safety and the reliability of these devices, I think that is something that we believe exists in common and there certainly is, there are conversations and meetings that go on with the professionals who deal with these matters.

Chairman WARNER. That's reassuring. Senator Clinton.

Senator CLINTON. Thank you, Mr. Chairman. Welcome, Secretary Bodman, and thank you for the partnership and work that you've done with my office on a number of issues that are of importance to New York. I want to focus on the nuclear waste reprocessing proposal that is in your budget and that you mentioned at the end of your testimony, the Global Nuclear Energy Partnership (GNEP)?

Secretary BODMAN. That's correct. GNEP. That's our term of art.

Senator CLINTON. Now, this is a proposal to create a global system of nuclear reactors and reprocessing plants over the course of decades that could cost tens if not hundreds of billions of dollars. I believe that this may be a well intentioned proposal, but one which has serious problems, and I don't think it holds up to the claims that the administration has made about it.

If you look at the independent research that has been done about this issue, the 1996 National Academy of Sciences report, a 2003 Massachusetts Institute of Technology (MIT) study, and even by DOE research, we know that we are taking enormous risks going down this path. I want to ask you just a couple of discrete questions, and if we could get through them, I'd appreciate it.

One of the big concerns about reprocessing obviously is that it creates plutonium, which can be used, as we know, to make nuclear weapons. This is a problem associated with the reprocessing technologies used in France and elsewhere and it is a reason why we have consistently opposed reprocessing. The administration as I understand it is claiming that GNEP reprocessing technology would not separate the plutonium from other elements and therefore that the reprocessed material would be proliferation resistant. But that's only in comparison to other reprocessing methods. The MIT and other studies I cited concluded that conventional spent fuel is far more proliferation resistant, the reason being it's too radioactive to be handled safely by terrorists.

So my first question is this. Isn't it true that any reprocessed fuel would be more easily held by terrorists than conventional spent fuel, and therefore doesn't processing under GNEP increase proliferation risks rather than decrease them?

Secretary BODMAN. I don't know the answer to that specifically, Senator. I would say that the goal is to recover plutonium and other actinide materials that are in a form that would not be useful to terrorists. Whether they would be more useful than the spent fuel that we now have, I don't know. My best guess is there wouldn't be a great difference, but that's just a guess.

I would be happy to get you a more thoughtful answer on that than I am able to provide you real time. I just would tell you that we have run this in the batch, on a batch scale out at Argonne and, not on a batch scale, it's been a continuous reaction but it's been on a bench scale, small scale and it seems to work, so it's something that I believe is worthy of examination.

The problem with the spent fuel that we now have scattered all over this country, including your State, is that those materials, we have only extracted about 10 percent of the energy out of it, and the uranium has been transformed into plutonium and other actinide materials and this is merely an effort to recover that energy in a fashion that would be proliferation resistant. I can't comment more than that, but I'd be happy to give you an answer on it.

[The information referred to follows:]

It is important to emphasize that Uranium Extraction Plus (UREX+) is not an end in itself. It is part of a technology pathway proposed as part of the Global Nuclear Energy Partnership (GNEP) initiative to allow the plutonium and other transuranic elements from light water reactor spent fuel to be consumed in electricity producing advanced burner reactors. If this technology is successful, it will allow a complete transformation of the nuclear waste management challenge and of the international nuclear fuel cycle. In today's world, a static focus simply comparing spent fuel assemblies in storage in the U.S. and UREX+ from the point of view of technical "proliferation-resistance" is too narrow, particularly since several of the advanced nuclear economies are currently separating plutonium and separated civil stocks are nearly 250 metric tons today, a figure that is more than double the total amount of plutonium that was produced for the U.S. nuclear weapons program since 1944. Doing nothing is not a success strategy for nuclear energy growth to meet pressing domestic and international, energy, environmental, and nonproliferation challenges.

The real issue is whether we build domestic and international consensus on a sustainable approach whereby a few advanced fuel cycle nations build systems that can eliminate the plutonium and other transuranics separated from the world's vast and growing stocks of light water reactor spent fuel, recycle it back through advanced burner reactors, and fully consume it, both reducing proliferation risks by providing reliable fuel services and resolving the growing nuclear waste problem.

It provides the opportunity to reshape the management of spent fuel at home and abroad, in support of new arrangements that constrain proliferation. Proliferation and the buildup of plutonium in the world have not stopped over the past three decades. The GNEP initiative seeks to address the global buildup of civil plutonium stocks and looks to move beyond the spent fuel standard by defining a path to reduce and eliminate those materials.

Within the U.S., a UREX+ facility on U.S. Government property would be secured to meet all requirements posed by the material stream, up to the stored weapon standard if necessary. UREX+ would not separate or accumulate plutonium, and would be used only in proportion to making fuel for advanced burner reactors.

Senator CLINTON. Mr. Secretary, I really appreciate that, because I think our oversight duty requires us to really understand what it is the administration is proposing and attempting to accomplish.

I think we have two competing goals here. One is to find cost effective, safe ways to increase the role of nuclear power in our energy sector, and the other is to be as vigilant as possible against the potential spread of nuclear materiel and proliferation. I think we can.

Secretary BODMAN. I agree with both of those.

Senator CLINTON. I think we can pursue the first goal, which I'm open to, which I'm sure many people are because of our energy challenges, but at least in my review of the information available through the National Academy of Sciences, MIT, etc., DOE reprocessing as it is currently available seems to raise more dangers and questions than answers, and there are other ways to pursue the potential for greater use of nuclear power within our energy and electricity production.

Part of the reason I'm so concerned about this is that the West Valley Demonstration Project in Western New York is the site of the only U.S. commercial reprocessing effort to date, and the reprocessing occurred in the 1960s. The cleanup has lasted until now. We are still not done with that cleanup. It's cost billions. So the idea that somehow reprocessing is going to solve our waste problem at least insofar as I'm aware of it seems a little optimistic, to say the least.

I'm also concerned about costs. Discretionary spending dollars are very scarce and in the fiscal year 2007 budget the administration spends $250 million on GNEP. That's a project with uncertain and very distant benefits in my opinion.

I think the money would be much better spent in looking at some of the DOE research that is on the brink of being commercially applicable on conservation and alternative, smart energy production, because we are cutting a lot of DOE programs that we know have a direct positive impact on our energy usage. Based on DOE documents, the fiscal year 2008 and fiscal year 2009 costs would total $1.5 billion, forcing further cuts in other programs, and then it ramps up to $1.3 billion for a 10-year demonstration phase. I see no DOE estimates beyond that point, but the best studies that I can find suggest that the reprocessing and transmutation of existing fuel would cost upwards or $100 billion.

So there are a number of very serious issues around this proposal about GNEP and Mr. Chairman, I would like to submit a series of questions in writing, because I think this is going to be one of the areas we really need to zero in on as we move through the authorization process.

Chairman WARNER. I thank the Senator from New York. I concur in that, and all members will be given that option, given the brevity of this hearing, we are going to have to resort to submitting questions. The Chair has a number that I would submit.

Secretary BODMAN. May I comment to the Senator?

Chairman WARNER. Yes. Excuse me.

Secretary BODMAN. There may be some confusion over the French and other related processing producers, they do in fact separate plutonium. GNEP is intended not to separate plutonium, but to leave it with a mixture that is not, we believe, based on what I know of proliferation, it is intended to prevent and to intercept the potential for proliferation.

It will also require the development of a reactor to burn that separated plutonium and actinide material which is a so-called fast reactor, so you are quite right. This is a very expensive, long-term project. I think the number $100 billion would be higher than I would give. My number is sort of in the $20 or $40 billion range.

I don't know what it will be once we work it out, and the goal here is to spend money over the next 2 or 3 years such that we would be in a position to narrow those bands and to make a more intelligent and thoughtful analysis of this problem.

It is a way of trying to simultaneously do both things that you mentioned, expand the availability of nuclear energy on the one hand, and to beat terrorism and proliferation on the other hand. So we have the same objective. It's a question of how to go about it.

Senator CLINTON. Thank you.

Chairman WARNER. Senator Thune.

Senator THUNE. Thank you, Mr. Chairman. Secretary Bodman, welcome to the committee and thank you for your leadership on energy issues for this country. I appreciate the work that your Department has done supporting the use of renewable energies, which is something that's important in my area in the midwest.

I have a question for you and I'd ask that you be frank with your answer, and I preface it by saying that I am concerned by the recent pattern that Congress has taken to zero out funds for programs that are aimed at ensuring America keeps one of its greatest weapons, and that is deterrence. While we need a leader in international efforts to curb proliferation, I believe that we cannot, nor should we, make ourselves a target by compromising our nuclear arsenal in the process.

So my question is, do you believe Congress is asking you to maintain a high standard of performance, but not providing you with the resources that are necessary to complete your mission?

Secretary BODMAN. This is with respect to the stewardship of the current nuclear stockpile, sir?

Senator THUNE. Correct.

Secretary BODMAN. No. I believe that we have had adequate resources and that I can certify as to the efficacy or the viability of the stockpile with the resources that we now have. It would get increasingly difficult, Senator, to do that as time moves on because we have the inevitable change in the materials that are inside these weapons. I alluded to that before in answering the chairman's question, and it's a problem that I think we need to resolve by the RRW approach, that is to say, to redesign the weapons such that they accomplish the same military objective, but do so in a fashion that is much more reliable and manageable so that future Secretaries of Energy do not have to come and make the same statement 20 years from now to you or your successor.

Senator THUNE. Following up on the chairman's line of questioning with you, I think he exhausted or at least got on the record many of the questions that I had with respect to the age. But my understanding is that of course, we have not had new warheads in the arsenal built since 1989, which makes the current arsenal 15-plus years old. It's also my understanding that during the Cold War, nuclear weapons were retired and replaced every 15 to 20 years.

Given that average age, and I know you covered this to some degree already with the chairman, would you be comfortable going to war with our current nuclear stockpile in its current aging condition?

Secretary BODMAN. I would. I so attest, this will be my second time to do it, and this year, I will tell you that I do it with more knowledge than I had a year ago, and that's why I spent as much time with the laboratory directors from the three weapons laboratories. I have looked into this really up to the limit of my technical ability to evaluate what we know, how they go about their work, and I am very impressed. These are great Americans. The men who run these laboratories—men and women run the laboratories generally, but the three directors are men and they do a great job, and I've been very impressed with their work.

Chairman WARNER. If I can intervene for a minute, I must go to the floor to make arrangements for a very important vote of this committee to be taken at the conclusion of the full Senate vote with regard to our nominees that hopefully we can get to the floor tonight.

We are anxious to, if we can, conclude questions. I see colleagues on the right. I do not see further colleagues on the left side of the aisle. I'll entrust the hearing to you, if one of you will elect to be chairman and finish it up. Or you have the authority to keep this hearing open, recess it, and then we'll resume at the conclusion of the votes on the floor.

Senator TALENT. Mr. Chairman, I have an Energy Committee hearing ongoing and so in the interest of time, I'm willing to submit my questions for the record if that will help expedite the hearing.

Chairman WARNER. Mr. Graham.

Senator GRAHAM. Can I ask questions now? You want me to chair?

Chairman WARNER. Senator Thune has a minute or 2. Senator Graham, you have the chair and if you would be kind enough to make the decision whether to resume or not and to inform me. I'll come back right after the floor vote is concluded.

Senator GRAHAM [presiding]. I really love that responsibility. Thank you.

Senator THUNE. One final question. I do have a question I'd like to submit for the record that has to do with dealing with the question we all had discussed here at the committee on the floor, about whether or not we had adequate numbers of scientists and engineers to keep up with the demands that are out there. Whether or not that's a problem. But, one time question. That is——

Secretary BODMAN. It is a problem, Senator.

Senator THUNE. Good. I'd like to hear you elaborate on that, too. In the interest of time, I'll submit that one for the record.

The final question I have has to do with coal liquefaction which is something—we have abundant resources of coal, limited resources of oil. We import most of our oil and we fuel airplanes with that oil. There is increasing discussion that I've had with folks at the Department of Defense about the possibility of being able to convert to liquified coal as an energy source, and I'm just interested to hear what thoughts you might have, how familiar you are with efforts that are ongoing out there, whether you believe that is viable in the near term?

Secretary BODMAN. I think it's viable. I think the issue that the Department of Energy has had, we are in this area, we are re-

searching this, Senator, and we do work on processes and on approaches that are new and novel. This is pretty well known technology. It's been around for some time. You convert it into liquid, the coal. A company in South Africa has done this.

So the issue is, is there a role for things like loan guarantees and that sort of thing. There is a loan guarantee program that was created by the Energy Policy Act of 2005 that you all passed last year and the President signed into law. We are working hard to try to get that created. I will tell you that creating a loan guarantee program where you are guaranteeing the construction of a new chemically based process is a formidable task.

I used to do that for a living and it's very, very hard and how we create that inside the government, I simply am unsure of right now. But nevertheless, the program does exist and that might be an area that would be useful in stimulating further use of this technology. But, there is relatively little research. This is more a funding and a commercialization of already known technology.

Senator THUNE. I'd like to explore that with you some more but I'll yield back, Mr. Chairman.

Senator GRAHAM. Thank you, sir.

Senator Cornyn.

Senator CORNYN. Secretary Bodman, thank you for being here today and for your service to our Nation. I know several Senators have raised the issue of nonproliferation, and it remains a huge concern given the times we are living in and the threats that exist. Just for the information of my colleagues, we are going to be having a hearing before the Emerging Threats and Capabilities Subcommittee on that subject later this spring and hopefully shed some additional light on that critical subject. We all agree that our nuclear weapons complex is critical to our national defense and equally important is that we provide the resources to carry out this critical mission to be good stewards of the taxpayers' money.

I have a particular interest in this issue, not just because of my interest in the national security but also because in Amarillo, Texas, we have an important facility called Pantex that plays a key role in the Stockpile Stewardship Program. Although the good work they do there and at similar sites around the Nation is not often in the news, and that's fine with me, I want to pay special recognition to the good work that they do.

Specifically, I want to ask you, Mr. Secretary, last year I expressed my concerns to you regarding the condition that we found the nuclear weapons complex in 5 years ago, specifically the nuclear weapons production plants such as Pantex and the Y–12 National Security Complex in Tennessee.

Fortunately, we have seen increases in the budget over the last 5 years to fund repairs and demolition of old buildings, putting up new ones, replacing aging equipment. Unfortunately, we still see a downward trend in the Facility Infrastructure and Recapitalization Program (FIRP), the program that funds deferred maintenance and equipment replacement backlogs.

In fiscal year 2005, $313 million was appropriated, in 2006, it was $149 million, and in 2007, $291 million is requested, but fiscal year 2007 remains below 2005 levels. FIRP is supposed to sunset at the end of fiscal year 2011, and I'm concerned that the funding

levels this year and next would leave an excessive deferred maintenance backlog at the nuclear weapons plants after 2011, the very problem that FIRP was supposed to fix. So my question is simply this. Do you have sufficient funds for this program?

Secretary BODMAN. Senator, I can't answer that definitively at this point in time. I can tell you that based on my experience in other departments, there are issues with respect to maintaining the quality of the facility as a general matter throughout the government. For reasons that I think are fairly clear, it is much easier to generate support in Congress for the creation of a new program than to fix an old program, so it is a challenge.

Having said that, I have been to Oak Ridge and I have looked at what is going on there. I can speak about that. I will be going to Pantex soon, but I have not yet been to Pantex. At Oak Ridge, we have made a lot of progress, for example, in developing and funding a very expensive new facility for storing highly enriched uranium and materials, which is a very important part of what we are doing there.

But, there are other buildings that are at Oak Ridge that eventually will need to be destroyed and cleaned out, and that will take years. What we did in this country during the Second World War was to, and it affected not just Pantex, it affected not just Oak Ridge, not just Savannah River, all of the different storage facilities, storied in the scientific history sense, we unfortunately were hellbent on getting the material and the chemistry physics right, so that we could build a bomb and bring the war to an end, and there was less attention being paid to the matters that you describe.

So that we face this throughout this complex, and the goal here is to try to develop the report which we have been asked about already, the EM report that looks at the entire complex and makes recommendations to the Department as to how we can succeed. We need to make some decisions about that, what we are going to do about consolidation of spent nuclear materials, and then go forward to deal with some of these matters.

I can't give you a good answer. I will try to give you a better answer if I may.

[The information referred to follows:]

The administration's budget request and legislative proposal regarding the end date of the program would, if enacted, provide sufficient funding to complete this important mission.

The Facilities and Infrastructure Recapitalization Program's (FIRP) mission is to restore, rebuild, and revitalize the physical infrastructure of the nuclear weapons complex. The program's long term goals are: 1) eliminate $1.2 billion of the National Nuclear Security Administration's deferred maintenance backlog and, 2) eliminate three million gross square feet of excess facility space.

The impact of significant previous reductions to the out year funding profile of the FIRP in support of deficit reduction, as well as congressional reductions to the fiscal year 2006 request, have adversely impacted the program's ability to complete its mission. The Department currently has a legislative proposal before Congress to extend the program's 2011 end date by 2 years to enable the program to complete its mission.

Senator CORNYN. That would be very helpful. Thank you. Mr. Secretary, in 2004, the DOE launched an initiative to provide employment opportunities to Iraqi scientists, technicians, and engineers who may have been involved in WMD programs. This initia-

tive was intended to support reconstruction efforts in Iraq and keep WMDs from terrorists and proliferant states. Can you update the committee on this program?

Have Iraqi scientists been able to take advantage of this opportunity to take advantage of productive and nonresearch activities? Roughly how many Iraqi scientists do you believe might be eligible to participate in this program, and is the program of a sufficient size to meet this anticipated demand?

Secretary BODMAN. There are two areas, if I may, if I could broaden your question. There are two countries in which we have had these kinds of programs. One in Libya. The Libyan program has gone forward and effectively, I believe, has been able to redirect some of the technical people into matters related to the oil field and matters related to environmental stewardship. On matters related to a single nation, I don't have numbers.

Now, I don't know about Iraq. I'll try to get that. The whole Iraqi situation is one that has continued to be a challenge because of the insurgency, and getting people to work in more productive parts of the economy has been a challenge. So exactly what our contributions have been, I can talk to you about in general, it's the same general areas, environmental stewardship, these things that would be required in Iraq. They have major needs in the energy infrastructure. Just how many of them, what the numbers are, I don't know exactly.

Senator CORNYN. I would appreciate that. I understand you may not have all those facts and figures at the tip of your tongue, but I do think it's important that we get at least the facts before us, good, bad, or ugly. Then we could determine whether we are making progress or going backwards.

Secretary BODMAN. Senator, I would be happy to look into it.

[The information referred to follows:]

The projects Department of Energy (DOE) supports all contribute to civilian scientific capacity building. DOE has funded to date 6 civilian scientific projects that employ 29 scientists, including 12 with a WMD background. They include:

- water purification techniques,
- the development of new composite material for use in artificial limbs,
- improving the indigenous capability of the Iraqi pharmaceutical industry,
- the improvement of corrosion resistance in steel,
- an analysis of the level of radionuclides in water and sediments in the Tigris and Euphrates rivers, and
- measuring natural radiation levels in Western Iraq.

Material science and radiation safety projects specifically suit scientists with weapons of mass destruction skills and expertise in nuclear weapons, nuclear energy, operational engineering, and explosives. These areas for research were chosen specifically for that reason.

Senator GRAHAM. Mr. Secretary, I promise you we'll get you out of here just in a few minutes. The vote is on so I'll take about no more than 10 minutes and we'll let you get on your way. One, I'll make a comment about the President's budget about the idea of recycling or reprocessing spent nuclear fuel, which I think is visionary. I support the concept that the President and Department of Energy are advocating for us to look at the fuel cycle differently and try to adopt some reprocessing recycling technology, that's new and exciting, being employed at other places in the world. I want to be a partner with you there.

Secretary BODMAN. Great.

Senator GRAHAM. See if we can expand the nuclear footprint to make our country and the world less dependent on fossil fuels. Savannah River Site, you know how much of my time I've spent on it and I appreciate your time and attention. There are three programs, the MOX program when you talk about nonproliferation as you did with Senator Cornyn, we have had 34 metric tons of weapons grade plutonium, material that was in a nuclear weapon formerly, that will be converted into commercial grade fuel at Savannah River Site as well as in Russia. This is bomb material taken off the market to be used for peaceful purposes.

I was instrumental, along with Senator Thurmond, in getting the Governor of South Carolina to accept this plutonium. The MOX program, according to the Inspector General (IG) report, has been poorly handled financially. It was originally a billion dollar program, now it's $3.5 billion. It's years behind schedule. We have had liability and management problems with the Russians and the funding line, Mr. Secretary, it puts us behind, not forward. Honest assessment, what do you see happening with MOX here?

Secretary BODMAN. We are informed, Senator, by our interlocutors in Russia, that all is well with respect to getting the liability matter resolved. I hope that is true. My colleagues tell me that they believe it is true. I'm a little bit of a, probably like you——

Senator GRAHAM. We have heard this before, haven't we?

Secretary BODMAN. I understand. Until we get that done, I'm a little bit of a Doubting Thomas on it. We continue to work with them. I will be visiting with Mr. Khristenko next month when I travel to Moscow for the G–8 energy ministers gathering, and I will, this is, I have spoken with him by the telephone but I have never met him personally, so this will be my first meeting. He has just been in office a few months. So I will, I think, sir, I understand your conviction and your interest in this, and the vital nature of it.

Believe me, sir, it has my attention and it will be one of the first items I take up when I see him. It's just hard to gauge exactly what is going on in Russia, even when I talk to experts.

Senator GRAHAM. That's fair. My hope is that once we get the liability issue off the table that we can assure people in South Carolina that the money will be there and that we will get the program up and running.

Secretary BODMAN. We are committed to making it happen as soon as I'm satisfied that it's there. We have had a huge delay, huge run ups in steel, concrete, and other things. That's been significant, not in total, but as a reason for the uptick in costs. Each time we delay one of these projects, it's a billion-dollar decision.

Senator GRAHAM. I will talk to you about the IG report. We just need to make sure that people take this job more seriously. We have 5 more minutes and I'm going to let you go.

South Carolina entered into an agreement with DOE that was historic about tank cleanup. It was a very close vote in the Senate, 48–48. I thought we made a rational decision by coming up with a cleanup standard that made sense. Our tanks are leaking, tanks with high level waste, and the deal was we would leave a small footprint in the bottom that would take years to get out, saving $16 billion that we can spend elsewhere.

Now that program is behind. We are 14 months behind; the Salt Waste Processing Facility is behind. We have funding problems. Could you just give me a few minutes about where you see this going and how we can get back on track?

Secretary BODMAN. I think we are there. Section 3116 I think is the section of the law that you were instrumental in getting passed. I made the first determination of that within the next couple of months. We have a similar finding that will go forth with respect to the Idaho facility. There were suggestions that we should pay more attention to the potential seismic impact on the new plant that will be built and that decision was deemed to be correct by my colleagues and I subscribe to it. It will delay the startup of the facility by a year and a half and add a billion dollars or so to the costs, and I'm convinced that it's the right thing to do and we will proceed with it.

Senator GRAHAM. Thank you, Mr. Secretary. As you can tell, South Carolina is certainly a very friendly State when it comes to making good decisions for our national security and high level waste. I want it cleaned up. I don't want the tanks to leak, but I don't want to set standards that are unnecessary. Some things would be sent to Yucca Mountain that really don't need to go.

I have a problem at home. Everything is behind schedule and underfunded, and I appreciate any efforts that you can make and that you have made to get us back on track, because these are very important programs to the Nation at stake. Thank you for your service. You came up from the private sector. This is a tough job.

There are some exciting opportunities that present themselves, the reprocessing, recycling of spent fuel in abundance. This country is deciding, it's a good time to make rational decisions about energy and power. I want to congratulate you and the President in that regard. With that, the hearing will be adjourned and have a good day.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JOHN WARNER

RELIABLE REPLACEMENT WARHEAD

1. Senator WARNER. Secretary Bodman, at the direction of Congress, the Department of Energy (DOE) is currently conducting a joint feasibility study—with the Department of Defense (DOD)—on a Reliable Replacement Warhead (RRW). This study will analyze a technical approach to warhead design and maintenance which could potentially eliminate many of the most costly and hazardous materials which are used in the current nuclear stockpile. What role do you believe such a RRW might play in shaping the nuclear stockpile of the future?

Secretary BODMAN. We are exploring RRW options in order to ensure the long-term sustainability of the military capabilities provided by warheads in the existing stockpile. With the support of Congress, we are undertaking the RRW study to understand whether, if we relaxed warhead design constraints imposed on Cold War systems (e.g., high yield to weight ratios that have typically driven "tight" performance margins in nuclear design), we could provide replacements for an aging stockpile. These replacement weapons could be more easily manufactured, use more environmentally benign materials, and their safety and reliability could be assured with high confidence for the long-term without nuclear testing. We intend that such an effort will also result in future reduced infrastructure costs for supporting the stockpile. Indeed, we see the RRW program as the "enabler" for both long-term stockpile transformation and transformation to a responsive infrastructure to support national defense capabilities while adding no new military capabilities.

2. Senator WARNER. Secretary Bodman, how could it complement the Stockpile Stewardship Program (SSP)?

Secretary BODMAN. Our decision to embark on the path to a RRW is a reflection of the success of our ability to apply the scientific tools of the SSP. Using these tools will enable us to certify a RRW without underground testing. It will also demonstrate our ability to meet responsive infrastructure goals. We must make continued progress to fully utilize and further develop the modern scientific tools of the SSP; these tools serve as an enabler to guide the transition from a warhead refurbishment program to a warhead replacement program.

DEVELOPING A NEW WARHEAD WITHOUT UNDERGROUND TESTING

3. Senator WARNER. Secretary Bodman, the nuclear weapons experts at the national laboratories believe that it will be possible to design and field a new warhead—such as the RRW now under study—without needing to conduct an underground nuclear weapons test, such as was conducted in this country up until 1992. Can you explain, in broad terms, why these weapons scientists believe it is possible to field a warhead without underground testing?

Secretary BODMAN. The intent of the RRW program is to identify nuclear and non-nuclear replacement components that could be fielded without nuclear testing. Feasible RRW options will be based on our robust database of historical nuclear tests as well as from the experience of the remaining designers and engineers who have successfully fielded our current stockpile. The advances of our SSP enable us to better understand nuclear explosive performance through modeling, simulation, and experiments. That combination of historical test information, modern SSP tools (e.g., high energy density physics and the Advanced Simulation and Computing program), and experienced designers and engineers, along with relaxed military requirements for yield-to-weight ratios, will enable us to design and certify nuclear components with high confidence. As a result, fielding RRW systems will likely reduce the possibility that the U.S. will need to conduct a nuclear test for certification or to diagnose or remedy a stockpile reliability problem.

4. Senator WARNER. Secretary Bodman, are you personally confident it is possible to field a warhead without underground testing?

Secretary BODMAN. While I am not a nuclear weapon designer, I trust the judgment of expert nuclear weapon designers who inform me that it is possible to field a warhead without underground testing, especially if that warhead has ties to a previously tested configuration. Experts at our national laboratories believe that by relaxing some of the requirements imposed on Cold War systems (e.g., maximum yield in minimum size and weight) and employing the modern scientific tools developed in the SSP, there is a strong technical consensus that we can achieve this goal.

TEST READINESS FOR THE POTENTIAL RESUMPTION OF NUCLEAR TESTING

5. Senator WARNER. Secretary Bodman, the National Defense Authorization Act for Fiscal Year 2004 requires DOE to achieve a level of "test readiness" which would allow DOE to resume underground nuclear testing within 18 months of a Presidential decision to conduct a test. Under the law, DOE is to achieve this level of readiness no later than October 1, 2006. I understand, however, that Congress has not appropriated sufficient funds to allow DOE to meet this deadline. Is it correct that DOE forecasts it cannot meet the statutory deadline?

Secretary BODMAN. Due to a reduced appropriation in the 2006 Energy and Water Development Appropriations Act, we cannot meet the statutory deadline of 18-month test readiness by October 1, 2006. If Congress funds the President's request for test readiness in fiscal year 2007, the Department will maintain test readiness at 24 months. To maintain the 24-month readiness beyond fiscal year 2007, the current outyear profile will have to be revisited. At this time, there are no requirements for a nuclear test and there are no plans to do a test. The National Nuclear Security Administration (NNSA) maintains the capability to resume testing if that is needed in the future and is directed by the President.

6. Senator WARNER. Secretary Bodman, do you believe the current readiness of 24 months is sufficient readiness, within which to conduct a test if a problem with the stockpile is discovered, and if so, on what do you base that judgment?

Secretary BODMAN. NNSA achieved 24-month test readiness at the end of fiscal year 2005. Before the administration embarked on its plan to improve test readiness, NNSA's readiness posture stood at about 36 months, and possibly greater. We

believe that this significant improvement (24 months) is adequate for meeting our national security needs.

SAFEGUARDS AND SECURITY—DESIGN BASIS THREAT

7. Senator WARNER. Secretary Bodman, after the attacks of September 11, 2001, the Secretary of Energy increased the security requirements across the nuclear weapons complex. The security requirements for the DOE are known as the Design Basis Threat. Could you describe the progress DOE has made towards hardening its nuclear facilities against the threats we now face?

Secretary BODMAN. NNSA has been very aggressive in pursuing immediate and long-lasting security upgrades within the nuclear weapons complex. Over the past 3 years, based on the results of detailed vulnerability analyses, we have invested hundreds of millions of dollars in enhanced detection systems, anti-vehicle protections, increased protective force capabilities, and facility/target hardening improvements. The net impact of these upgrades is that our facilities rank among the most highly secured operations anywhere in the Nation. We will continue to pursue additional upgrades and refinements, with an eye on new and emerging technologies, as we work to implement the changes necessary to meet the requirements of the 2005 Design Basis Threat.

8. Senator WARNER. Secretary Bodman, another strategy for increasing the security of DOE nuclear materials, is simply to store those materials in fewer locations—in other words, consolidation of these materials in fewer, more hardened locations. Is DOE evaluating opportunities to consolidate its nuclear materials and making progress towards that goal?

Secretary BODMAN. The Department has made considerable progress in the area of nuclear materials consolidation and disposition. There are a number of examples of progress in this area, including the movement of nuclear material from Los Alamos National Laboratory (LANL) to a more secure location at the Nevada Test Site, accelerated dismantlements of warhead secondaries, consolidation of highly enriched uranium material, and construction of the Highly Enriched Uranium Materials Facility at the Y–12 National Security Complex. I have established a Department-wide Coordination Committee to review opportunities for additional consolidation activities and to develop an overarching plan for materials consolidation and disposition.

PIT PRODUCTION AND PLUTONIUM AGING

9. Senator WARNER. Secretary Bodman, the United States no longer has the capability to manufacture an essential component of nuclear weapons—the plutonium pits which power the nuclear reaction. The U.S. ceased production of pits when Rocky Flats was closed in 1989 and is now trying to reconstitute a modest production capability for pits at LANL. What challenges is DOE encountering in trying to increase the rate of production of pits at Los Alamos?

Secretary BODMAN. There are many challenges confronting the DOE and the LANL in increasing the rate of production of pits at the plutonium facility at TA–55/PF–4. The PF–4 facility was designed over 30 years ago to support plutonium research and development and the facility infrastructure and layout supports that mission. Major challenges to improve the pit production capacity of PF–4 include the physical limitations of the facility, equipment configuration and installation, personnel qualification and retention, and continued support of multiple plutonium missions. The TA–55/PF–4 facility supports a number of important national missions in addition to pit production. For example, continuing Pu–238 missions supporting the National Aeronautics and Space Administration, both conventional and enhanced surveillance activities for pits, special recovery activities, non-proliferation activities, and small-scale physics testing. All of these activities use TA–55/PF–4 space that limits the ability to expand the pit manufacturing mission. NNSA and LANL are working to resolve these challenges, and are committed to establishing a pit production capacity of 10 W88 pits per year in fiscal year 2007 and 30–40 pits per year by fiscal year 2012.

10. Senator WARNER. Secretary Bodman, will the production at Los Alamos be sufficient to sustain the stockpile over the long-term?

Secretary BODMAN. NNSA plans to increase the LANL pit manufacturing capacity to at least 30–40 pits per year by the end of fiscal year 2012. This production rate, however, is insufficient to meet DOD projected requirements. The NNSA submitted a report to Congress in January 2005 that confirmed the need for at least a 125-

pit-per-year capacity starting in 2021. This is based on a 60-year pit lifetime and a stockpile based on the planned 2012 stockpile approved by the President and provided to Congress in a June 2004 report. Although we expect more refined pit lifetime estimates by the end of fiscal year 2006, future pit production capacity requirements are likely to be driven more by stockpile transformation than legacy pit lifetimes. In this connection, our ongoing work with the DOD to develop long-term stockpile quantities and transformation rates also suggests that a long-term pit production capacity of about 125 pits per year is about right. This is being validated through the Nuclear Weapons Council. In the meantime, we will work with Congress to gain authorization to reestablish planning activities for an infrastructure that can support the longer-term pit production needs.

11. Senator WARNER. Secretary Bodman, in 2005, Congress directed DOE to initiate more detailed study of the aging of plutonium pits used in nuclear weapons to determine how long we might expect the current pits to last. What is the status of this investigation?

Secretary BODMAN. By the end of fiscal year 2006, we will have system-specific pit lifetime estimates that have been subject to peer review between the weapons physics laboratories (Lawrence Livermore National Laboratory and Los Alamos National Laboratory) and extensive external review by a panel of scientific experts known as JASON.

12. Senator WARNER. Secretary Bodman, what is DOE's current estimate (stated as a range) of pit lifetime?

Secretary BODMAN. The DOE's current estimate of minimum pit lifetime is 45 to 60 years. This range accounts for the differences in design margins among the weapon types, the current uncertainties in the sensitivity of performance to aging degradation, and the lack of aging data beyond the oldest available plutonium used in weapon systems.

RESPONSIVE NUCLEAR INFRASTRUCTURE

13. Senator WARNER. Secretary Bodman, the Nuclear Posture Review (NPR) issued in 2001 called for the development of a responsive nuclear infrastructure which would allow this Nation to have the agility to respond to any problems which might be discovered in the nuclear weapons stockpile, as well as the capability to respond to emerging threats. Much of the work in support of the stockpile, however, is still carried out in facilities from the Cold War era, some of which have not been well-maintained or sufficiently recapitalized over time. Is timely progress being made in developing a responsive nuclear infrastructure and what additional steps could be taken to accelerate this progress?

Secretary BODMAN. Within the NNSA, Defense Programs has been taking actions to develop a more responsive infrastructure. These actions include establishing, in consultation with the DOD, a strategic implementation plan to guide future actions and measure improvements, studying a RRW to facilitate transformation to a more responsive infrastructure, and starting pilot projects (e.g., Multi-Unit Processing at Pantex) to enhance infrastructure responsiveness. NNSA has also been reviewing alternatives for the nuclear weapons complex of the future. These reviews will result in a preferred long-term infrastructure planning scenario to serve as the basis for future actions. Timely progress is being made but more needs to be done, including reaching agreement with Congress (hopefully this spring) on the path forward, particularly on stockpile and infrastructure transformation.

14. Senator WARNER. Secretary Bodman, do you believe that the communication between the DOD and DOE—regarding what is needed and what will be provided—is clear?

Secretary BODMAN. Yes, communications are clear between the DOE and DOD. The DOE and DOD are working as partners to define requirements for the future nuclear weapons stockpile and supporting infrastructure. A Transformation Coordinating Committee was recently established to accelerate these efforts and to ensure we are addressing issues related to transformation in a comprehensive manner. The RRW study is a prime and current example of how DOE and DOD can and do work together.

15. Senator WARNER. Secretary Bodman, has a set of parameters by which to measure "responsiveness" been agreed upon between the DOD and DOE and if not, when will this be done?

Secretary BODMAN. Following the 2001 Nuclear Posture Review and the 2003 Stockpile Stewardship Conference, an initial set of responsiveness criteria were negotiated between the DOE and DOD. These are frequently referred to within the NNSA as the "2012 goals." These goals are "quantified" targets, e.g., resolving a new stockpile issue within 18 months, for seven responsiveness objectives. We have since updated and now formally monitor these responsiveness objectives to judge success. The Nuclear Weapons Council is expected to consider the updated set of responsiveness objectives for approval by June 2006.

NATIONAL IGNITION FACILITY

16. Senator WARNER. Secretary Bodman, the National Ignition Facility (NIF) is a key facility in the science-based SSP. When fully constructed, it will allow weapons scientists to aim 192 lasers at a "BB" sized target, simulating the temperatures and conditions of a nuclear explosion, but at a much smaller scale. DOE's current goal is to achieve this ignition by 2010. What is the current status of NIF?

Secretary BODMAN. The NIF project is on schedule and expected to be completed according to its approved baseline in the second quarter of fiscal year 2009. As of the end of February 2006, the Project is approximately 84 percent complete and is on track to conduct an ignition experiment at the NIF in 2010.

17. Senator WARNER. Secretary Bodman, is DOE's current progress in the development of the NIF on target to meet its goal of achieving fusion ignition by 2010?

Secretary BODMAN. The goal of ignition is a top priority of the DOE. The fiscal year 2006 appropriation and fiscal year 2007 budget request are sufficient to enable DOE to conduct an ignition experiment at the NIF in 2010. The fielding of the first ignition experiment is in itself a highly complex task, and ignition in a laboratory setting has never before been attempted. While it is difficult to predict whether the first experiment will achieve ignition, we are confident that the experiments will ultimately succeed.

NAVAL REACTORS PROGRAM

18. Senator WARNER. Secretary Bodman, for fiscal year 2007, the DOE has requested $795.1 million for the Naval Reactors program to support its part of this joint DOE—Navy program. This tremendously successful program has as its number-one priority ensuring the safety and reliability of the 104 operating naval reactor plants, which power approximately 40 percent of the Navy's major combatants. Funding for Naval Reactors has been essentially flat for a number of years now. Do you believe we are making the appropriate investments in this area?

Secretary BODMAN. The requested funding level for fiscal year 2007 is adequate to meet the needs of the Naval Reactors program. However, as the program reinvests in its 50-year-old infrastructure, and tries to expedite cleanup and disposal of facilities no longer needed, other areas, such as fleet support and investment in future designs, will likely feel pressure. The program also needs to continue investing substantial resources (people, money, and academic capital) in addressing management of spent fuel—that is, preparing naval spent fuel for storage, shipment, and emplacement in a repository.

FISSILE MATERIAL DISPOSITION PROGRAM

19. Senator WARNER. Secretary Bodman, in 2000, the United States and Russia signed an agreement that committed each country to dispose of 34 metric tons of surplus weapons-grade plutonium. Both countries agreed to dispose of the plutonium in mixed oxide fuel (MOX) fabrication facilities that would dispose of the plutonium by using it as nuclear reactor fuel. This program, while laudable in intent, has been plagued by numerous problems: There was a 2-year delay in the Russian program due to an inability to agree on liability issues for U.S. contractors. That delay caused the United States to postpone construction of the U.S. MOX fabrication facility in South Carolina in order to maintain parallelism in the program. Finally, the costs of the program have risen significantly. A December 2005 DOE Inspector General report concluded that the cost of the U.S. MOX facility will be $3.5 billion—$2.5 billion more than the DOE estimate in 2002. The fiscal year 2007 budget request for the MOX program is $638.0 million. Why hasn't Russia signed the liability agreement it reached with the United States last year?

Secretary BODMAN. The United States and Russia successfully completed negotiations of a protocol covering liability protection for the plutonium disposition program

in July 2005. The protocol is currently under final review within the Russian Government, and is expected to be signed in the near future. We have been reassured repeatedly by officials from the Russian Ministry of Foreign Affairs and the Russian Federal Atomic Energy Agency (Rosatom) that there are no substantive problems with the agreed language, but rather it is a question of the protocol undergoing a complete interagency review that has been moving more slowly than I had hoped. While we are disappointed with the delay in signing, it is important to note that critical U.S.-Russian cooperation to move forward with implementation continues.

20. Senator WARNER. Secretary Bodman, since Russia has indicated this agreement must be ratified by the Russian Duma, are there risks in spending additional U.S. taxpayer dollars on the Russian program before the Duma has approved the liability agreement?

Secretary BODMAN. I believe the risks are minimal. We believe the Duma will not oppose an agreement the Russian Government has endorsed.

21. Senator WARNER. Secretary Bodman, do you believe Russia is still committed to disposing of excess plutonium through the MOX program?

Secretary BODMAN. Yes, I believe Russia remains committed to disposing of 34 metric tons of its excess plutonium. Recent high-level meetings at Rosatom indicate that Russia continues to support the goals of the 2000 agreement and would proceed with the MOX program using primarily light water reactors if full funding is provided by the international community.

22. Senator WARNER. Secretary Bodman, do you believe the U.S. and Russian programs should continue to proceed at a parallel pace?

Secretary BODMAN. The United States and Russia remain committed to proceeding with plutonium disposition in parallel, to the extent practicable, as called for in the 2000 agreement. As a result, the two sides will continue to work together to ensure that significant progress is made in both countries. The United States and Russia are working together to translate this requirement into a detailed schedule and corresponding list of milestones on how best to proceed. We will need to agree on a flexible approach to parallelism that allows the parties to meet the overall intent of the 2000 agreement while permitting each side flexibility to take into account differences in each country, such as infrastructure and regulatory requirements.

23. Senator WARNER. Secretary Bodman, if we were to delink the U.S. and Russian MOX programs, what would be the likely impact on the Russian program and on the U.S. program?

Secretary BODMAN. The 2000 agreement commits the United States and Russia to dispose of 34 metric tons each of excess weapons plutonium in parallel to the extent practicable. Linkage with the U.S. disposition program is not the only driving force motivating the Russians to dispose of their excess plutonium. The type of reactor used (the more efficient fast reactors vice the light water reactors) and significant international funding for the disposition program are much more important to the Russians. Impediments to either of these factors would likely result in Russia storing its plutonium for the foreseeable future, which in turn would become a long-term proliferation concern to the U.S. Along with the obvious nonproliferation benefits resulting from a parallel plutonium disposition program with Russia, the U.S. MOX program is a key part of the Department's plan to reduce recurring U.S. costs for security and storage of surplus plutonium throughout the weapons complex, and meet design basis threat requirements.

DOE NONPROLIFERATION PROGRAMS IN IRAQ AND LIBYA

24. Senator WARNER. Secretary Bodman, in 2004 DOE launched an initiative to provide employment opportunities for Iraqi scientists, technicians, and engineers who may have been involved in Iraqi weapons of mass destruction (WMD) programs. This initiative was intended to support reconstruction efforts in Iraq and to prevent the proliferation of WMD expertise to terrorists or proliferant states. Can you update the committee regarding the status and progress of this program?

Secretary BODMAN. Pre-war Iraq had an extensive scientific community of technical experts, many of whom had specialized WMD expertise and knowledge. Iraq developed a workable nuclear weapons design and centrifuge enrichment technology. Scientists and technical experts also helped produce large stockpiles of chemical weapons agents, and undertook advanced research on biological weapons.

Since 2003, DOE has funded projects intended to increase our understanding of the Iraqi scientific establishment and to ensure those experts with WMD-related knowledge do not again become a proliferation threat. DOE's first project was multiphased, beginning with a baseline survey on the state of Iraq's scientific infrastructure, to identify areas where WMD scientists could be employed. This survey, based on the accounts of over 200 scientists, revealed Iraqi needs in key areas: public health, water, the environment, and engineering. Using this assessment, DOE next funded pilot projects in public health and water in 2004. Currently, DOE is funding six civilian technical projects that employ WMD scientists and make use of their unique skills. This ongoing effort reduces the risk of future proliferation from their expertise, while also supporting broader U.S. and Iraqi government reconstruction efforts.

25. Senator WARNER. Secretary Bodman, have Iraqi scientists been able to take advantage of this opportunity to put their talents to work on productive, non-military research activities?

Secretary BODMAN. Yes. The projects DOE supports all contribute to civilian scientific capacity building. DOE has funded to date six civilian scientific projects that employ 29 scientists, including 12 with a WMD background. They include:

- water purification techniques,
- the development of new composite material for use in artificial limbs,
- improving the indigenous capability of the Iraqi pharmaceutical industry,
- improving corrosion resistance in steel,
- an analysis of the level of radionuclides in water and sediments in the Tigris and Euphrates rivers, and
- measuring natural radiation levels in Western Iraq.

Material science and radiation safety projects specifically suit scientists with WMD skills and expertise in nuclear weapons, nuclear energy, operational engineering, and explosives. These areas for research were chosen specifically for that reason.

26. Senator WARNER. Secretary Bodman, roughly how many Iraqi scientists do you think might be eligible to participate in this program, and is the program able to expand to meet the demand?

Secretary BODMAN. The Department of State and the Iraqi National Monitoring Directorate have assessed that there are approximately 500 scientists, senior technicians, and engineers of potential proliferation risk. The 6 projects mentioned employ 29 scientists, including 12 with a WMD background. Currently, our Iraq work operates on a relatively small budget—$1.5 million in fiscal year 2006. As the program evolves, and the situation in Iraq stabilizes, we expect to engage a greater number of Iraq experts.

27. Senator WARNER. Secretary Bodman, I understand DOE had plans to establish a similar program in Libya. What is the status of that effort?

Secretary BODMAN. In recognition of Libya's decision to eliminate its WMD program, the DOE has been working with the Department of State and the United Kingdom to engage and redirect WMD scientists and facilities in Libya. The Department plans to apply $2–3 million annually to these activities. To date, the Department has developed five scientist engagement projects in Libya in the areas of water desalination and purification, groundwater management, and machine tool use. Target institutes are: the Center for Mechanical Industries (CMI), the Tajura Renewable Energies and Water Desalination Research Center (REWDRC), and the National Bureau of Research and Development (NBRD). Project implementation in 2006 would engage 25–50 former weapons scientists, engineers, and technicians.

In addition, last August we signed a sister laboratory arrangement for technical cooperation with Libyan National Bureau of Research and Development to promote peaceful nuclear collaboration in the areas of radioisotope production; health physics; neutron activation analysis; environment, safety, and health; and radioactive waste disposal.

NUCLEAR SECURITY COOPERATION WITH RUSSIA

28. Senator WARNER. Secretary Bodman, at the Bratislava Summit in February 2005, Presidents Bush and Putin agreed on a comprehensive joint action plan for cooperation in nuclear security, including a plan for security upgrades of Russian nuclear facilities and warhead sites. What progress has been made on implementing the agreements reached at Bratislava?

Secretary BODMAN. According to the terms of the joint action plan, security upgrades at all of the Rosatom nuclear sites will be completed no later than the end of 2008. We are presently on track to meet that deadline. With regard to the warhead sites identified for upgrades within the Bratislava discussions, we perceive no major impediments that might prevent us from securing these sites by the end of 2008.

In addition, NNSA and Rosatom developed an accelerated schedule for removal of Russian-origin highly enriched uranium (HEU) fresh and spent fuel from Russian-designed research reactors in third countries. The pilot operation of shipping Russian-origin spent HEU fuel from the WWR–SM research reactor in Uzbekistan is in progress and all of the spent fuel will be removed from Uzbekistan by June 2006. Under the accelerated schedule, all eligible HEU fresh fuel shipments are to be completed by the end of 2006, and shipments of spent nuclear fuel currently stored outside of research reactors will be completed by 2010.

Furthermore, NNSA also has produced a prioritized schedule through 2011 for the repatriation of U.S.-origin HEU spent fuel from research reactors in third countries under the Foreign Research Reactor Spent Nuclear Fuel (FRR SNF) Acceptance program. This effort, in close cooperation with NNSA's Reduced Enrichment for Research and Test Reactors (RERTR) program, works to reduce and, to the extent possible, eliminate the use of HEU in civil nuclear applications and promote the conversion of research reactors to low enriched uranium fuel. The deadline for the FRR SNF Acceptance program was extended by 10 years to 2019. Efforts currently are underway to accelerate program participation.

Finally, NNSA and Russian institutes are collaborating to develop new, higher density low enriched uranium fuels to replace HEU fuels used in U.S.-designed and Russian-designed research reactors in third countries.

29. Senator WARNER. Secretary Bodman, does the fiscal year 2007 budget request for defense nuclear nonproliferation provide all the resources required to fulfill the commitments President Bush made at Bratislava?

Secretary BODMAN. Yes, the administration's fiscal year 2007 budget request fully supports the efforts to complete the security upgrades at the Russian Strategic Rocket Forces (SRF) and 12th Main Directorate warheads sites and all of the Rosatom sites by the end of 2008.

The fiscal year 2007 budget request also supports an accelerated schedule for removal of Russian-origin HEU spent fuel from Russian-designed research reactors in third countries, the return of U.S.-origin HEU spent fuel from research reactors in third countries, and the development of new, higher-density low enriched uranium fuel to enable the conversion of U.S.-designed and Russian-designed research reactors in third countries. In particular, it is important to highlight that the administration's fiscal year 2007 budget request for the Global Threat Reduction Initiative's Russian Research Reactor Fuel Return program reflects a doubling of the budget in order to meet the prioritized schedule in accordance with the Bratislava Joint Statement on Nuclear Security Cooperation.

GLOBAL THREAT REDUCTION INITIATIVE

30. Senator WARNER. Secretary Bodman, in March 2005, DOE launched the Global Threat Reduction Initiative, which aims to identify and secure radiological materials around the world against diversion for use in radiological dispersion devices. What is the status of this important anti-terrorism initiative?

Secretary BODMAN. With the establishment of the Global Threat Reduction Initiative (GTRI) in May 2004, the DOE consolidated and accelerated several programs that reduce the threat posed by high-risk, vulnerable civil nuclear materials and other radioactive materials that could be used in an improvised nuclear device or radiological dispersal device. GTRI is working in cooperation with the International Atomic Energy Agency (IAEA), the International Criminal Police Organization (Interpol), and with other partner organizations in over 40 countries around the world to secure or recover high-risk materials, and minimize and, to the extent possible, eliminate the use of highly enriched uranium in civil nuclear applications.

GTRI secured 373 foreign sites internationally that contain high-risk, vulnerable radiological materials and recovered 12,175 excess and unwanted sealed radiological sources in the United States. In addition, we assist several countries in establishing effective regulatory authority and implementing accounting procedures that will assist national authorities in controlling nuclear and other radioactive materials within their national borders. We are also working bilaterally and through the IAEA to secure and recover unused and orphaned nuclear and other radioactive materials

that pose a terrorist risk. Considering that sustainability is key in any security system, GTRI is also striving to ensure that security enhancements can and will be maintained over the long term.

31. Senator WARNER. Secretary Bodman, has the DOE developed a strategy for prioritizing its activities under this initiative so that the material that poses the highest risk is identified and addressed first?

Secretary BODMAN. Yes, the NNSA has developed a risk-based analysis of the countries and facilities where vulnerable, high-risk nuclear and other radioactive materials pose potential risks to U.S. national security. This analysis provides the Office of Global Threat Reduction with an important tool to allocate its resources.

The risk-based process prioritizes countries and facilities where the combination of dangerous material, terrorist activity, and country or facility vulnerabilities present the greatest potential risks to U.S. national security. The process is derived from the accepted principle of risk as a product of consequence, threat, and vulnerability. The risk-based approach takes into account several criteria, including the type and quantity of material, security conditions at the site, and the location of the material.

DEPARTMENT OF HOMELAND SECURITY'S DOMESTIC NUCLEAR DETECTION OFFICE

32. Senator WARNER. Secretary Bodman, last year, a new Domestic Nuclear Detection Office was established within the Department of Homeland Security (DHS). This office was to be a national-level, jointly staffed office within DHS to strengthen the Nation's ability to detect and prevent attempts to import or use nuclear or radiological materials. The office was tasked with coordinating domestic research and development for detection, identification, and reporting of radiological and nuclear materials. The office was also tasked with coordinating the activities of agencies—including DOE, DOD, and State—that play a role in the development of nuclear detectors or in their use in domestic or overseas programs.

Given that the DOE has historically led U.S. efforts in research and development of nuclear detection technologies, how have DOE's mission and programs been affected by the establishment of this new office?

Secretary BODMAN. While DOE/NNSA's Office of Nonproliferation Research and Development maintains responsibility for the policy direction and implementation of its programs, we are sharing information and coordinating closely on strategy for research and development with the Domestic Nuclear Detection Office (DNDO). DOE/NNSA's Office of Nonproliferation Research and Development and DNDO are responsible for developing technologies for complementary but different missions. NNSA's responsibility includes research and development for international nonproliferation efforts, including support to the defense and intelligence communities. The DNDO is responsible for protecting the U.S. through development of the nuclear detection architecture to prevent radiological and nuclear materials from illicitly entering the United States. Coordination between NNSA and DNDO is beneficial for fulfilling this mission. The benefits of this coordination are evident in DNDO's inclusion of DOE/NNSA in reviewing its R&D program and its efforts to test and evaluate advancements in detection capabilities at the test bed DNDO established at the Nevada Test Site. In addition, our Second Line of Defense program is participating in, and expects to benefit from, DNDO's operational testing and evaluation of advancements in nuclear detection equipment.

33. Senator WARNER. Secretary Bodman, how would you describe DOE's relationship with this new entity in DHS?

Secretary BODMAN. Our interactions with DNDO have been positive and we are optimistic that our relationship will continue to be constructive. DOE frequently exchanges data with DNDO to support the global architectural analysis and to collaboratively explore advancements in detection capabilities. Furthermore, DOE has a detailed assignment stationed within the DNDO to support their efforts on a day to day basis. DOE frequently attends and coordinates briefings with DNDO to other agencies and to Congress.

ENVIRONMENTAL MANAGEMENT FUNDING

34. Senator WARNER. Secretary Bodman, the fiscal year 2007 budget request proposes a reduction in funding for the defense Environmental Management (EM) program of approximately $740 million. This reduction is principally a reflection of the completion of the cleanup of the Rocky Flats site during fiscal year 2006. The com-

mittee receives only a 1-year budget request for this program. What do you predict as the out-year funding trend for the DOE cleanup activities?

Secretary BODMAN. The administration determines the details of its appropriations request 1 year at a time. As reflected in the 5-year plan the DOE recently delivered to Congress, the out-year funding for cleanup activities is expected to decline over the next several years.

35. Senator WARNER. Secretary Bodman, some of the most technically challenging cleanup work remains—such as the nuclear waste tanks at Hanford. Given that fact, do you believe the EM program budget can continue to decline in the coming years?

Secretary BODMAN. The DOE believes that there are major uncertainties regarding its ability to comply with current requirements in its environmental cleanup agreements and with other requirements, and address the technical challenges of the remaining cleanup work. The EM out-year target funding levels are based on the previously planned accelerated site closure strategy. The DOE is currently updating these assumptions to reflect known changes in the regulatory and statutory requirements, incorporate changes based on actual program performance, and to incorporate technological and acquisition strategies to meet the DOE's long-term environmental commitments.

WASTE INCIDENTAL TO REPROCESSING—USING THE AUTHORITY GRANTED

36. Senator WARNER. Secretary Bodman, 2 years ago, Congress conducted substantial debate on the issue of residues or "heels" left in nuclear waste storage tanks. Congress ultimately granted DOE the authority to leave some small amount of this residue in place, after DOE had physically emptied as much nuclear waste from each tank as possible. How has DOE used this new authority?

Secretary BODMAN. The authority you cite is section 3116(a) of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005. We are implementing section 3116 at the Savannah River Site (SRS) and the Idaho National Laboratory (INL), the two sites covered by the legislation.

On January 17, 2006, after the statutorily required consultation with the U.S. Nuclear Regulatory Commission (NRC), the DOE made the first section 3116 determination for the Salt Waste Processing Facility (SWPF) at SRS. The DOE is now pursuing the necessary permits from the State of South Carolina. The facility is currently under design and DOE is planning to begin SWPF operations in fiscal year 2011.

We are currently consulting with the NRC, in accordance with section 3116, on two other draft waste determinations. The first would enable us to close two specific SRS tanks containing stabilized residual waste. The second would enable us to close Idaho tanks and associated components containing stabilized residual wastes. We expect to complete our NRC consultations on both of these draft waste determinations this summer.

37. Senator WARNER. Secretary Bodman, the new authority requires DOE to consult with the NRC in these matters. Is that relationship in place and functioning well?

Secretary BODMAN. Section 3116(a) of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 provided additional authority for me to determine, in consultation with the NRC, that certain wastes from reprocessing are not high-level waste.

On January 17, 2006, I made the first determination for disposal of tank salt waste at the SRS, after working an approximately 10-month long statutorily required consultation with the NRC.

HEALTH AND PENSION BENEFITS

38. Senator WARNER. Secretary Bodman, in the Senate debate on last year's defense bill, a number of amendments were filed, related to benefits for cleanup workers at various DOE sites. As the manager of the bill, I was able to work with Senator Levin and the sponsors of these amendments with the result that we did not adopt any provisions related to DOE pension policy. DOE opposed most of the proposed amendments, or at least had strong reservations about them. What was the basis of these reservations?

Secretary BODMAN. The Department believes its approach to contractor benefit requirements is fair and reflects current best commercial practices that will enable

the Department to continue to attract the best contractors and the Department's contractors to attract the best employees.

We opposed the proposed pension amendments because they would have required specific changes to private pension plans—changes that would have significantly increased the liabilities of those plans, would have undermined the agreed-upon resolution of those matters in collective-bargaining agreements, constrained the ability of DOE contractors to manage their workforces, and made future negotiations with labor organizations representing their workforces more difficult. The legislation would have singled out DOE contractors for different treatment from other government contractors and made it more difficult to manage retirement benefit costs. Certain of the proposed amendments were intended to require the contractors to maintain employees' vested accrued benefits in a manner that overlapped with the existing protection of such benefits under the Employee Retirement Income Security Act (ERISA).

39. Senator WARNER. Secretary Bodman, are there any legislative provisions you feel are needed in this area?

Secretary BODMAN. At this time the Department does not believe that additional legal authorities are necessary to address contractor employee benefits issues.

40. Senator WARNER. Secretary Bodman, could you share your view on the general theme of worker benefits under DOE contracts?

Secretary BODMAN. Generally, the Department intends to use an approach to worker benefits under DOE contracts that is fair, reflects current best commercial practices, and will enable the Department to continue to attract the best contractors and the Department's contractors to attract the best employees. In so doing the Department needs to improve the predictability of its contractor cost reimbursement obligations and moderate benefit cost and liability growth in contractor benefit programs.

41. Senator WARNER. Secretary Bodman, what do you believe should be the overarching principles by which DOE guides the development of requirements related to contractor benefits?

Secretary BODMAN. The overarching principles with respect to employee benefits and DOE contract requirements are fairness and a reflection of current best commercial practices that will enable the Department to continue to attract the best contractors and Department's contractors to attract the best employees.

NUCLEAR WASTE CLEANUP AT HANFORD, WASHINGTON

42. Senator WARNER. Secretary Bodman, in your statement, you have called out the environmental cleanup project at Hanford, Washington as being uniquely plagued with management and regulatory challenges. Specifically, you have identified "overly optimistic assumptions" and "unrealized technology advancements" as the source of the approximately $5 billion cost escalation on this project. While it is important that this project regain its momentum, it is critical that it first be placed on the right path. Could you describe for the committee the action plan you are now implementing to find and correct the deficiencies associated with the execution of this project?

Secretary BODMAN. The DOE, along with the U.S. Army Corps of Engineers (USACE) and Bechtel National, Inc. (the Waste Treatment and Immobilization Plant contractor), is currently undertaking several major activities to ensure that we fully understand what is required to successfully complete the project and begin plant operations. Below are key activities that have been initiated in the areas of project management, technology, and the project cost and schedule:

Strengthen Project Management

An independent firm has completed an After Action Factfinding Review which identified the root causes for the project management issues and was published in January 2006. In response, several initiatives have been put into place to strengthen the project management process:

- I have met several times with senior principals of Bechtel National, Inc., to discuss directly DOE concerns and expectations about project performance;
- The Assistant Secretary for Environmental Management has established a Headquarters' senior-level Waste Treatment and Immobilization Plant (WTP) Oversight Team;

- The DOE has recruited qualified personnel and is in the process of hiring several others in the areas of contracting, procurement, contract law administration, and project management;
- A Headquarters Team has been commissioned to assess the Office of River Protection compliance with DOE Order 413.3, Program and Project Management for the Acquisition of Capital Assets;
- The WTP contractor is implementing an Earned Value Management System (EVMS) that fully complies with American National Standards Institute/Environmental Industry Association (ANSI/EIA) 748–A–1998;
- A structured weekly and monthly reporting system is in place, plus a Quarterly Performance Headquarters review is being conducted by the Assistant Secretary for Environmental Management; and,
- Senior DOE management is receiving project status updates on a regular basis.

Verify WTP Design-Engineering

- The DOE has commissioned a broad group of distinguished independent senior professionals from private industry and academia to thoroughly review all technology aspects of the WTP process flow sheet. The flow sheet report was finalized in March 2006 and indicates that other than one correctable flaw dealing with line plugging, the WTP should operate. There are several other solvable issues regarding waste throughput. DOE is formulating a path forward that addresses and remedies these issues. We will share this with the committee.
- The DOE has separately commissioned the USACE to independently review the establishment, validation, and implementation of the revised seismic design criteria, a technology related issue already identified as having a significant cost and schedule impact. Also, the Defense Nuclear Facilities Safety Board has been actively engaged in this issue and will continue to be included in discussions regarding the final seismic criteria.
- In addition, the DOE is proceeding with the drilling of at least one deep borehole to confirm the ground motion data, which should be completed by the summer of 2007. However, the assumption is the final design criteria have acceptable margin of design. The DOE expects the reviews and discussions of seismic criteria to be completed by late summer 2006 to permit proceeding with construction of the facilities affected by the concern for seismic criteria.

Establish a Credible Project Cost and Schedule

- The DOE has commissioned "best and brightest" independent senior professionals from private industry, academia, and Bechtel corporate management with years of experience to review the WTP resource-loaded project cost, schedule, estimating methodology, contingency management, and overall project management system. This report is due to be completed by early spring 2006.
- The DOE has also engaged the USACE to perform an independent expert review of the Estimate At Completion, and, if acceptable, to validate the project baseline scope, cost, and schedule. The USACE has retained a number of recognized industry experts working alongside their own senior staff. The USACE's report is scheduled to be completed by late summer 2006.

Based on the results from the reviews, the DOE expects to establish a sound project cost and schedule to complete the Hanford WTP. The objective is to ensure this project will be well managed. We owe it to Congress, regional stakeholders, and the U.S. taxpayers that the substantial investment in the WTP is receiving the highest level of talent and attention the DOE can provide.

QUESTIONS SUBMITTED BY SENATOR JOHN ENSIGN

MANAGEMENT AND OPERATIONS CONTRACTS

43. Senator ENSIGN. Secretary Bodman, on the issue of management and operations (M&O) contracts for DOE facilities, DOE has indicated that it wants to move toward dispersing these contracts among different contractors, in essence, bringing "new blood" into the management of DOE facilities. Is that still the DOE's intention and what are some examples of where you are doing that?

Secretary BODMAN. I fully support competition as a tool to ensure that the DOE's facilities and sites are managed and operated by the best contractors. DOE is committed to conducting its M&O contract competitions fairly and in a manner that fos-

ters competitive interest. We believe that where competition is employed, regardless of the winner, DOE receives benefits. The competitive pressure, coupled with the stronger contract requirements such as the use of performance-based incentives required by the Department's solicitation, should drive the program and management improvements that the Department is seeking as well as continue to provide the American taxpayer with optimum management teams for our M&O contracts. A phenomenon that we are seeing is that potential offerors are assembling "teams" in order to be more competitive and provide the best possible combination of management and science expertise. This teaming phenomenon was observed under the procurements for the Idaho National Laboratory, the Oak Ridge National Laboratory, the Los Alamos National Laboratory, and the Portsmouth and Paducah remediation requirements. A number of competitions are ongoing or are planned in the near future including the Argonne National Laboratory, the Fermi National Accelerator Laboratory, and the Lawrence Livermore National Laboratory. We anticipate similar industry responses under these competitions.

44. Senator ENSIGN. Secretary Bodman, in that same light, is the fact that a potential contractor might be a first-time M&O contractor for a DOE facility a disadvantage, even if that contractor has experience managing other large-scale Federal Government facilities?

Secretary BODMAN. As a general matter, we strive to develop competitive solicitations that promote competition (1) by open and early communication with industry and (2) by structuring evaluation criteria that induce potential offerors to craft proposals that best meet the Department's requirements. In order to ensure the selection of the optimum management team to manage our M&O contracts, DOE uses a combination of tools to engage the marketplace early in the competitive process by providing meaningful and timely information on the requirement, the contractor's performance, the physical site and facilities, and agreements with regulatory agencies. DOE often uses "one-on-one" meetings where industry officials meet with senior DOE program officials prior to development of the draft solicitation. DOE then considers the information obtained in light of the type of work to be performed at the site in developing the acquisition approach, and evaluation criteria that will be used in the solicitation. With respect to a contractor's experience, during the competitive process, the DOE evaluates offerors' past performance and experience in managing large scale facilities similar in size, scope, and complexity to that of the specific site or facility in order to ensure potential contractors can successfully perform the required effort.

NEVADA TEST SITE

45. Senator ENSIGN. Secretary Bodman, I obviously have a particular interest in the Nevada Test Site (NTS). Since the cessation of nuclear testing, Nevada's congressional delegation has consistently supported the use of that facility for the testing of new technologies, as well as the utilization of potential subcontractors or tenants who can assist with that objective. Is DOE giving any weight to the capability of potential contractors to achieve those aims?

Secretary BODMAN. Yes, as evidenced by this statement that is one of the minimum expectations required by the Acquisition Plan:

> The Contractor is expected to maintain or exceed the performance of the incumbent with respect to applied research, development, and engineering. The Contractor will be expected to sustain and improve the culture of technology application that has contributed to the success of the NTS over the years.

Furthermore, "Section M, Evaluation Criteria for Award" of the Request for Proposals identifies "Other DOE and non-DOE Support", the area under which such work by non NNSA/Defense Programs would be done, as part of "Criterion 1 Applied Science, Engineering, and Technology." Criterion 1 received by far the highest weighting in the evaluation. The NTS has long been used to support the NNSA's mission to "Support the United States leadership in science and technology." The NNSA expects the selection of the M&O contractor for the new contract to be capable of achieving that objective.

46. Senator ENSIGN. Secretary Bodman, as a result of unforeseen circumstances, I understand that the timeline for the selection of a contractor for the NTS has slipped. Can you give me any idea how close DOE is to making a selection?

Secretary BODMAN. The Source Selection Official accepted the Source Evaluation Board's Final Report, and is expected to make a decision in time for the transition

to the new contract to begin by April 1, as identified in "Amendment 003 of the Solicitation" that resides on the DOE Web site at http://www.doeal.gov/nevadacontractrecompete/.

DOE LABORATORY PENSIONS

47. Senator ENSIGN. Secretary Bodman, how far along is DOE towards moving to defined contribution pension plans at the DOE national laboratories, in line with the private sector?

Secretary BODMAN. Consistent with the goal to mitigate cost volatility and liability growth in contractor pension plans, the Department is taking steps to ensure that as contracts are recompeted, solicitations require (unless otherwise required by law) the provision of market-based pension plans competitive for the industry to new, non incumbent employees hired after the date of contract award. The solicitations also provide that incumbent employees will remain in their existing pension plans pursuant to plan eligibility requirements and applicable law; that is, "if you're in, you're in." Since January 1, 2005, we have awarded nine contracts containing the requirement that DOE facility contractors establish market based pension plans for all new employees hired after contract award. DOE believes this is an approach that is fair, reflects current best commercial practices, and will enable the Department to continue to attract contractors and contractors to attract the best employees.

QUESTIONS SUBMITTED BY SENATOR LINDSAY O. GRAHAM

FISCAL YEAR 2007 BUDGET

48. Senator GRAHAM. Secretary Bodman, the overall decrease in the budget for the SRS is approximately $60 million. However, the EM budget for SRS reflects a $94 million decrease from fiscal year 2006. If funding for the SWPF is not included, the total reduction in EM funding for SRS is around $120 million. With this significant reduction in funding, what work will be stopped or eliminated at SRS in fiscal year 2007?

Secretary BODMAN. Savannah River's (SR) EM overall budget is $60 million less than last year. The $94 million difference between fiscal year 2006 and fiscal year 2007 excludes funding for Program Direction and Safeguards and Security, as does the $120 million. There are a number of increases and decreases within the following amounts that make it difficult to reconcile the figures without line-by-line budget examination, but overall, the explanations for the net $60 million decrease for EM are as follows:

- $33.8 million decrease is associated with completion of deactivation of the cooling tower for 235–F and completion of the FB-Line deactivation (PBS SR–0011B).
- $33.2 million decrease is associated with the completion of operations in the F-Area plutonium storage facility and the new strategy to consolidate plutonium storage into one facility in K-Area (PBS SR–0011C).
- $40.4 million decrease is associated with the decontamination and decommission (D&D) project (PBS SR–0040C). This reduction was necessary to realign dollars to meet critical mission needs and higher priority projects in order to meet regulatory compliance issues (e.g. SWPF and the soil and groundwater program).

These decreases were partially offset by an increase in the Radioactive Liquid Tank Waste Stabilization and Disposition project (PBS SR–0014C) of $32.6 million (primarily to support design and construction of the SWPF), an increase in the Soil and Water Remediation Project (SR–0030) of $9.7 million in order to meet regulatory compliance milestones, and an increase in Safeguards and Security (SR–0020) of $21.3 million for implementation of the 2005 Design Basis Threat requirements.

As demonstrated above, the most significant impact of this overall EM reduction of $60 million is associated with the D&D program ($40.4 million) which supports activities that are not required by compliance agreements. This reduction will result in a re-pacing of the D&D program.

49. Senator GRAHAM. Secretary Bodman, the D&D has the most significant cuts. The President's budget reduces funding in this area from approximately $60 million in fiscal year 2006 to $12.5 million for fiscal year 2007. How will this effect worker safety and community concerns?

Secretary BODMAN. The reduced funding for the D&D project means less D&D scope will be accomplished. The D&D scope that is accomplished will be performed with full implementation of safety and worker protection measures and controls. There will be no reduction in safety for the work performed. There will be no impact to the local communities from deferral of this work until a later date. These activities are not required by compliance agreements.

50. Senator GRAHAM. Secretary Bodman, how will the DOE prioritize demolition work at SRS?

Secretary BODMAN. EM's overall priorities are:

1. Conduct compliant and safe operations;
2. Fully establish the disposition capability for radioactive liquid tank waste, special nuclear materials, and spent nuclear fuel;
3. Dispose of contact-handled and remote-handled transuranic waste and low level radioactive waste;
4. Continue to remediate contaminated soil and groundwater;
5. Decontaminate, decommission, and demolish contaminated facilities no longer needed; and,
6. Support post-closure benefits and liability requirements.

The demolition work at the SRS will be prioritized in a manner reflective of these overall priorities.

51. Senator GRAHAM. Secretary Bodman, since there are people assigned to perform the existing cleanup work at SRS, what is the anticipated labor impact associated with the planned reductions?

Secretary BODMAN. Prior to identified reductions in the budget, the SRS planned a workforce restructuring and reduction using a phased approach beginning in fiscal year 2005. The restructuring program was needed as a result of progress made in site cleanup, reprioritization of work scope, and subsequent changes in skills mix requirements. The DOE continues to evaluate workforce requirements to determine whether additional changes will be required.

52. Senator GRAHAM. Secretary Bodman, when SRS took plutonium and other materials from sites such as Rocky Flats and Fernald, DOE was enabled to accomplish cleanup missions ahead of schedule and at cost savings. At the time, DOE stated its intention to use the money saved to reinvest in cleanup of other sites, such as SRS. However, this has not been the case. Can you explain why this has not happened?

Secretary BODMAN. Prior to fiscal year 2001, the DOE's funding strategy for the EM program was that as sites such as Rocky Flats completed cleanup and funding requirements at those sites decreased, that funding would be shifted to other sites. However, as part of the administration's "Accelerated Cleanup Initiative," increased funding was provided beginning in fiscal year 2003 to most sites including Savannah River, Oak Ridge, and Idaho to accelerate cleanup rather than waiting until some sites such as Rocky Flats were completed. This allowed the DOE to address its urgent risks sooner and to accelerate cleanup. Fiscal year 2005 was the peak year of funding for this initiative.

MIXED OXIDE FUEL

53. Senator GRAHAM. Secretary Bodman, when the SRS was selected as the site for the MOX program, the DOE and NNSA made important commitments to the State of South Carolina. If the MOX plant was not constructed and fully operational according to a schedule codified in the National Defense Authorization Act for Fiscal Year 2003, the Federal Government would be required to pay the State of South Carolina up to $100 million per year beginning in 2011. It is South Carolina's intention to follow through on the project and not receive penalty payments, however, the residents of the State simply seek reassurances that weapons grade plutonium would not remain at SRS indefinitely.

The program is approximately 3 years behind schedule. This is due to a number of factors including delays in negotiating a liability agreement with Russia. In the fiscal year 2006 Energy and Water Appropriations Act, the penalty payment time table was to be adjusted by 3 years in order to reflect these delays. However, we must accelerate the program in order to bring it closer to the original construction and operations schedule.

In your opening statement before the committee, you mentioned that the MOX plant will begin operations in 2015. However, current law states that if the MOX

production goals are not met by January 1, 2014, the DOE will be required to pay the penalty payments. Even if the new schedule for MOX plant can be met, is it the intention of the Federal Government to honor its commitments to South Carolina and make the penalty payments?

Secretary BODMAN. The Department is committed to begin operation of the MOX facility as soon as practical. The fiscal year 2006 Energy and Water Appropriations Act directed the Department to prepare and submit to Congress a new baseline schedule for the MOX facility by the end of this year. This new baseline will take into account all relevant factors, including the fiscal year 2007 funding level approved by Congress. This baseline will permit Congress and the administration to consider what, if any, changes should be made to the statutory framework for the MOX facility. The administration will comply with what Congress legislates on payments to the State.

54. Senator GRAHAM. Secretary Bodman, this past fall, we discussed the status of the MOX project. At that time, you told me that the program was approximately 3 years behind schedule. However, according to your testimony, it appears as if your fall schedule was incorrect. What has changed since the fall that has caused an additional delay in the program?

Secretary BODMAN. DOE received approximately $180 million less than the budget request for fissile materials disposition in fiscal year 2006. This has caused an additional delay in the schedule for operation of the U.S. MOX facility, as well as DOE's ability to meet the MOX production objective.

55. Senator GRAHAM. Secretary Bodman, what assurances can you give me that in December, the timetable will not show further postponement of the MOX facility?

Secretary BODMAN. A detailed revised cost estimate and schedule for construction and operation of the MOX facility is currently being developed and will be submitted to Congress by December 2006. Our intent is to establish an aggressive and realistic schedule that reflects all relevant factors including the likely funding level in the Fiscal Year 2007 Energy and Water Development Appropriations Act and the anticipated funding levels for future years.

56. Senator GRAHAM. Secretary Bodman, attempts to alter the agreement the Federal Government entered into with South Carolina send a negative message to all communities that work with DOE. Can I get your assurances that the administration will work to prevent any attempts to further alter the penalty language?

Secretary BODMAN. The MOX facility is a key component of U.S.-Russian efforts to dispose of stockpiles of surplus weapons plutonium. The Department is committed to begin operation of the MOX facility as soon as practicable and to continue working with the State of South Carolina and local communities in achieving that objective. The Department will provide Congress with a revised baseline for the MOX facility by December 31, 2006. This baseline will reflect the fiscal year 2007 funding levels approved by Congress and other relevant factors. We will work with Congress to determine what is the proper path forward in light of this baseline.

57. Senator GRAHAM. Secretary Bodman, the President has requested $383 million for the MOX program for fiscal year 2007. On a cost basis, the MOX program represents our Nation's largest single non-proliferation program. After the MOX plants in South Carolina and Russia are constructed and operational, they will lead to the ultimate elimination of 34 metric tons of defense plutonium. This represents approximately 4,000 nuclear warheads.

Does the fiscal year 2007 budget request aim to accelerate construction to make up for time lost in negotiating with the Russians? How do you plan to make up for the delays?

Secretary BODMAN. DOE has undertaken a number of actions to strengthen the management of the MOX project and will insist on a multi-tier performance incentive in future contract negotiations for the construction of the MOX facility to meet critical project milestones. Our intention is to adhere to the schedule in the report I submitted to Congress on February 15, 2006, although we will continue to explore ways to accelerate its schedule.

58. Senator GRAHAM. Secretary Bodman, how much money would be required to bring the project back on schedule?

Secretary BODMAN. A detailed revised cost estimate and schedule for construction and operation of the MOX facility are currently being developed and will be validated as part of the Department's Critical Decision process. DOE will submit to Congress by December 2006 a report on the revised cost and schedule for construc-

tion and operation of the MOX facility. Until these estimates have been developed and validated, it is premature to speculate on additional funding.

59. Senator GRAHAM. Secretary Bodman, while site preparations have begun, will construction begin this fall as planned?

Secretary BODMAN. DOE began site preparation activities for the U.S. MOX facility at the SRS in October 2005. We fully intend to begin construction this year.

60. Senator GRAHAM. Secretary Bodman, how important is the MOX program in achieving our nonproliferation goals?

Secretary BODMAN. The Russian plutonium disposition program is very important to achieving U.S. nonproliferation goals. This is the only program that will permanently dispose of Russian plutonium so that it can never again be used for weapons.

61. Senator GRAHAM. Secretary Bodman, what message does the delay in our largest nonproliferation program send the international community, including the Russians, North Koreans, and Iranians?

Secretary BODMAN. The international community strongly supports the Russian plutonium disposition program. Our Group of Eight (G–8) partners have committed significant funds to the program and, despite delays between the U.S. and Russia over liability protection, they continue to support the program. The United States demonstrated its commitment to this important nonproliferation program by continuing to pursue the negotiations and continued preparatory work as much as possible. This indicates that we, along with our international partners, will aggressively pursue initiatives to prevent proliferation despite hurdles along the way, and it sends a strong message to potential proliferants that proliferation will not be tolerated.

62. Senator GRAHAM. Secretary Bodman, in 2002, Vice President Cheney was in South Carolina when he said, "this administration is totally committed to work with Congressman Graham and your congressional delegation to pass legislation that will guarantee that South Carolina will not become a permanent storage site for plutonium." We passed that legislation in the National Defense Authorization Act for Fiscal Year 2003.

Can you assure me that the SRS will not become the Nation's repository for defense plutonium and you will work to resist all efforts to make this happen?

Secretary BODMAN. In accordance with applicable law, no surplus, weapons-usable fissile plutonium will be shipped to the SRS without a plan for the disposition of such plutonium. The DOE will continue to be guided by all applicable laws in this regard, including the National Defense Authorization Act for Fiscal Year 2003, as amended. The DOE agrees that the SRS should not become a permanent repository for such plutonium and is committed to dispositioning such plutonium in a proper manner.

63. Senator GRAHAM. Secretary Bodman, I notice there is no funding in the fiscal year 2007 budget request for SRS plutonium disposition. What is your strategy for the disposition of plutonium that is not scheduled to be sent through the MOX process?

Secretary BODMAN. Deputy Secretary Clay Sell approved on September 6, 2005, the mission need (Critical Decision-0) for a new plutonium disposition capability to be established at the SRS to deal with such plutonium not suitable for use in MOX fuel. The DOE's fiscal year 2006 budget request and appropriation includes $10 million for conceptual design for this project. Work on the conceptual design has begun and will continue into fiscal year 2007. Based on the results of the conceptual design and alternatives analysis, after appropriate analysis pursuant to the National Environmental Policy Act, a decision on the selected process will be made.

64. Senator GRAHAM. Secretary Bodman, if the MOX program should fail, DOE would have to remove the plutonium from SRS. Does DOE have the capability to move the plutonium out of South Carolina to an alternative site?

Secretary BODMAN. Yes, we do have the capability to move the material. The amount of time it would take to move the material would depend upon many variables including the priority of the movement with respect to the other commitments of the Secure Transportation Asset, the amount of material to be moved and its configuration, and the location of the alternative site. The material moved to the SRS from Rocky Flats took approximately 11 months of concentrated effort to transport.

HYDROGEN

65. Senator GRAHAM. Secretary Bodman, DOE is to be commended for strengthening its commitment to science research, especially in the advancement of hydrogen research. However, I am deeply disturbed by the lack of funding at DOE's only EM national laboratory.

Despite over 50 years of experience in storing hydrogen, Savannah River National Laboratory (SRNL) does not appear to be a focal point for the DOE's efforts to realize the President's hydrogen initiative. Other labs such as Sandia and Oak Ridge, which have less expertise in hydrogen research than SRNL, are targeted to receive a substantial increase in their funding, as compared to the amount dedicated to funding hydrogen research at the SRNL. Why is the potential of SRNL not being realized by DOE?

Secretary BODMAN. DOE recognizes SRNL's extensive past experience in nuclear applications for hydrogen. As a result of that experience, SRNL was successful in competing for three hydrogen research projects supported by the DOE Hydrogen Program: (1) nuclear-based hydrogen production, (2) metal hydride research as part of a Hydrogen Storage Center of Excellence, and (3) basic research in carbon-based storage materials. SRNL's success has led to an increase in Hydrogen Program funding from $950,000 in fiscal year 2005 to $1,700,000 in 2006. Other national laboratories such as Sandia are also clearly recognized as experts in hydrogen technologies and have been awarded DOE projects based on competitive review. Many hydrogen projects were hit hard by the $25 million appropriations shortfall in fiscal year 2006 and the approximately $40 million in congressionally directed projects. The combined effect was that funding for 66 projects was eliminated and funding for 48 projects was reduced. It is difficult to increase funding for any projects under these circumstances.

In addition to planned DOE investments, SRNL will have the opportunity to participate in future competitive solicitations to contribute new research ideas for the President's Hydrogen Fuel Initiative.

66. Senator GRAHAM. Secretary Bodman, on February 13, 2006, the Center for Hydrogen Research was opened in Aiken, South Carolina. This facility will be a magnet for investment and innovation in hydrogen. Already General Motors and Toyota are working to support hydrogen research at the SRNL. How is DOE planning to capitalize on this investment and increase the resources allocated to SRNL to develop hydrogen research?

Secretary BODMAN. The DOE Hydrogen Program currently supports three projects at the SRNL: (1) nuclear-based hydrogen production, (2) metal hydride research as part of the Metal Hydride Center of Excellence, and (3) basic research in carbon-based storage materials. Hydrogen Program funding at SRNL increased from $950,000 in fiscal year 2005 to $1,700,000 in 2006. In addition to planned DOE investments, SRNL will have the opportunity to participate in future competitive solicitations to contribute new research ideas for the President's Hydrogen Fuel Initiative.

LIQUID WASTE

67. Senator GRAHAM. Secretary Bodman, the storage of 37 million gallons of highly radioactive liquid waste in aging tanks at SRS is the single largest threat to human health and the environment in South Carolina. Recently discovered additional leaks highlight the need to move quickly in closing the tanks. SRS has indicated that they will fail to meet the closure schedules established in the Federal Facility Agreement for High Level Waste (HLW) Tanks 18 and 19 (10/31/06 for Tank 19, 02/28/07 for Tank 18). How does DOE intend to ensure that the HLW tank closure commitments in the Federal Facility Agreement are upheld?

Secretary BODMAN. The DOE, in coordination with the South Carolina Department of Health and Environmental Control representatives, is evaluating actions necessary to ensure future tank closure activities meet the existing Federal Facility Agreement schedule.

On January 17, 2006, I made the first determination for disposal of tank salt waste at the SRS, after working an approximately 10-month long statutorily required consultation with the U.S. Nuclear Regulatory Commission.

68. Senator GRAHAM. Secretary Bodman, as any delays in implementing section 3116 of the National Defense Authorization Act for Fiscal Year 2005 will have a significant impact on the surrounding community, what is DOE doing to ensure that

community stakeholders, such as the South Carolina Department of Health and Environmental Control (SCDHEC) are part of the process moving forward?

Secretary BODMAN. The DOE has published each draft waste determination for public comment and has received comments from the State regulatory agencies. In particular, the SCDHEC has provided comments on the draft determination concerning the SRS. DOE routinely (monthly) briefs the SRS Citizens Advisory Board on the status of waste determinations. Furthermore, representatives from DOE–SR and the SCDHEC recently met on February 24, 2006, to reinitiate technical discussions associated with closing Tanks 18 and 19, and reached agreement to hold regularly scheduled meetings.

69. Senator GRAHAM. Secretary Bodman, I authored and worked to pass section 3116, which was intended to facilitate timely closure of the HLW tanks at SRS. However, the first section 3116 waste determination took over 14 months to complete after passage of section 3116. It appears that DOE's implementation time line is adding about a year to the closure process. How will DOE manage the implementation time line to facilitate the closure commitment dates?

Secretary BODMAN. Section 3116(a) of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 provided additional authority for me to determine, in consultation with the NRC, that certain wastes from reprocessing are not high-level waste. The DOE and the NRC recently held a lessons learned meeting with State representatives to identify opportunities to reduce the implementation time line for future waste determinations and facilitate meeting tank closure commitment dates. Additionally, DOE and NRC staff and senior management continue to have dialogue to resolve specific implementation issues associated with implementing the legislation.

70. Senator GRAHAM. Secretary Bodman, I am concerned DOE has relinquished control of the waste determination to the NRC. What is DOE doing to ensure that goals of section 3116 are being realized and not being slowed down by unnecessary bureaucracy?

Secretary BODMAN. Section 3116(a) of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 provided additional authority for me to determine, in consultation with the NRC, that certain wastes from reprocessing are not high-level waste. The DOE and the NRC recently held a lessons learned meeting with State representatives to identify opportunities to reduce the implementation time line for future waste determinations and to ensure the goals of section 3116 are being realized. Additionally, DOE and NRC staff and senior management continue to have dialogue to resolve specific implementation issues associated with implementing the legislation.

SALT WASTE PROCESSING FACILITY

71. Senator GRAHAM. Secretary Bodman, due to recent decisions by DOE concerning design standards for the SWPF, the schedule for construction and operation has been extended by over 2 years. This has necessitated the need for various interim activities to ensure safe and appropriate operation of the high level radioactive waste tank system. Can you explain DOE's process in determining the proper seismic criteria?

Secretary BODMAN. The DOE has established design and performance standards associated with natural phenomena hazards (including seismic) in DOE Guide 420.1–2, Guide for the Mitigation of Natural Phenomena Hazards for DOE Nuclear Facilities and Non-Nuclear Facilities, and DOE–STD–1021–93, Natural Phenomenon Hazards Performance Categorization Guidelines for Structures, Systems, and Components, that are tailored and graded to the hazards associated with our nuclear facilities. Performance Category 3 (PC–3), representing the most stringent earthquake design requirements, is invoked where the highest hazards exist in these types of facilities. This level of design rigor is typically applied to conditions where facility hazards pose a risk sufficient to warrant safety related functions that protect the public. PC–2 defines a less robust set of earthquake design requirements applied to facility conditions where hazards require a safety-related function to protect workers.

In accordance with the DOE standards early in the design of facilities, the performance categorization is determined and analysis refined as the safety documentation matures. In some cases where the potential consequence to the onsite population and facility workers is high, the PC–3 design is considered for providing a reliable confinement safety function for seismic events.

The SWPF preliminary safety analysis and the original facility design were based on PC–2 categorization. However, questions were raised whether PC–2 systems would provide assurance that confinement of radioactive materials was sufficient to protect workers following a large earthquake at the SRS. As the PC–3 analysis provides more detailed stress information which allows the designer to minimize any permanent structural deformation to ensure that the confinement boundaries remain intact, DOE decided that the SWPF will be designed to meet PC–3 standards in order to provide adequate assurance of radioactive material confinement.

72. Senator GRAHAM. Secretary Bodman, how will DOE meet the technical and funding challenges of achieving these activities without impacting other SRS cleanup and waste management actions?

Secretary BODMAN. At the SRS in South Carolina, the SWPF project design has been revised to meet more stringent confinement design requirements. These proposed changes form the basis for the budget profile and funding scenarios presented in the fiscal year 2007 project data sheets. The DOE believes that there are major uncertainties regarding its ability to comply with current requirements in its environmental cleanup agreements and with other requirements, and address the technical challenges of the remaining cleanup work. The EM activities estimated at target funding levels are based on the previously planned accelerated site closure strategy. Several of these assumptions have not materialized. In addition, new work scope from emerging cleanup requirements has now been identified and execution of some key projects has not been adequate. The DOE is currently updating these assumptions to reflect known changes in the regulatory and statutory requirements, incorporate changes based on actual program performance, and to incorporate technological and acquisition strategies to meet the DOE's long-term environmental commitments.

73. Senator GRAHAM. Secretary Bodman, efficient treatment of the salt portion of HLW is needed as soon as possible to minimize the radioactive residuals at SRS. In addition, treatment of the salt waste is needed to provide proper management of the high level radioactive waste tank system to support new mission activities proposed for SRS. Is DOE planning to commit resources to operate the SWPF as early as possible without detriment to other SRS cleanup activities?

Secretary BODMAN. The DOE recognizes the importance of the SWPF to the treatment and disposition of radioactive tank waste at the SRS. DOE is planning to request funding to begin SWPF operations in fiscal year 2011. The facility is currently under design.

74. Senator GRAHAM. Secretary Bodman, can you comment on DOE's commitment to operate the SWPF and DOE's associated funding plans?

Secretary BODMAN. The DOE recognizes the importance of the SWPF to the treatment and disposition of radioactive tank waste at the SRS. DOE is planning to request funding to begin SWPF operations in 2011. The facility is currently under design.

75. Senator GRAHAM. Secretary Bodman, if a large earthquake hits SRS, the largest risk to the workers and the community will be found in the tank farms. As such, shouldn't it be the highest priority of DOE to close the tanks?

Secretary BODMAN. The DOE considers treatment and safe disposition of the tank farms waste at the SRS to be among the highest priorities of all Office of Environmental Management missions. To this end, the Defense Waste Processing Facility (DWPF) has been stabilizing SRS sludge waste since 1996. The SWPF, currently under design, is critical to the treatment and disposition of salt waste (comprising over 90 percent of the volume of waste in the SRS tank farms and approximately half of the radioactivity). We plan to use our best efforts to begin SWPF operations in 2011.

76. Senator GRAHAM. Secretary Bodman, I understand that SRS stakeholders were not part of the decisionmaking process to change the building standards. Why weren't SCDHEC, the State of South Carolina, or any officials in the legislative branch consulted prior to the announcement of the new standard?

Secretary BODMAN. The DOE should have done a better job of keeping the stakeholders and the regulators fully informed of the status of this issue and the potential impacts of making these decisions. This has been identified as a critical lesson learned.

A management-level team, consisting of representatives from the SCDHEC, the South Carolina Governor's Nuclear Advisory Council, DOE, and the Defense Nu-

clear Facilities Safety Board, has been established to improve communications among the parties.

77. Senator GRAHAM. Secretary Bodman, as potential new missions for the site such as spent fuel recycling may result in an increase of high level waste at the site, I am concerned that if the SWPF is not opened on schedule it could hinder SRS's ability to compete for future missions. Further, if the process is further delayed, it could result in the shutdown of the DWPF and the reduction of mission. How will you ensure that DWPF remains operational?

Secretary BODMAN. The DOE plans to manage the SWPF project aggressively and to use its best efforts to begin SWPF operations in 2011. Doing so will help ensure that the DWPF processing at the SRS is managed in a manner that supports the current missions.

CONTRACT REBID/COMMUNITY CONCERNS

78. Senator GRAHAM. Secretary Bodman, community support for the SRS has always been strong. However, the workforce reductions and uncertainty over programs such as MOX and the MPF have begun to fracture support for SRS. What is DOE doing to revitalize community support?

Secretary BODMAN. The DOE values its longstanding community support for the SRS and its current missions. DOE is committed to community support through numerous proactive measures.

- The Savannah River Operations Office (DOE–SR) Manager meets regularly with the Savannah River Regional Diversification Initiative, the SRS Retirees Association, the Citizens for Nuclear Technology Awareness, and other local economic development and civic groups to expand existing lines of communication. DOE–SR is also increasing the availability of senior staff members to speak at local civic organization events about the SRS current and any future missions.
- DOE is working closely with the SCDHEC and the South Carolina Governor's Nuclear Advisory Board on salt waste disposition and nuclear waste tank closure.
- The SRS Citizens Advisory Board (CAB) provides recommendations to DOE on environmental remediation, waste management and other related SRS issues. In fiscal year 2005, the CAB held six full board meetings in conjunction with combined committee meetings in Georgia and South Carolina and hosted 28 additional committee meetings primarily in the Aiken-Augusta area.
- The Medical University of South Carolina, in partnership with SRS and other civic organizations, sponsored Community Leaders Institutes (CLI) in rural counties in South Carolina and Georgia. While the outreach program has been active for 5 years, in the past year, there have been five CLI events attended by about 900 citizens. These institutes provide citizens with information on grant opportunities in the areas of housing, economic development, health issues, and environmental justice, among other topics. SRS senior managers participate in these institutes to answer questions about SRS.
- In fiscal year 2005, the SRS Tours Program hosted 1,636 people on 148 tours. Those touring the site ranged from congressional staff members and chambers of commerce to nuclear activists groups.
- The SRS Education Outreach Program provides a variety of science and literacy outreach programs at SRS, including DOE, the Savannah River National Laboratory, the Savannah River Ecology Laboratory, Natural Resources Management and Research Institute, and the Washington Savannah River Company. These outreach programs enhance interest in science, mathematics, engineering, and technology and support improvements in education by using the unique resources available at the site. Last year, the site reached more than 62,000 students and helped about 700 teachers with classroom presentations. One example is the SRS-sponsored annual Central Savannah River Area College Night event, the largest college fair in the southeast. Over 6,000 participants and 150 colleges and universities attend the annual event.
- In other areas, SRS employees are noted for their outstanding community support. SRS is the largest area contributor to charity efforts like the Golden Harvest Food Bank, Marine Corps Toys for Tots, the United Way, Habitat for Humanity, and a host of other charities and goodwill causes. The

DOE–SR Federal employees annually rate among the highest Combined Federal Campaign contributors per employee in the Nation.

79. Senator GRAHAM. Secretary Bodman, what steps is DOE taking to improve coordination with the local community?

Secretary BODMAN. In addition to valuing community support, the DOE is also committed to continuing its longstanding positive working relationships with local organizations and agencies via interagency agreements, open communication channels, and sharing of vital resources. To that end, DOE closely coordinates with local and State government agencies for annual emergency exercises as well as making SRS resources readily available in the event of actual life-threatening emergencies. Working with the DOE Headquarters Office of Congressional and Intergovernmental Affairs, DOE–SR seeks to strengthen lines of communication with local congressional delegations, the Office of the Governor, and local elected officials through open, accurate, and timely notifications of notable SRS activities and challenges. DOE–SR respects the views and concerns of all of its stakeholders and is committed to proactively coordinating ongoing site activities.

80. Senator GRAHAM. Secretary Bodman, will DOE be issuing a draft Request for Proposals (RFP) for the SRS Management and Operations (M&O) contract?

Secretary BODMAN. The DOE intends to award two contracts to replace the current site contract with Washington Savannah River Company, LLC (WSRC): one for the site operations currently under contract to WSRC (referred to as the site M&O acquisition), and the second for the liquid waste program. Planning is underway for both of these acquisitions. Typically, DOE issues a draft RFP in order to receive input from industry for complex scopes of work. The decision to issue draft RFPs has not yet been made regarding the upcoming SRS acquisitions.

81. Senator GRAHAM. Secretary Bodman, when will the RFP come out?

Secretary BODMAN. Planning is underway for the site M&O and the liquid waste acquisitions. We are assessing our schedules as part of the current development of the RFPs.

82. Senator GRAHAM. Secretary Bodman, what is the schedule for bid deadlines and decisions to be made?

Secretary BODMAN. Planning is underway for the site M&O and the liquid waste acquisitions. We are assessing our schedules as part of the current development of the RFPs.

83. Senator GRAHAM. Secretary Bodman, as DOE continues to draft an RFP for the upcoming SRS rebid, I encourage you to treat the SRS retiree benefit package in a manner that is fair and consistent with the DOE's previous practice at other sites such as the Los Alamos National Laboratory. This point of view is shared by the entire South Carolina and Georgia Senate delegations, as well as Governor Mark Sanford of South Carolina. Will SRS be treated in the same manner as Los Alamos National Laboratory?

Secretary BODMAN. The anticipated SRS RFPs will provide benefits packages for incumbent employees and new hires consistent with recent solicitations for management of major DOE facilities. Pursuant to this approach, the Department will continue to reimburse the allowable costs for incumbent employees hired by a new contractor to remain in their existing defined benefit pension plans subject to plan eligibility requirements and applicable law; that is, "if you're in, you're in." However, to the extent permitted by law, the RFPs would also require the contractors selected for award to provide market-based pension plans for new, non-incumbent employees hired after award. With respect to medical benefits for contractor employees, the DOE is currently assessing its approach and the anticipated RFPs will reflect the outcome of this process.

84. Senator GRAHAM. Secretary Bodman, last year, money was diverted from projects at SRS to meet obligations of the pension fund. I understand the funding shortfall was not a result of mismanagement of pension assets, but due to a penalty payment that was assessed on the fund as a result of lower-than-expected returns on fund assets. While the budgetary pressures caused by the increased pension liabilities did not directly impact critical work at SRS, work was delayed nonetheless. I understand pension shortfalls are not unique to the SRS and are symptomatic of a DOE-wide problem. How does DOE intend to meet pension obligations without negatively impacting work at DOE sites?

Secretary BODMAN. When the DOE encounters a shortfall in the pension fund, we carefully evaluate and allocate resources based on factors that support primary mission objectives, and attempt to identify as areas for deferral of work only those projects not critical to safety, health, or environmental protection and which do not impact regulatory compliance.

QUESTIONS SUBMITTED BY SENATOR JOHN CORNYN

INFORMATION SECURITY AND ASSURANCE

85. Senator CORNYN. Secretary Bodman, I continue to be concerned with securing Federal information systems. The Federal Government collects and manages a vast amount of information and much of it is sensitive or personal in nature. In addition, the systems that maintain that information are increasingly interconnected. Therefore, there is a growing risk of unauthorized access to these systems and information.

The Federal Information Security Management Act (FISMA) of 2002 requires Federal agencies to annually report on their information security efforts to OMB. The subsequent "Federal Computer Security Report Card" that GAO developed based on the information from the reported information gave the DOE a grade of "F" in 2002, 2003, and 2004. Generally, what efforts has DOE undertaken to improve its FISMA performance?

Secretary BODMAN. I have directed that the Department's entire cyber security program be revitalized. Under the leadership of our new DOE Chief Information Officer and a Department-wide team, we have developed a plan for this revitalization and we are moving aggressively to implement that plan. The revitalized cyber security plan guides systematic improvement of every aspect of cyber security. The plan mitigates the cyber security weaknesses that have been identified, based on the following principles:

- Managing cyber security risk in a dynamic threat environment requires sharing threat information, managing risk, and effective use of resources in such a manner as to be "sufficient but not overdone".
- Cyber security is everyone's business. The cyber security program's responsibilities are distributed among senior Department leaders to ensure a strong cyber-security posture, while preserving mission capability.
- Systematic improvement now as well as continuous improvement over the long term in the DOE cyber security posture is essential to strengthen the protection of DOE's information and information systems.

DOE has begun work under the new cyber security plan, and is leveraging existing expertise within DOE and best practices drawn from both within and outside the Department.

86. Senator CORNYN. Secretary Bodman, what is the status of the DOE's efforts to inventory information systems?

Secretary BODMAN. We have developed a comprehensive plan to improve the way we manage our large inventory of information systems and networks, including tracking all of our major hardware and software. We have invested in an automated capability to bring our inventory of systems up to date and to help ensure that our network boundaries are secure. This capability will help us ensure that our software is up to date, with the latest security software patches. We have already begun implementing this inventory control plan as part of our revitalized cyber security program.

87. Senator CORNYN. Secretary Bodman, what is your guidance to management personnel on the importance of protecting information and networks?

Secretary BODMAN. I have personally made it very clear to all DOE senior management that cyber security is a high priority, and that we must ensure adequate protection of all DOE information and information systems and networks. I have established cyber security as a personal priority for each Under Secretary and other top managers. I have ensured that these managers are directly involved in top-level planning for revitalizing the Department's cyber security by establishing a Cyber Security Steering Committee led by the Chief Information Officer; and having as members the Under Secretary/Administrator of the National Nuclear Security Administration, the Under Secretary for Energy, Science, and Environment, the Director of the Office of Science, the Director of the Office of Safety and Security Performance Assurance, the Administrator of the Energy Information Administration, and a representative of our power marketing administrations. This Executive Steering

Committee has provided overall direction in the formation of the revitalized DOE Cyber Security Program, recently approved by the Deputy Secretary and currently being implemented.

88. Senator CORNYN. Secretary Bodman, what ongoing activities are you pursuing to ensure that information security practices are followed throughout the agency?

Secretary BODMAN. I am holding everyone in the Department responsible for information security, and this accountability begins with senior departmental management. Accountability at all levels is critical to the success of cyber security throughout DOE. The line organization managers are crucial to the success of the cyber security program, ensuring long-term, continued emphasis on cyber security and the commitment of required resources needed to support the implementation of the Department's revitalized cyber security program within their organizations. Information system users are also responsible for doing their part to protect our information and information systems.

QUESTIONS SUBMITTED BY SENATOR JOHN THUNE

EDUCATION TO PRODUCE SCIENTISTS AND ENGINEERS

89. Senator THUNE. Secretary Bodman, one of the things I have heard several times this year both in this committee and on the floor of the Senate is America's struggle to educate and produce scientists and engineers. What threat do you think this problem poses to the maintenance of our current nuclear arsenal, our ability to create new weapons systems, and is the DOE taking any steps to recruit and train a new generation of scientists and engineers who will lead the DOE in the future?

Secretary BODMAN. The NNSA and its laboratories and plants have evolved from the singularly focused Manhattan Project into a national reservoir of technical expertise and capabilities in the numerous technologies that support the design and manufacture of the most complex and precise machines produced, nuclear weapons. Our primary customer, the DOD, relies on the scientists and engineers who design and build nuclear weapons to do their part to maintain U.S. strategic strike capabilities and also draws on them for innovative solutions to a wide range of military and intelligence problems. The Intelligence Community is another long-time customer that has drawn on the laboratories for exceptional, interdisciplinary innovation. The DHS turns to the laboratories often for analysis and technology for applications that range from biological weapons to port security. The Federal Bureau of Investigation and other law enforcement organizations use forensic technologies developed by the laboratories to analyze evidence. Of course, the DOE's Nuclear Nonproliferation effort absolutely depends on scientific and technical expertise available only at the laboratories and plants.

For these and many other reasons, we must maintain this talent pool, and I share your concerns about the challenges of recruiting the next generation of scientists and engineers to maintain and design nuclear weapons. For the Federal Government's homeland and national security enterprises, the potential of overall shortages in the sciences and engineering are even more worrisome because of the requirement for security clearances, which limits hiring to U.S. citizens. With an aging workforce where about 40 percent of nuclear weapons program technical staff members are retirement eligible, NNSA laboratories and plants have already had some difficulty hiring appropriately educated and trained persons into their highly skilled workforces. That experience, plus emerging data on the needs of the broader national security community for the same skills and a constricted education pipeline of U.S. citizens, especially those with advanced degrees, have raised concerns about NNSA's ability to maintain a highly skilled and appropriately trained workforce to carry out the nuclear weapons mission.

In 2004, the National Science and Technology Council (NSTC) Interagency Working Group on Critical Workforce Needs, led by NNSA, collected data across the defense, homeland security, and intelligence communities on hundreds of critical skills and the expected difficulty in finding U.S. citizens with those skills over the next 5–10 years. NNSA plants identified 256 critical skills, 32 percent "expected to be difficult to hire" in the 5–10 year time frame. With the addition of those skills that "may be difficult to hire," the percentage rises to 73 percent. For the laboratories there are 300 identified critical skills, half of them expected by the laboratories to be "difficult to hire." This percentage rises to 84 percent with the addition of skills identified as "may be difficult to hire". Of particular concern is filling positions at NNSA laboratories that require PhDs, as the total number of graduates in fields of

interest has been declining since 1997, and less than half these graduates from U.S. universities are U.S. citizens. Moreover, the 7–10 years it takes to earn a Ph.D., post baccalaureate, makes it imperative that we identify potential shortfalls and take steps now to develop skilled individuals.

To stay on top of the situation, we are committed to re-energizing the NSTC effort and continuing our support and participation in the interagency working group. We will seek annual data updates, added focus on high consequence skills, and continued data mining and analysis to share with all participants even as we use this data to target specific critical skills for attention.

Through headquarters selected programs, NNSA provides highly competitive fellowships and competitively awarded grants to develop needed science and engineering techniques, develop needed skills, and advance scholarship at the high school and undergraduate levels. These grants are awarded to major universities and minority institutions including Historically Black Colleges and Universities and the Massey Chairs of Excellence. We look to the laboratories and plants to both leverage our Federal programs and improve their intern programs to attract and develop diverse U.S. citizens with specific at-risk skills. We are reviewing on a continuing basis the efficiency and cost effectiveness of different investments to be certain that we have the necessary student and university programs. We need them to feed our laboratory and plant internship programs as they actively develop U.S. citizens with specific, at-risk skills.

I have challenged my NNSA managers not to rely on business-as-usual approaches to meet anticipated nuclear weapon critical skill hiring needs. NNSA and its laboratories and plants will work with universities, including minority educational institutions so that students will seamlessly transition from coursework and internships to employment. There are three substantial benefits from feeding the pipeline in this way: 1) there is mutual culling by the students and NNSA, because students return as interns each year by invitation and according to their own interest, 2) there is full benefit to the organization, because returning interns contribute to the mission effort, and 3) the critically skilled interns who are hired when they graduate do not require years of costly on-the-job training.

PIT MANUFACTURING FACILITY

90. Senator THUNE. Secretary Bodman, in your testimony you state "We were disappointed, however, that Congress declined to fund planning for a modern pit production facility in fiscal year 2006. As a result, we did not seek funding for this facility in fiscal year 2007, although we remain convinced that increased pit production capacity is essential to our long-term evolution to a more responsive nuclear weapons infrastructure. In coming months, we will work with Congress to identify an agreed approach to fund long-term pit production capacity. In the meantime, we plan to increase the Los Alamos pit manufacturing capacity to 30–40 pits per year by the end of fiscal year 2012. This production rate, however, will be insufficient to meet our assessed long-term pit production needs."

Do you believe that Congress is asking you to maintain a high standard of performance but not providing you with the resources to complete your mission?

Secretary BODMAN. The lack of funding for a higher pit production capacity is a concern. The NNSA submitted a report to Congress in January 2005 that identified the need for at least a 125-pit-per-year capacity starting in 2021. Our work with the DOD to develop long-term stockpile quantities and transformation rates suggests that this pit production capacity is about right. This spring, the DOE will provide Congress the results of its review of the Secretary of Energy Advisory Board Nuclear Weapons Complex Infrastructure Task Force. The NNSA is committed to work with Congress to establish the appropriate funding and schedule to establish a more responsive infrastructure that will support the nuclear weapons stockpile into the future.

91. Senator THUNE. Secretary Bodman, with the age of our warheads, pit production must be responsive. We must have the capacity to produce what we need. We do not have the luxury of time on our side. The arsenal is decaying. Safety and reliability are in jeopardy because we cannot certify that these aging warheads will operate as they were designed. What is your level of confidence on the safety and reliability of our arsenal?

Secretary BODMAN. I am highly confident in the current safety and assessed reliability of the U.S. nuclear weapons stockpile, and recently joined the Secretary of Defense in providing the President our assessment of this very issue. I have personally met with the Directors of Los Alamos, Lawrence Livermore, and Sandia Na-

tional Laboratories to discuss the status of the nuclear weapons stockpile at length, and I have reviewed their assessments of each system in the stockpile. However, we have concluded that the path we are currently on—successive refurbishments of warheads in the Cold War legacy stockpile which have tight design margins due to the yield-to-weight requirements—presents increased risk in our being able to assure high confidence in the continued safety and reliability of that stockpile over the very long term (many decades) without nuclear testing. The evolution away from tested designs, resulting from the inevitable accumulations of small changes over the extended lifetimes of these highly optimized systems with low performance margins, is what gives rise to this concern. Nor will successive refurbishments support transition to a truly "responsive" and cost effective nuclear weapons infrastructure as called for in the NPR. These concerns reflect the judgment of the directors at the three national weapons laboratories—Los Alamos, Livermore, and Sandia—and that of the Commander of U.S. Strategic Command, who is advised by his group of experts. We are exploring RRW options in order to ensure the long-term sustainability of the current military capabilities provided by warheads in the existing stockpile.

92. Senator THUNE. Secretary Bodman, how do we speed up the transformation to assure we have a safe and reliable nuclear weapons stockpile?

Secretary BODMAN. The RRW concept and responsive infrastructure—each enabled by the other—may genuinely be transformational. RRW allows the promise for sustaining, with long-term confidence and without underground nuclear testing, military characteristics existing in the stockpile today. At the same time, RRW will enable us to enhance safety and security and simplify the manufacturing and certification processes, which helps enable a responsive infrastructure. A responsive infrastructure, in turn, would enable further reductions in stockpile size. We are currently conducting a Nuclear Weapons Council-approved RRW feasibility study. Once that study is completed, the Nuclear Weapons Council will select a preferred option and the administration will agree on a path forward for stockpile transformation.

FUNDING FOR CLEANUP SITES

93. Senator THUNE. Secretary Bodman, over the last year you completed the cleanup of the Rocky Flats site in Colorado while working cleanup of several other sites. Yet, the EM budget only dropped by 2.5 percent. You mentioned that overly optimistic assumptions and unrealized technology advancements have led you to the slower progress you are experiencing. I'm concerned about the management cost overruns and what I consider a lack of oversight. Congress is investing a significant amount of funds each year and your execution of the cleanup has been sub par. What actions have you taken to rectify this problem?

Secretary BODMAN. While EM has had a number of successes, it is true that EM has also had less successful projects, as well. The actions we have taken to address these latter projects include maintaining focus on safe, cost-effective risk reduction and cleanup. Safety is our highest priority. To improve project oversight, we are increasing our concentration on project management. We are training the EM leaders, project managers, and staff to become certified in accordance with industry standards. We are independently validating project baselines, schedules, and assumptions about effective identification and management of risks. We are working to ensure that our cleanup contracts are designed to drive outstanding performance. We are striving for constant, real time feedback of lessons learned to improve project planning and execution. We believe these steps will enable EM to continue making progress and improve project performance:

- Monthly project reviews by site managers and headquarters staff;
- Quarterly project reviews by the Assistant Secretary and senior headquarters managers; and,
- Full implementation of DOE orders on all EM projects, both capital construction and operating.

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

GLOBAL NUCLEAR ENERGY PARTNERSHIP

94. Senator LEVIN. Secretary Bodman, a key element of the Global Nuclear Energy Partnership (GNEP) plan is that other countries would supply new nuclear fuel and take back spent nuclear fuel. Have any other countries expressed an interest

in being fuel supplier countries, and would these countries also agree to take back and reprocess the spent fuel?

Secretary BODMAN. The preliminary responses from major fuel supply nations and the IAEA have been very encouraging. We look forward to expanding our discussions with both fuel supply nations and potential fuel user nations as this important initiative moves forward. These countries do not necessarily have to agree to take back and recycle used fuel; however, the intent would be that at least one GNEP supplier nation would do so.

95. Senator LEVIN. Secretary Bodman, part of the GNEP program is the development of proliferation resistant nuclear fuel cycle technologies. Are any funds included in the DOE fiscal year 2007 budget request for research and development to support proliferation resistant nuclear fuel cycle technologies?

Secretary BODMAN. The fiscal year 2007 budget request for the GNEP initiative is $250 million to accelerate the development of proliferation-resistant fuel technologies. The Department has proposed to continue research and development and engineering and environmental studies needed to develop a baseline cost and schedule for three possible engineering scale demonstrations of more proliferation resistant fuel technologies that would fit together as an integrated fuel recycle system.

96. Senator LEVIN. Secretary Bodman, in the press packet and budget materials describing GNEP, DOE claims that it has developed a new proliferation resistant fuel reprocessing technology. Would other member countries of the GNEP be required to use the DOE technology?

Secretary BODMAN. Supplier nations would continue to operate current generation fuel cycle facilities and would work with the U.S. and partner nations to develop and demonstrate new, more proliferation resistant fuel recycling technologies that could be deployed in the future.

97. Senator LEVIN. Secretary Bodman, under GNEP some countries would be nuclear fuel suppliers and others would receive the fuel. Who would determine which countries would have nuclear power reactor fuel supplied to them?

Secretary BODMAN. Key supplier states would agree on the framework for safe and secure expansion of nuclear energy, agreeing to arrangements that permit the use of reactors and provide fuel services, while discouraging further spread of enrichment and reprocessing.

98. Senator LEVIN. Secretary Bodman, would the fuel recipients all have to be signatories to the Nonproliferation Treaty (NPT)?

Secretary BODMAN. We envision that all recipients of fuel under the GNEP reliable fuel services regime would have to meet certain nonproliferation commitments, for example, refraining from the development of enrichment and reprocessing capabilities, implementing the IAEA Additional Protocol and complying with NPT and IAEA safeguards and Additional Protocol obligations, and maintaining the latest international standards for the physical protection of nuclear materials.

99. Senator LEVIN. Secretary Bodman, currently, nuclear fuel or other nuclear technology assistance cannot be provided to countries who are not signatories to the NPT. What happens to the NPT under the GNEP proposal?

Secretary BODMAN. GNEP will be implemented in conformity with the NPT and will strengthen the NPT by offering reliable fuel services as an alternative to the further spread of enrichment and reprocessing capabilities, which can be used as a cover for developing a nuclear weapons capability.

100. Senator LEVIN. Secretary Bodman, under the GNEP does DOE see a centralized nuclear fuel pricing arrangement, similar to OPEC? How and who decide the price of nuclear fuel?

Secretary BODMAN. No. GNEP does not contemplate centralized nuclear fuel pricing. GNEP seeks agreement on the shared goals of the partnership and market competition among diverse suppliers within that framework. We seek, among supplier states in the partnership, agreement on goals that will improve security, operation and waste management characteristics of the fuel cycle over time. Currently, commercial marketing of fuel services and reactors is concentrated among the United States, the European Union, Japan, Canada, Russia, and China. These countries account for about 80 percent of world nuclear energy capacity. In addition to seeking to expand nuclear energy within these states, GNEP seeks to expand the market for fuel services responsibly to developing countries interested in bringing the benefits of nuclear power to their economy. These countries, under the GNEP initiative,

would be able to purchase a reactor and then lease fuel and not have to make their own investments in enrichment or reprocessing.

To back up market mechanisms, the United States supports and is committed to supply low-enriched uranium to a fuel reserve to that would provide supply assurances to countries foregoing enrichment and reprocessing. In the event of a short-term supply disruption that the market cannot correct, fuel from this reserve could be sold at market prices for distribution, thus increasing the confidence of reactor-only states that they could meet their energy needs. Market competition would nevertheless be the primary factor in determining the prices for nuclear fuel services.

101. Senator LEVIN. Secretary Bodman, would spent fuel reprocessing reduce the volume of high level waste generated that would be required to be stored at a geologic repository?

Secretary BODMAN. Volume reduction is a factor in determining the loading of the geologic repository, especially to the extent that it reduces the number of disposal containers that are required. However, a more important consideration in the loading of the repository is the heat generated by radioactive decay of certain constituents of the spent fuel. Decay heat drops rapidly as a function of time after discharge from the reactor. Decay heat shortly after discharge is dominated by several short-lived fission products such as isotopes of tellurium, ruthenium, cerium, xenon, and zirconium; that heat is dissipated during water pool cooling. After the initial cooling period, the decay heat is dominated for the next 60–70 years primarily by the decay of cesium and strontium. Beyond that period, the decay heat is dominated by isotopes of the transuranic elements—plutonium, neptunium, americium, and curium—due to their relatively long half-lives. As a result, by separating the cesium and strontium and the transuranic elements from the spent fuel, and consuming the transuranic elements in a fast spectrum reactor, the Department estimates that the capacity of the Yucca Mountain repository would be significantly increased, by a factor of 50–100. The actual increase in capacity will depend on how successful we are with the demonstration projects; that is, to what level of efficiency we can recover and destroy the heat-generating radionuclides.

102. Senator LEVIN. Secretary Bodman, in the past, millions of gallons of high level radioactive waste were generated through reprocessing that must now be vitrified and sent to a geologic waste repository. What is the disposition path for the high level waste that would be generated as part of the GNEP spent fuel reprocessing proposal?

Secretary BODMAN. While the PUREX process used today in the world and DOE's advanced recycle technology, Uranium Extraction Plus (UREX+), both involve chemical separations processes, the detailed "flow sheets" or processes for the technologies are significantly different. For example, PUREX is a batch processing process and UREX+ is a much more efficient and less waste intensive continuous process.

An important design objective of the UREX+ technology, as well as an objective in demonstrating the technology at an engineering scale, is to validate that UREX+ can successfully partition spent fuel into its component parts to produce a transuranic product that can be consumed in a fast reactor rather than disposed of in a geologic repository. Also, the UREX+ group separations process precludes separation of a pure plutonium product, a significant advantage from a proliferation perspective. Finally, UREX+ represents significantly improved means of handling the separated fission products from spent fuel and improved processing which would not result in the accumulation of any high-level liquid waste.

NUCLEAR WEAPONS COMPLEX ISSUES

103. Senator LEVIN. Secretary Bodman, has the DOE prepared a response to the July 2005 recommendations of the Energy Advisory Board on reconfiguring the nuclear weapons complex?

Secretary BODMAN. The Secretary of Energy Advisory Board (SEAB) Nuclear Weapons Complex Infrastructure Task Force Report on the Nuclear Weapons Complex was issued as a draft in July 2005 and submitted by the Board to me in October 2005. We have been analyzing these recommendations and other recent inputs (e.g., QDR) to a long-term planning scenario for the nuclear weapons complex. DOE is preparing a comprehensive response defining what we are going to do. We will be sharing the planning scenario with stakeholders, including Congress, early this spring.

104. Senator LEVIN. Secretary Bodman, what studies, reviews, or other actions has the DOE taken or are currently ongoing in response to the Advisory Board report?

Secretary BODMAN. Within the NNSA, Defense Programs has been actively reviewing the recommendations of the SEAB Nuclear Weapons Complex Infrastructure Task Force to prepare a comprehensive path forward. Of note, many SEAB recommendations are consistent with initiatives that NNSA already has planned or is currently implementing (e.g., immediate design of a RRW, consolidation of special nuclear materials, accelerating dismantlement of retired weapons, and managing the evolving complex to enhance responsiveness and sustainability). However, a major SEAB recommendation dealing with planning for a Consolidated Nuclear Production Center requires further review before a path forward is selected. These reviews are underway and anticipated to be completed in time to share the results with Members of Congress this spring.

ROBUST NUCLEAR EARTH PENETRATOR

105. Senator LEVIN. Secretary Bodman, what is the DOD planning to do with the $4.0 million that was transferred to it from DOE in fiscal year 2006?

Secretary BODMAN. We believe the DOD should address its plans for the $4.0 million appropriated to DOD in fiscal year 2006 for earth penetrator studies.

106. Senator LEVIN. Secretary Bodman, will this money be used to conduct the robust nuclear earth penetrator sled test?

Secretary BODMAN. We believe the DOD should address its plans for the $4.0 million appropriated to DOD in fiscal year 2006 for earth penetrator studies.

107. Senator LEVIN. Secretary Bodman, will DOE/NNSA participate in any way in the sled test?

Secretary BODMAN. The Fiscal Year 2006 Energy and Water Development Appropriations Act eliminated all funds requested for the RNEP program, including funds to conduct a sled test previously under preparation at Sandia National Laboratories. No sled test for a nuclear earth penetrator study will be funded by or conducted at any DOE site. If the DOD conducts an earth penetrator test at a DOD facility and requests DOE support, the Department will, through its national laboratories, provide equipment and technical expertise as necessary.

NUCLEAR TEST READINESS

108. Senator LEVIN. Secretary Bodman, will the DOE be submitting a legislative proposal to repeal section 3113 of the National Defense Authorization Act for Fiscal Year 2004, requiring an 18-month test readiness posture by October 2006?

Secretary BODMAN. Not at this time. While the NNSA has made considerable progress in improving its test readiness posture over the last 4 years cutting the readiness time from 36 months to 24, Congress did not fully provide the funding requested by the President to achieve an 18-month test readiness posture by the end of fiscal year 2006, as required by section 3113 of the National Defense Authorization Act for Fiscal Year 2004. I would be happy to work with Congress to address this issue.

NUCLEAR WEAPONS STOCKPILE REDUCTIONS

109. Senator LEVIN. Secretary Bodman, does the DOE/NNSA budget request for fiscal year 2007 begin substantial reductions in the nuclear weapons stockpile?

Secretary BODMAN. The President's request for the fiscal year 2007 weapons budget is fully consistent with the June 2004 report to Congress on the nuclear weapons stockpile that explains the plan to reduce the size of the U.S. nuclear stockpile. This reduction includes both active and inactive strategic warheads, as well as nonstrategic nuclear warheads. These reductions have already begun and will continue in fiscal year 2007. By 2012, the U.S. nuclear stockpile will be reduced by nearly one-half from fiscal year 2001 levels, resulting in the smallest nuclear stockpile since the Eisenhower administration.

110. Senator LEVIN. Secretary Bodman, how many warheads from the current stockpile will be retired and how many will be dismantled in fiscal year 2007?

Secretary BODMAN. [Deleted.]

NATIONAL IGNITION FACILITY

111. Senator LEVIN. Secretary Bodman, will you commit to providing adequate funding to the National Ignition Facility (NIF) to support ignition by 2010 and support a robust series of high density physics experiments?

Secretary BODMAN. The fiscal year 2006 appropriation and fiscal year 2007 budget request are sufficient to enable DOE to conduct an ignition experiment at the NIF in 2010. The goal of ignition is a top priority of DOE. In order to maintain the commitment to an ignition experiment in 2010, it has been necessary to reduce somewhat other high energy density physics experiments.

MATERIALS PROTECTION CONTROL AND ACCOUNTING

112. Senator LEVIN. Secretary Bodman, is the DOE/NNSA on track to complete all permanent upgrades at nuclear materials sites in Russia and the former Soviet Union by 2010?

Secretary BODMAN. Yes. In response to the September 11, 2001, attacks, NNSA took aggressive steps to accelerate the original 2010 schedule so that the security upgrade activities will be completed by the end of 2008, after which facilities will be transitioned into a sustainability phase. In addition, the Bratislava agreement provided for a comprehensive joint action plan for cooperation on security upgrades of Russian nuclear facilities within the Rosatom complex. This plan ensures that security upgrades for Russian Rosatom facilities will be completed by the target date of 2008.

113. Senator LEVIN. Secretary Bodman, is the DOE/NNSA on track to complete all permanent upgrades at nuclear weapons storage areas in Russia by 2008?

Secretary BODMAN. Yes. Cooperation to secure the nuclear warhead storage sites of the Russian Strategic Rocket Forces will be completed by the end of 2008. Under the Bratislava Initiative, the Russian Ministry of Defense nominated a number of new nuclear warhead storage sites operated by the 12th Main Directorate for cooperative work. We are confident that we will also conclude these efforts by the end of 2008.

114. Senator LEVIN. Secretary Bodman, could either effort be accelerated?

Secretary BODMAN. Yes. Both efforts have already been accelerated. In response to the September 11, 2001, attacks, NNSA took aggressive steps to accelerate the completion of security upgrades by 2008, 2 full years ahead of schedule. The nomination of all the 12th Main Directorate sites under the Bratislava Initiative has increased our work scope, but we believe we will complete these by 2008 as well.

HANFORD WASTE TREATMENT PLANT

115. Senator LEVIN. Secretary Bodman, what is the process for agreeing to final seismic criteria for the Hanford WTP, when will the process be complete, and will the criteria be validated?

Secretary BODMAN. The WTP prime contractor, Bechtel National Inc., has prepared and submitted the latest seismic design criteria. These incorporate the DOE's current best understanding of the seismic hazard at Hanford and the WTP. The DOE is currently reviewing these criteria. The U.S. Army Corps of Engineers, engaged by the DOE, has independently reviewed and concurred with the final design criteria. The DOE will discuss the final seismic criteria with the Defense Nuclear Facilities Safety Board and will carefully consider the Board's recommendation regarding the criteria, if any. The DOE expects the reviews and discussions to be completed by late summer 2006 to permit proceeding with construction of the facilities affected by the seismic criteria.

In addition, the DOE is proceeding with the drilling of at least one deep borehole to confirm the ground motion data, which should be completed in summer 2007. The assumption is the latest design criteria have an acceptable margin of design. Also, the DOE intends to update the probabilistic seismic hazard analysis in the next 2 years to reflect modest changes in methodology that will have occurred.

116. Senator LEVIN. Secretary Bodman, what is the process for determining the realistic cost and schedule to complete the Hanford WTP and when will this process be complete?

Secretary BODMAN. The WTP prime contractor, Bechtel National Inc., was directed and provided to the DOE an updated detailed Estimate-at-Completion (EAC)

for the project in December 2005. Several actions have occurred or are occurring to develop a realistic estimate. DOE has implemented two independent "best and brightest" expert reviews: 1) an evaluation of the technical adequacy of the design to meet the contract performance specifications, which is to be completed by spring 2006, and 2) an assessment of the confidence in the EAC and management approach, which is to be completed by spring 2006. The EAC is being revised based on the impacts and results of these actions and the revision provided to the DOE in late spring 2006. Since the hearing, the two "best and brightest" reports have been completed and delivered to the committees.

The DOE has also engaged the USACE to perform an independent expert review of the EAC, and, if acceptable, to validate the EAC. The USACE has retained a number of recognized industry experts working alongside its own senior staff. The USACE's report is scheduled to be completed by late summer 2006. DOE delivered an interim report produced by USACE in March 2006.

Based on the results from the reviews, the DOE expects to establish a sound cost and schedule to complete the Hanford WTP. The objective is to ensure this project will be well managed. We owe it to Congress, regional stakeholders, and the U.S. taxpayers that the substantial investment in the WTP is receiving the highest level of talent and attention the DOE can provide.

117. Senator LEVIN. Secretary Bodman, will this process be completed using the final validated seismic criteria?

Secretary BODMAN. Since March 2005, the interim seismic criteria have been the basis for the design for the Hanford Waste Treatment and Immobilization Plant. The DOE expects the reviews and discussions for the final seismic criteria to be completed by late summer 2006. This will include reviews by the U.S. Army Corps of Engineers and the Defense Nuclear Facilities Safety Board. The basis for design will transition to the final seismic design criteria and permit proceeding with construction of the facilities affected by the concern for seismic issues.

118. Senator LEVIN. Secretary Bodman, when the cost and schedule are finally revised, what level of confidence will the DOE have in completing the project within the revised cost and schedule baseline?

Secretary BODMAN. The DOE is assessing the confidence in the design, cost, and schedule for each of the five major facilities which make up the Hanford WTP. The WTP prime contractor, Bechtel National Inc., submitted to the DOE an updated detailed Estimate-at-Completion for the project in December 2005. The submittal includes an analysis of the necessary contingency to provide for an 80 percent confidence in the estimate, considering the complexity of the project, the cost and schedule uncertainties, and the maturity of the design. There are also risks which are beyond the contractor's control, such as potential future changes in existing regulatory requirements and funding, which have been estimated by the contractor. These estimates are being reviewed by the DOE and independent external experts as well as a validation review by the U.S. Army Corps of Engineers.

The DOE is also conducting extensive evaluations and enhancing the project management systems, risks management, technical support, business infrastructure, and oversight procedures required for successful execution of the project. The implementation of recommendations from these evaluations will increase the confidence in the management of the project and sets up the tools and the framework to anticipate and resolve new problems that may arise during project execution.

WORKER HEALTH AND SAFETY

119. Senator LEVIN. Secretary Bodman, in early February the DOE published the Worker Health and Safety Rule. Is funding requested in the fiscal year 2007 DOE budget request to implement the rule?

Secretary BODMAN. Yes, funding is requested within the fiscal year 2007 budget request to implement the rule.

120. Senator LEVIN. Secretary Bodman, if there is funding requested what is the amount requested and in what accounts is the requested amount contained?

Secretary BODMAN. The funding falls under the Energy Supply and Conservation Appropriation—in Policy, Standards and Guidance and DOE-Wide Environment, Safety, and Health Programs. The Office of Health requested $410,000 and the Office of Price Anderson Enforcement (which conducts all EH enforcement activities) requested $450,000 in fiscal year 2007. In addition to this funding, the fiscal year

2007 budget also includes funding in Program Direction for three Federal FTEs to conduct worker safety and health enforcement.

QUESTIONS SUBMITTED BY SENATOR EDWARD M. KENNEDY

CHAPMAN VALVE

121. Senator KENNEDY. Secretary Bodman, Chapman Valve in Springfield, Massachusetts, is listed by the DOE as an atomic weapons employer facility covered under the Energy Employees Occupational Illness Compensation Program (EEOICP) for the years 1948–1949. Chapman Valve performed uranium processing work for Brookhaven Labs for their reactor programs and Brookhaven is reported to have records concerning Chapman Valve. According to minutes of a National Institute for Occupational Safety and Health (NIOSH) meeting held in Springfield, Massachusetts, and according to government officials present at this meeting, their records had not been recovered. Would you be able to have the Office of Worker Advocacy within the Office of Environment, Safety, and Health provide a copy of the contract(s) or purchase orders between the Manhattan Engineer District (MED)/Atomic Energy Commission and Chapman Valve?

Secretary BODMAN. The Office of Environment, Safety, and Health (EH) does not have custody of contracts or purchase orders between DOE or its predecessor agencies and Chapman Valve Company. Contracts from this era have been transferred to the National Archives and Records Administration in Atlanta, Georgia. I have instructed EH to attempt to locate the information you requested and provide it to you if found.

122. Senator KENNEDY. Secretary Bodman, can you please provide copies of documents held in the archives of the Brookhaven Labs (or entities which have Brookhaven's historical records) pertaining to Chapman Valve, including but not limited to purchase orders, shipments, receipts, specifications, and memorandum?

Secretary BODMAN. Yes. The EH will make this specific request to Brookhaven Labs and report back to you if the records can be located.

EH regularly works with DOE sites and records centers to ensure that any information and/or records are available for the purposes of EEOICP.

123. Senator KENNEDY. Secretary Bodman, the DOE appears to be cutting its former worker medical screening program. This program was authorized under the National Defense Authorization Act for Fiscal Year 1993. In fiscal year 2006, $16.5 million was appropriated, yet the DOE has requested only $12.3 million in fiscal year 2007. Why has the DOE cut the budget for this program which screens beryllium and nuclear workers for occupational diseases?

Secretary BODMAN. The Department's fiscal year 2007 request for $12.4 million for the Former Worker Medical Surveillance Program (FWP) is essentially level with the Department's fiscal year 2006 request of $12.5 million for the FWP.

The $16.5 million Congress appropriated for fiscal year 2006 includes approximately $4 million in earmarks for targeted program components including a new CT scanning initiative that screens DOE's Oak Ridge National Laboratory and Y–12 plant workers for lung cancer.

QUESTIONS SUBMITTED BY SENATOR JACK REED

ENERGY EFFICIENCY INVESTMENT

124. Senator REED. Secretary Bodman, during the President's State of the Union address, he said America is addicted to oil. Yet, 1 week later, the administration submits a budget to Congress that cuts funding to key energy efficiency initiatives such as building codes and weatherization programs, EnergyStar, and industrial energy efficiency that are proven to reduce our dependence on fossil fuel. In December, Senator Snowe and I led a bipartisan letter signed by 30 Senators asking the President to fully fund energy efficiency and renewable energy programs authorized in the Energy Policy Act of 2005. I am sorry that the administration did not support our request. Today's investments in these programs create energy savings for decades. Could you please explain to me how the administration can ask the American public and businesses to reduce their energy consumption but the administration is not willing to do the same by making meaningful investments in energy efficiency?

Secretary BODMAN. The Advanced Energy Initiative aims to reduce America's dependence on imported energy sources. The fiscal year 2007 DOE budget requests

$2.1 billion to meet these goals, an increase of $381 million over fiscal year 2006. Funding will help develop clean, affordable sources of energy that will lead to changes in the way we power our homes, businesses, and cars.

The Advanced Energy Initiative includes a broad mix of oil displacement and clean energy R&D initiatives, including nuclear (up 56 percent to $392 million), solar (up 78 percent to $148 million), and biomass (up 65 percent to $150 million). Specific goals include reducing the cost of cellulosic ethanol to $1.07/gallon by 2012, and reducing the cost of solar photovoltaics to less than 10 cents/kilowatt hour by 2015. The Energy Policy Act contains authorizations for a variety of initiatives. As the administration noted in the July 15, 2005, letter to the conference committee on H.R. 6, the House and Senate versions included authorizations levels that set unrealistic targets and expectations for future program-funding decisions. The President's fiscal year 2007 budget proposal reflects the administration's programmatic and fiscal priorities. Those priorities took into account the spending opportunities presented by the Energy Policy Act.

ENERGY INFORMATION ADMINISTRATION

125. Senator REED. Secretary Bodman, recently 57 prominent energy economists, analysts, and members of the investment community wrote you urging sustained increases in funding for the Energy Information Administration (EIA) to improve energy data analysis. I personally know the importance of EIA data for tracking energy prices, particularly heating oil in New England, and supply and demand in the marketplace. What is DOE doing to comprehensively assess the budget and staffing requirements necessary to improve EIA's data collection, analysis, and reporting capacity?

Secretary BODMAN. DOE recognizes the importance of EIA's information and analyses and has taken steps to strengthen its data quality, timeliness, and reliability. The Department's fiscal year 2007 budget formulation process assessed budget and staffing requirements across programs. As a result of this review, EIA's fiscal year 2007 request of $89.8 million is 5.2 percent ($4.5 million) above the fiscal year 2006 appropriation. The additional resources, if provided, would be directed toward redesigning key petroleum and natural gas surveys to improve data reliability and statistical accuracy, and toward increasing global oil and gas data and modeling capabilities to address data issues which can contribute to oil market volatility. Also funded would be initial scoping activities on a next-generation U.S. energy model to replace the current National Energy Model System, which would improve EIA's ability to assess and forecast supply, demand, and technology trends impacting U.S. and world energy markets.

126. Senator REED. Secretary Bodman, how do you plan to address the staff shortages, modernize statistical software, upgrade information technology, and improve data quality? I would appreciate it if you please provide a detailed analysis of the resources in terms of both funding and staffing to address these issues.

Secretary BODMAN. As with much of the Federal Government, over 30 percent of EIA's staff is, or soon will be, eligible to retire. EIA is addressing its staffing situation on multiple levels. It continues to reduce skill gaps in mission-critical occupations through aggressive recruiting of mathematical and survey statisticians, operations research analysts, and economists. Its hiring process has been streamlined for entry-level and journeyman-level positions. Rotational opportunities are provided for existing staff to expand their breadth of knowledge and skill level. Formal training and certification in project, contract, and financial management is being pursued for its project managers, engineers, information technology specialists, and contract technical monitors.

Just as retirements are driving human resource challenges, the increasingly more complex and interdependent domestic and global energy markets are driving EIA to focus limited resources on maintaining the quality, timeliness, and relevance of its products. In fiscal year 2007, about half of the requested $4.5 million funding increase, supplemented by resources redirected from lower priority surveys and deferred maintenance activities, will support EIA's critical priorities of improving data quality and upgrading its modeling and forecasting capabilities.

EIA will redirect resources to review and maintain selected, high priority petroleum and natural gas survey frames that have reached the end of their useful life. This effort, which will yield both cost reductions and quality improvements, is essential to produce accurate statistics, resolve data discrepancies, and keep abreast of changes in the energy industry. EIA will identify new respondents required to report on the petroleum and natural gas surveys, and will make needed modifica-

tions to the supply and marketing information database system and the natural gas information processing systems. EIA will continue data quality activities such as reducing large unaccounted-for crude oil statistics, missing motor gasoline production, and missing crude and petroleum product imports. Updating and improving other survey frames, such as petroleum and natural gas reserves and coal and alternative fuels, will be deferred.

During fiscal year 2007, EIA will begin scoping the requirements of a next-generation National Energy Model System. The current system was developed in the early 1990s and has exceeded its expected lifecycle. A reliable and maintainable mid-term energy model is needed for EIA to develop baseline energy projections and execute policy analyses requested by Congress and the administration. We have allocated six full time equivalents and approximately $1.2 million on this effort in fiscal year 2007. EIA will work with its stakeholders to assess their requirements. The redesign will likely improve the representation of energy markets with added flexibility to address new policies and technologies; change the mathematical representation methods resulting in improved accuracy, stable solutions, and reduced time for model simulations; use modern programming tools that are more flexible and powerful; and add the representation of hydrogen production and distribution to enable the analysis of additional options to reduce dependence on foreign oil and to decrease emissions of greenhouse gases.

In fiscal year 2007, EIA also will focus on improving the modeling, forecasting, and analysis of international energy markets which are increasingly influencing U.S. markets for natural gas. EIA plans to enhance its analysis of global liquefied natural gas (LNG) markets, since U.S. dependence on LNG is forecasted to grow from 3 percent of natural gas supplies in 2004 to 20 percent in 2030. Our expanded analysis would reflect fundamental changes in technologies and world energy market conditions, as well as global competition for stranded natural gas resources.

QUESTIONS SUBMITTED BY SENATOR HILLARY RODHAM CLINTON

GLOBAL NUCLEAR ENERGY PARTNERSHIP

127. Senator CLINTON. Secretary Bodman, one of the biggest concerns about reprocessing is that it creates plutonium, which can be used to make nuclear weapons. This is a problem associated with reprocessing technologies used in France and elsewhere, and is the reason that the U.S. has consistently opposed reprocessing. The administration is claiming that the GNEP reprocessing technology would not separate the plutonium from other elements, and therefore, that the reprocessed material would be proliferation-resistant.

But this is only by comparison to other reprocessing methods. In fact, a 2003 MIT study and other studies have concluded that conventional spent fuel is far more proliferation resistant—the reason being that it is far too radioactive to be handled by terrorists or others who lack the necessary safety equipment.

Isn't it true that any conceivable reprocessed fuel, regardless of the reprocessing technology used, would be more easily handled by terrorists than conventional spent fuel?

Secretary BODMAN. It is important to emphasize that UREX+ technology is not an end in itself. It is part of a GNEP technology pathway to allow the plutonium and other transuranic elements from light water reactor spent fuel to be consumed in electricity producing advanced burner reactors. If this approach is successful, it will allow a complete transformation of the nuclear waste management challenge and of the international nuclear fuel cycle. Therefore, a static focus simply comparing spent fuel assemblies in storage in the U.S. and UREX+ from the point of view of technical "proliferation-resistance" is much too narrow, particularly as several of the advanced nuclear economies are currently separating plutonium and separated civil stocks are nearly 250 metric tons today—a figure that is more than double the total amount of plutonium that was produced for the U.S. nuclear weapons program since 1944.

The real issue is whether we can build domestic and international consensus on a sustainable approach whereby a few advanced fuel cycle nations build systems that can eliminate the plutonium and other transuranics separated from the world's vast and growing stocks of light water reactor spent fuel, recycle it back through advanced burner reactors, and fully consume it, both reducing proliferation risks by providing reliable fuel services and resolving the growing nuclear waste problem.

It provides the opportunity to reshape the management of spent fuel at home and abroad, in support of new arrangements that constrain proliferation. Proliferation and the buildup of plutonium in the world have not stopped over the past three dec-

ades. GNEP seeks to address the global buildup of civil plutonium stocks and looks to move beyond the spent fuel standard by defining a path to reduce and eliminate those materials.

Within the U.S., a UREX+ facility on U.S. Government property would be secured to meet all requirements posed by the material stream, up to the stored weapon standard if necessary. UREX+ would not separate or accumulate plutonium and would be used only in proportion to making fuel for advanced burner reactors. Doing nothing is not a success strategy for nuclear energy growth to meet pressing domestic and international energy, environmental, and nonproliferation challenges.

128. Senator CLINTON. Secretary Bodman, doesn't reprocessing under GNEP thus actually increase proliferation risks rather than decrease them?

Secretary BODMAN. No, GNEP is a comprehensive strategy to increase U.S. and global energy security, encourage clean development around the world, improve the environment, and reduce the risk of nuclear proliferation. In this context, GNEP aims to develop and demonstrate technologies that are more proliferation-resistant, but this concept needs to be viewed broadly. The GNEP model works because only the supplier states will be engaged in the recycling of spent fuel. These are states with strong non-proliferation records. One of the principal objectives of GNEP is to develop successor technologies to those in commercial use today. These technologies would be more proliferation resistant and more robust, by design, from a physical protection standpoint, and would employ advanced international safeguards. These processes will be under IAEA verification auspices. GNEP will consider a variety of advanced recycling approaches, beginning with the one that is most mature, UREX+. We also plan to consider other recycling technologies, including pyroprocessing.

More broadly, GNEP will enable the United States to regain the lead internationally in charting the future of the nuclear fuel cycle. By developing a credible alternative to both the once-through cycle and current mixed oxide programs, we will help to transform spent fuel management in a way that advances our own energy, economic, environmental, and security interests, and those of the international community. We will work to build a consensus around the principle that production of separated plutonium should come to an end and separated plutonium should be eliminated from civil use. Over time, GNEP should result in the reduction of existing stocks of separated plutonium and an end to the accumulation of spent fuel around the world. Sensitive facilities and materials would be limited to a small number of advanced and responsible states. Cradle-to-grave fuel cycle services would offer an attractive alternative to current fuel supply arrangements and help to prevent the spread of sensitive fuel cycle capabilities. In sum, we believe GNEP is a net plus for the nonproliferation regime and will decrease proliferation risks.

129. Senator CLINTON. Secretary Bodman, in the fiscal year 2007 budget, the administration spends $250 million on GNEP—a project with uncertain and very distant benefits—but cuts other important programs with significant and near-term payoffs. But the $250 million in fiscal year 2007 is just the first GNEP installment. Based on DOE documents, the fiscal year 2008 and fiscal year 2009 costs would total $1.55 billion. Then funding would increase further, totaling $13 billion for a 10-year demonstration phase of the program.

A 1996 NAS study concluded that reprocessing and transmutation of existing fuel from U.S. reactors could cost upwards of $100 billion. During the hearing, you said that you thought the total life-cycle cost of the program would be from $20–40 billion. What was this estimate based on, and what is the estimated life cycle cost for GNEP? Please provide a detailed cost estimate.

Secretary BODMAN. A preliminary, order-of-magnitude cost estimate for the GNEP initiative ranges from $20 billion to $40 billion. This includes the cost of Nuclear Power 2010 and Yucca Mountain over the next 10 years as well as the cost of demonstrating integrated recycling technologies. Previously reported estimates for the cost of bringing the three technology demonstration facilities to initial operation range from $3 billion to $6 billion over the next 10 years. In 2008, the Department will have more refined estimates of the cost and schedule to complete the full 20-year demonstration effort. One of the primary purposes of the engineering scale technology demonstrations is to produce reliable estimates of the total life cycle cost of GNEP.

130. Senator CLINTON. Secretary Bodman, based on our experience at West Valley, New York, and elsewhere, we know that decontaminating and decommissioning nuclear facilities is inevitable and extremely expensive. Please include an estimate of these costs in your response.

Secretary BODMAN. GNEP is a phased program. Each phase will begin after a well defined decision based on the results of the previous phase and an assessment of risks associated with proceeding to the next phase. Over the next 2 years, the Department will complete pre-conceptual design studies, environmental analyses, and other economic and technical feasibility studies that will be needed to inform a decision in 2008 on whether to proceed with detailed engineering design and construction of the engineering scale demonstration of advanced recycling technologies. As such, as part of the future development of detailed engineering designs, the Department would prepare detailed and more accurate estimates of the costs associated with decontamination and decommissioning the facilities. Those estimates would consider not only the specifics of the design and operation of the proposed facilities but state-of-the-art techniques and experience in decontamination and decommissioning nuclear facilities. Additionally, as a design objective, the Department seeks to incorporate ease of decontamination and decommissioning into the facilities.

131. Senator CLINTON. Secretary Bodman, in the GNEP system that you envision, what are the respective roles of the public and private sectors?

Secretary BODMAN. The Department is open to the participation of the public and private sectors in the GNEP technology demonstration program. We anticipate that international partners will seek to cooperate with the Department in developing and demonstrating these more proliferation resistant fuel recycling technologies. For example, the U.S., Japan, and France recently signed a systems arrangement that provides the foundation for cooperation on investigating sodium cooled fast reactor technology, an advanced reactor technology that could be suitable for consuming actinide-bearing fuel.

On March 17, 2006, the Department issued a Request for Expressions of Interest seeking expressions of interest from entities seeking to compete for award of site evaluation study contracts in hosting engineering scale demonstrations of the advanced recycling facilities. After consideration of the input received and following the development of a Request for Proposals, the Department anticipates issuing a Request for Proposals to conduct site evaluation studies for engineering scale demonstrations for selected sites. The information gained from the site evaluation studies will be important to the Department's decision process for selecting locations for the technology demonstration facilities.

We envision additional public and private sector participation in every aspect of this program where it makes sense to develop partnering relationships.

132. Senator CLINTON. Secretary Bodman, would the reprocessing plants be Government-owned and operated?

Secretary BODMAN. Currently, we anticipate that the engineering scale demonstration of the advanced separations technology would likely be Government-owned and operated in a fashion similar to that under which other such Government facilities are operated.

133. Senator CLINTON. Secretary Bodman, would the fast reactors be privately owned and operated?

Secretary BODMAN. Currently, we anticipate that the demonstration Advanced Burner Test Reactor would likely be Government-owned and operated in a fashion similar to that under which other such Government facilities are operated.

134. Senator CLINTON. Secretary Bodman, GNEP envisions nuclear waste shipments coming from around the world into ports like New York. How would these shipments be secured?

Secretary BODMAN. The U.S. does not anticipate receiving spent fuel from other countries until sufficient recycling capacity is available in the United States. Ports of entry for recycling spent fuel have not been identified, nor can they be in the absence of specific details of the fuel-leasing program's participants, the location of recycling facilities, and the shipments themselves. However, every year hundreds of international shipments of fresh and spent fuel are routinely made in accordance with safety and safeguards precautions. During the last 30 years, more than 60,000 metric tons of used nuclear fuel have been transported around the world without incident or loss. Under GNEP, future shipments would be made under appropriate domestic and international laws and regulations governing the packaging, handling, security, and transport of radioactive material.

135. Senator CLINTON. Secretary Bodman, wouldn't increased shipments of these materials into the United States create new opportunities for terrorists to create dirty bombs or other weapons that utilize radioactive materials?

Secretary BODMAN. The international framework under which the United States, or any other nation, would receive returned fuel under GNEP has yet to be worked out. Over the next few years, we would anticipate working with existing nuclear fuel supplier nations and the IAEA to develop a framework for fuel return. However, fundamental to any U.S. decision is the development and deployment of new domestic recycling technologies and facilities that would not separate plutonium and would minimize wastes requiring geologic disposal.

It should be noted that every year, hundreds of international shipments of fresh and spent fuel are routinely made with all safety and safeguards precautions. During the last 30 years, over 60,000 metric tons of spent nuclear fuel has been transported around the world without incident or loss. Any transportation of spent nuclear fuel under GNEP would utilize the latest technologies and packages that provide a high level of protection against terrorist attack or unauthorized access to the fuel, as well as against a wide range of possible accidents. We do not believe there would be a significant increase in the risk of a dirty bomb or other terrorist dispersion of radioactive materials as a result of the transportation of spent nuclear fuel.

PROCESS OF DEVELOPING THE GNEP PROPOSAL

136. Senator CLINTON. Secretary Bodman, did any non-governmental persons give substantive and technical advice to the DOE during formulating and vetting of the GNEP proposal that is included in the fiscal year 2007 budget? If so, please provide their names.

Secretary BODMAN. In the spring of 2005, I charged the Deputy Secretary with the responsibility of developing a plan to safely and effectively expand the use of nuclear energy. Proposed elements of the plan were developed by Federal employees and reviewed by program secretarial officers.

After interagency discussions on a range of proposals in the summer of 2005, the Department worked on developing additional analyses and plans. These efforts were conducted in consultation with other Federal agencies and were aided by relevant experts from the Department's national laboratories. These analyses and plans were reviewed again by the Department's program secretarial officers, the Deputy Secretary, and me, before further interagency review.

The Department hosted an ad-hoc meeting in August and another in September of 2005 of former officials from prior administrations and academicians, to subject some of the DOE ideas to critical scrutiny, with a particular focus on the international and program management challenges of an ambitious initiative to expand the peaceful worldwide use of nuclear energy. The purpose was to test some of the proposals with individuals who could exercise seasoned, independent, expert judgment. Other than Federal employees and employees of the Department's laboratories, the following people attended those meetings:

Mr. Charles B. Curtis, former Deputy Secretary of Energy (President, Nuclear Threat Initiative)

Dr. William R. Graham, former Science Adviser to the President (President, National Securities Research, Inc.)

Dr. John Hamre, former Deputy Secretary of Defense (President, Center for Strategic and International Studies)

Dr. Arnold Kantor, former Under Secretary of Defense (Scowcroft Group)

Dr. Ernest Moniz, former Under Secretary of Energy (Professor of Physics, Massachusetts Institute of Technology)

Ambassador Thomas Pickering, former Ambassador to the United Nations (Vice President, Boeing)

Mr. Daniel Poneman, former Special Assistant to the President (Scowcroft Group)

Dr. Burton Richter, Professor of Physics (Nobel Laureate, 1976), (Stanford University)

General Larry D. Welch (Ret.), former Chief of Staff, Air Force (former President, Institute for Defense Analyses)

137. Senator CLINTON. Secretary Bodman, if non-governmental persons were involved, were applicable procedures followed under the Federal Advisory Committee Act?

Secretary BODMAN. Yes. First, with respect to involving our employees from the national laboratories who took part in analyses or discussions relevant to GNEP, they are treated as Federal employees for Federal Advisory Committee Act purposes pursuant to section 3112 of the National Defense Authorization Act for Fiscal Year 2004. The GNEP proposal involved analyses on many technical fronts—nuclear

science, separations, reactors, safeguards, repository analysis, simulations, and basic R&D—that benefited by drawing on these resources.

Second, academicians and former senior officials of prior administrations were involved in ad-hoc meetings in August and September with Federal officials to react to the GNEP vision. At these meetings, these individuals were advised to offer only their individual reactions, and in fact no group dynamic or consensus occurred. General advice concerning the provisions of the Federal Advisory Committee Act was given at the start of both meetings to ensure that no violation of the act occurred. No view in support of or opposition to GNEP should be attributed to individuals simply by virtue of their participation in evaluating ideas that the President announced in the following year.

138. Senator CLINTON. Secretary Bodman, can all records be made available to the committee of advice rendered to the DOE?

Secretary BODMAN. The Department would consider such a request made by the chairman of the Senate Armed Services Committee.

139. Senator CLINTON. Secretary Bodman, it is my understanding that the GNEP program was developed in confidence with the DOE. Is this true?

Secretary BODMAN. No. DOE, in early 2005, was already thinking about how to revitalize and accelerate the peaceful use of nuclear energy, consistent with the President's 2001 National Energy Policy that outlines a range of technological objectives for the nuclear fuel cycle and the Advanced Fuel Cycle Initiative for which Congress has appropriated funds for the last 5 years. Consultations with the administration in the spring of 2005 led to a sustained exchange of ideas concerning how to expand nuclear energy in the context of the President's nonproliferation policy to meet a range of national energy, environment, and development goals. The subsequent development of proposals and initiatives conformed to the normal interagency process associated with any large scale initiative, including repeated interagency meetings throughout 2005 and early 2006. Other agencies, including the Department of State and members of the Intelligence Community, were involved throughout. In short, there was a standard deliberative process within the government, and a standard effort to preserve decision options for the President for a potential initiative with global impacts.

140. Senator CLINTON. Secretary Bodman, what procedures did the DOE use to ensure non-disclosure? Were any written forms or express statements provided by the DOE to participants? Can you please provide any form used to protect such confidences. What legal authorities were used in developing such non-disclosure arrangements?

Secretary BODMAN. The GNEP proposal was formulated through the normal type of deliberative process associated with major initiatives announced by the President's budget request. As is normally the case, circumspection is expected of participants in the deliberative process while it is ongoing. I am not aware of any resort to "forms."

WEST VALLEY

141. Senator CLINTON. Secretary Bodman, the West Valley site in western New York is the only place in the United States where reprocessing has been tried before, and cleanup still has a long way to go. I understand that during staff briefings on GNEP, DOE staff indicated that all sites are being looked at as possibilities for the demonstration phase of GNEP. Please clarify. Has the DOE identified any specific sites for reprocessing or other activities that would be conducted as part of GNEP?

Secretary BODMAN. The Department has made no decisions regarding specific sites for locating the engineering scale demonstrations. The Department is seeking Expressions of Interest from entities interested in evaluating and hosting the demonstration facilities. DOE expects to issue a Request for Proposals later this year for the award of contracts for site evaluation studies. In addition, the Department will initiate an Environmental Impact Statement (EIS) this year to examine potential demonstration technologies and locations where they could be located. The input the Department receives from the public and private sectors will be important information for the EIS. A decision on whether to proceed with the design and construction phase of the technology demonstration program and where to locate the facilities will be made in 2008.

142. Senator CLINTON. Secretary Bodman, is the West Valley site being considered? Has it been ruled out?

Secretary BODMAN. The Department has made no decisions on locations that should be examined for the GNEP technology demonstration program. The Department is seeking public and private sector interest in hosting the demonstration facilities and plans to issue a Request for Proposals later this year for the award of contracts for site evaluation studies.

WASTE

143. Senator CLINTON. Secretary Bodman, please explain the DOE's claims that the GNEP program will significantly reduce the volume of waste. What waste is specifically being described?

Secretary BODMAN. Volume reduction of high-level waste is a factor in determining the loading of the geologic repository, especially to the extent that it reduces the number of disposal containers that are required. However, a more important consideration in the loading of the repository is the heat generated by radioactive decay of certain constituents of the spent fuel. Decay heat drops rapidly as a function of time after discharge from the reactor. Decay heat shortly after discharge is dominated by several short lived fission products such as isotopes of tellurium, ruthenium, cerium, xenon, and zirconium; that heat is dissipated during water pool cooling. After the initial cooling period, the decay heat is dominated for the next 60–70 years primarily by the decay of cesium and strontium. Beyond that period, the decay heat is dominated by isotopes of the transuranic elements—plutonium, neptunium, americium, and curium—due to their relatively long half-lives. As a result, by separating the cesium and strontium and the transuranic elements from the spent fuel, and consuming the transuranic elements in a fast spectrum reactor, the Department estimates that the capacity of the Yucca Mountain repository would be significantly increased, by a factor of 50–100. The actual increase in capacity will depend on how successful we are with the demonstration projects; that is, to what level of efficiency we can recover and destroy the heat-generating radionuclides.

144. Senator CLINTON. Secretary Bodman, won't reprocessing increase the total volume of waste generated, by some estimates 20-fold or more?

Secretary BODMAN. The Department does not believe that an integrated recycling program would increase the total volume of waste generated. The reduction in the volume of the waste from the recycle strategy cannot yet be confidently predicted. The reduction in the total volume of waste depends on details associated with the engineering-scale demonstration of the integrated recycling facilities and selection of specific waste forms. Clearly, the objective of this approach to the fuel cycle is to reduce the volume and toxicity of waste requiring a geologic repository and to design processes that do not result in separated streams of pure plutonium or large volumes of liquid radioactive wastes. The Department will design the advanced separations technology to minimize generation of additional waste. More information on anticipated waste generation will be developed as pre-conceptual design studies, feasibility studies, and environmental reviews are completed over the next 2 years.

145. Senator CLINTON. Secretary Bodman, will the volume of low-level and intermediate-level waste be increased and, if so, by how much?

Secretary BODMAN. The Department has set a design objective of reducing the generation of waste to as low as possible. The Department does not currently have specific information on volumes of low level waste generation. More information on waste generation from these technologies should be available over the next two years as the Department completes pre-conceptual design studies, feasibility studies, and environmental analyses related to the technologies.

146. Senator CLINTON. Secretary Bodman, how developed is the technology that the DOE claims will reduce the volume of waste and how soon will it be available on a commercial scale?

Secretary BODMAN. The Department's goal for operation of the Uranium Extraction Plus engineering scale demonstration would be to begin operation in 2011. The Department's goal for the Advanced Burner Test Reactor (ABTR) would be to begin initial operation in 2014. The Department would complete the first module of an Advanced Fuel Cycle Facility by 2016 to begin producing an actinide-based fuel that could be tested in the ABTR. Initial operations of the ABTR would use conventional fuels with the actinide-based fuels beginning to be tested in the reactor in the 2016 timeframe. The Department would need several years of experience operating the

facilities in parallel with the design of commercial scale facilities. It is currently anticipated that commercial scale operations could begin over the next 20 years.

147. Senator CLINTON. Secretary Bodman, do the DOE's estimates for waste reduction include the decommissioning and decontamination of the facilities themselves that must be built for this proposal?

Secretary BODMAN. At this time the Department has initiated conceptual design of the proposed integrated recycling facilities. Given the state of the facility designs, the Department cannot estimate the volume of waste from the decommissioning and decontamination of the recycling demonstration facilities.

148. Senator CLINTON. Secretary Bodman, does the waste volume estimate include liquid and gaseous waste? Please provide a detailed estimate of types and volumes of wastes that would be generated during the GNEP life cycle, the types of facilities that would be required to dispose of those wastes, and an estimate of disposal costs.

Secretary BODMAN. The volume of the waste or the cost of disposing of waste generated from the GNEP demonstration facilities cannot be confidently predicted until the designs of the facilities advances, as the volumes and costs depend on details of several processes and selection of specific waste forms. Initial estimates based on pre-conceptual design studies should be available over the next 2 years.

[Whereupon, at 10:43 a.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2007

THURSDAY, MARCH 2, 2006

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

AIR FORCE POSTURE

The committee met, pursuant to notice, at 9:30 a.m. in room SH–216, Hart Senate Office Building, Senator John Warner (chairman) presiding.

Committee members present: Senators Warner, McCain, Inhofe, Roberts, Talent, Chambliss, Thune, and Levin.

Committee staff members present: Charles S. Abell, staff director; Leah C. Brewer, nominations and hearings clerk; and John H. Quirk V, security clerk.

Majority staff members present: Gregory T. Kiley, professional staff member; Derek J. Maurer, professional staff member; David M. Morriss, counsel; Lucian L. Niemeyer, professional staff member; Stanley R. O'Connor, Jr., professional staff member; Sean G. Stackley, professional staff member; Scott W. Stucky, general counsel; and Richard F. Walsh, counsel.

Minority staff members present: Richard D. DeBobes, Democratic staff director; Jonathan D. Clark, minority counsel; Madelyn R. Creedon, minority counsel; Gabriella Eisen, research assistant; Creighton Greene, professional staff member; Bridget W. Higgins, research assistant; Gerald J. Leeling, minority counsel; and Peter K. Levine, minority counsel.

Staff assistants present: Micah H. Harris and Jessica L. Kingston.

Committee members' assistants present: Christopher J. Paul and Paul C. Hutton IV, assistants to Senator McCain; John A. Bonsell and Jeremy Shull, assistants to Senator Inhofe; Chris Arnold, assistant to Senator Roberts; Arch Galloway II, assistant to Senator Sessions; Lindsey R. Neas, assistant to Senator Talent; Clyde A. Taylor IV, assistant to Senator Chambliss; Bob Taylor and Stuart C. Mallory, assistants to Senator Thune; Mieke Y. Eoyang, assistant to Senator Kennedy; Frederick M. Downey, assistant to Senator Lieberman; Matthew Benham, assistant to Senator Bill Nelson; and Andrew Shapiro, assistant to Senator Clinton.

OPENING STATEMENT OF SENATOR JOHN WARNER, CHAIRMAN

Chairman WARNER. When I came to the Senate 28 years ago, I listened to my elders, and one of them used to say, "There are times when the Senate does very little, but there are other times where they try to do it all, to make up." This is one of those days. Senator Levin and I are members of another committee that has a very important markup this morning on legislation relating to lobbying and so forth. Consequently, we'll be in and out, but we're going to give you a very thorough hearing, Secretary Wynne and General Moseley. I welcome both of you here.

This is a day in which we're going to look at the President's budget request. It comes at a critical time of change in the global war on terrorism, but here at home also. The first Quadrennial Defense Review (QDR) fully focused on the September 11 threats has been delivered to Congress, and we have taken care of that and looked at it very carefully.

We commend the President for his continuing commitment to strengthen our defense capabilities, really across the board. We have a very strong budget request this year.

Budget priorities supporting the global war on terror, restructuring our forces and our global posture, building joint capabilities for future threats, and taking care of our troops and their families, certainly are the correct points of emphasis in this budget.

One of the committee's most important duties is to provide oversight over the management of the hundreds of billions of dollars that the Department spends each year on the acquisition of supplies, services, and equipment. We have become aware, over the past several years, of emerging problems in the acquisition area, and this is an area in which you have really distinguished yourself, Secretary Wynne, and we're so pleased that you're in this position.

Consequently, the Department has initiated numerous legislative provisions in an effort to direct the Department toward more sound acquisition practices. We'll continue to work with you to explore and ensure the Services act to carefully spend our taxpayers' dollars.

This committee is committed to doing all we can to ensure the safety of our airmen, soldiers, sailors, marines, and their families, wherever they are in the world. Taking the lessons from recent operations in the war on terrorism, two specific areas bear mentioning. The area of countering improvised explosive devices (IEDs) will continue to be our top priority in this committee; second, we recognize the invaluable contributions that unmanned aircraft systems have made to the warfighter. We need to explore the greater use of this technology. Putting aside any sense of humility, this committee has spearheaded that effort for many years, and I thank so many of my colleagues for the strong support they've given, and, indeed, the staff itself, in working out innovative ways to explore this. I saw one yesterday—the Army has it, it's that instrument they're going to use to take over some of the duties of the helicopters, and it carries that whole suite of weapons that a helicopter can carry. I expect you're watching that one, are you not?

General MOSELEY. You bet, sir.

Chairman WARNER. I'll lay a bet you buy a few of those before the day is over.

General MOSELEY. The Navy has some good systems, too——

Chairman WARNER. Oh, yes.

General MOSELEY.—with the rotary wing unmanned aerial vehicle (UAV).

Chairman WARNER. Extraordinary model.

I applaud the Air Force Battlefield Airman Initiative that has improved combat training to increase joint air-to-ground integration for directing air strikes in support of ground forces. Since 2001, Air Force joint tactical attack controllers (JTACs), many attached to Special Operations Force (SOF) units, have directed over 85 percent of the air strikes in Afghanistan. Also, the Air Force is optimizing Reserve component personnel for new missions that can be performed from the United States, including unmanned aircraft systems operations and intelligence, surveillance, and reconnaissance (ISR), and reachback, leveraging the core competencies of the Reserves, while reducing stress on the force.

We do have some concerns here among us in the committee about several things, about the Air Force proposal to establish a third and fourth operational basing strategy for the F–22A that would reduce the number of aircraft within the squadron, and possibly reduce squadron combat effectiveness. We are also concerned about the Department of Defense (DOD) proposal to terminate the F–136 Joint Strike Fighter (JSF) engine program, effectively leaving the United States and our allies with one single supplier for large fighter engines for the most popular strike fighter aircraft in current history. We anticipate maybe 3,000 of those airplanes and to have that entire program dependent on one engine seems to me—the decision was correct to go to two engines in the beginning, but we're going to review the current budget proposal to drop back to one.

I was very pleased to see that Secretary England responded to the letter that Senator Levin and I forwarded, and that the dual programs will continue until such time as Congress, working with the administration, reconciles this issue. I'll now put in today's record the letter that Senator Levin and I wrote and the response that the Secretary returned to us.

[The information referred to follows:]

JOHN WARNER, VIRGINIA, CHAIRMAN
JOHN McCAIN, ARIZONA
JAMES M. INHOFE, OKLAHOMA
PAT ROBERTS, KANSAS
JEFF SESSIONS, ALABAMA
SUSAN M. COLLINS, MAINE
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MARK DAYTON, MINNESOTA
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HILLARY RODHAM CLINTON, NEW YORK
CHARLES S. ABELL, STAFF DIRECTOR
RICHARD D. DeBOBES, DEMOCRATIC STAFF DIRECTOR

United States Senate
COMMITTEE ON ARMED SERVICES
WASHINGTON, DC 20510-6050

February 15, 2006

Honorable Donald H. Rumsfeld
Secretary of Defense
1000 Defense Pentagon
Washington, DC 20301-1000

Dear Mr. Secretary:

It has come to our attention that the Department of Defense has proposed the termination of the F136 Joint Strike Fighter engine program in the President's fiscal year 2007 budget request. As you are aware, Congress has supported this program for over a decade and will need time to consider this new proposal before the Department takes action that would presume the outcome of our deliberations.

We are writing to strongly urge that the Department not take any action that would slow or otherwise negatively impact the development schedule for the F136 program that Congress just approved in the fiscal year 2006 budget. The Department should continue to provide the funds appropriated for the F136 program, and called for in the F136 systems design and development contract, while Congress is considering the fiscal year 2007 budget request.

Sincerely,

Carl Levin
Ranking Member

John Warner
Chairman

DEPUTY SECRETARY OF DEFENSE
1010 DEFENSE PENTAGON
WASHINGTON, DC 20301-1010

Honorable John Warner
Chairman
Committee on Armed Services
United States Senate
Washington, DC 20510-6050

Dear Mr. Chairman,

Reference your and Senator Levin's letter of February 15 to Secretary Rumsfeld regarding the F136 Joint Strike Fighter engine program, the Department concurs with your request. The Department will continue to provide the funds appropriated in the Fiscal Year 2006 budget for the F136 program and called for in the F136 systems design and development contract, while Congress is considering the FY 2007 request.

CC:
Honorable Carl Levin
Ranking Member
Committee on Armed Services
United State Senate
Washington, DC 20510-6050

Chairman WARNER. So, I thank you, gentleman. These are exciting times to be in your positions. I envy both of you and the country is fortunate to have two extremely competent individuals, well-trained, to take on this responsibility.

Senator Levin, I've proceeded, given we have our heavy schedule this morning. I finished my opening statement.

[The prepared statement of Senator Warner follows:]

PREPARED STATEMENT BY SENATOR JOHN WARNER

The committee meets today to receive the testimony of the Secretary of the Air Force and the Chief of Staff of the Air Force on the posture of the U.S. Armed Forces and President Bush's defense budget request for the Air Force for fiscal year 2007.

We welcome Secretary Wynne and General Moseley back and commend our witnesses for the outstanding leadership they provide our Nation and our men and women serving in the United States Air Force. Our thoughts and prayers are with them and their families, particularly those families with loved ones that are away from home defending our freedom.

The President's budget request arrives this year at a critical time of change not just in the global war on terrorism, but here at home, as well. The first Quadrennial Defense Review (QDR) fully focused on post-September 11 threats has just been delivered to Congress. We will need to carefully analyze and evaluate this document.

I commend the President for his continuing commitment to strengthen our defense capabilities and providing our forces with the resources and capabilities they need to successfully fulfill their missions. The budget priorities of supporting the global war on terror, restructuring our forces and our global posture, building joint capabilities for future threats, and taking care of our troops and their families are clearly the right emphasis.

One of the committee's most important duties is to provide oversight over the management of the hundreds of billions of dollars that the Department spends each year on the acquisition of supplies, services, and equipment—everything from office supplies to weapon systems. We have become aware over the last several years of emerging problems in the acquisition arena and have initiated numerous legislative provisions in an effort to direct the Department towards more sound acquisition practices. We will continue to work with you to explore ways to ensure the Services act as good stewards of taxpayer dollars.

This committee is committed to doing all we can to ensure the safety of our airmen, soldiers, sailors, and marines. Taking lessons from recent operations in the war on terrorism, two specific areas bear mentioning. The area of countering improvised explosive devices (IEDs) has and will continue to be our top priority. Second, recognizing the invaluable contributions that unmanned aircraft systems have made to the warfighter. We need to explore the greater use of this technology.

I applaud the Air Force Battlefield Airman initiative that has improved combat training to increase joint air-ground integration for directing air strikes in support of ground forces. Since 2001, Air Force Joint Tactical Attack Controllers (JTACs), many attached to Special Operations Force units, have directed over 85 percent of the air strikes in Afghanistan. Also, the Air Force is optimizing Reserve component personnel for new missions that can be performed from the United States, including unmanned aircraft systems operations, and intelligence, surveillance, and reconnaissance reach-back, leveraging the core competencies of the Reserves while reducing stress on the force.

I do have concerns, however, about the Air Force proposal to establish a third and fourth operational basing strategy for the F–22A that would reduce the number of aircraft within a squadron and possibly reduce squadron combat effectiveness. I am also concerned about the Department of Defense proposal to terminate the F136 Joint Strike Fighter engine program, effectively leaving the United States and our allies with a single supplier of large fighter engines for the most popular strike-fighter aircraft in our inventories for the next 30 years. The short-term savings achieved by this proposal may result in excessive long-term cost to the taxpayer and less than optimum engine improvements over the service life of the Joint Strike Fighter.

I thank you all for your distinguished service and look forward to your testimony.

STATEMENT OF SENATOR CARL LEVIN

Senator LEVIN. Mr. Chairman, thank you. Let me join you in welcoming our witnesses to the committee. I'm sorry that I'm a few minutes late. Late or not, I'm glad to be able to be here because of the importance of this hearing.

Hundreds of thousands of our military members are currently deployed far away from their homes and families in service to our Nation. Many of those who are serving in very dangerous places like Iraq and Afghanistan depend on our leadership. Many of those who are serving in very dangerous places are also specifically and very much dependent upon the leadership of the witnesses that are in front of us today.

We can't overstate the sacrifice that our military people, who are all volunteers, are making to ensure the security of their fellow Americans. We salute them. We pledge that we will do our part to ensure that they and their families are fully supported as they face these hardships and these dangers.

The Air Force Secretary and General Moseley have responsibility to organize, train, and equip the Air Force. It is they who we turn to, to provide the support, and particularly the best training and equipment that this Nation can provide, so that members of the Air Force have all that they need to successfully perform their crucial duties.

It is important that Secretary Wynne and General Moseley tell us today of any changes that may have taken place since their budget was prepared, and any requirement for funding which did not appear in the 2006 supplemental or in the fiscal year 2007 defense authorization request.

Responsible budgeting means making choices and setting priorities. I am afraid the budget request before us understates the true cost of our defense program, because it does not fully recognize or pay for the cost of ongoing operations in Iraq and Afghanistan.

Funds for those will apparently be requested later this year, on an emergency, non-paid-for basis. That's not responsible budgeting. Those costs should be planned on and paid for now. Honest budgeting requires no less.

Although the exact cost for the operations in fiscal year 2007 are not presently known, we have been spending significant sums, about $5 billion per month, in Iraq and Afghanistan for some time now. We know that these costs are going to continue past September 30 into fiscal year 2007. We also know that equipment that has been destroyed needs to be replaced, and equipment that has been used far more than anticipated needs to be repaired in the near-term, and modernized in the long-term. Those costs should be planned on now. Taken together, those omissions mean this budget understates known defense costs for fiscal year 2007, and the true size of the future deficits, by billions of dollars.

While it is true that no one can predict with precision what these fiscal year 2007 costs will be, we should provide funds to cover known requirements. I have suggested increasing the budget to pay for ongoing operations in Iraq and Afghanistan, as well as resetting the force. It is the responsible thing to do for our troops and for budget accuracy.

Additionally, I know that there are a number of other more programmatic issues that we will be discussing at this hearing, including incremental funding of the F–22, canceling the development of an alternate engine for the JSF, whether to continue C–17 production beyond the current plan of 180 aircraft, and starting a new program for a strategic tanker acquisition.

So, Mr. Chairman, I join you in welcoming our witnesses, and in thanking them for their service. I look forward to their testimony.

Chairman WARNER. Thank you very much.

Does any other member feel they want a minute or two for opening-statement purposes?

Senator Chambliss?

Senator CHAMBLISS. I'll defer.

Chairman WARNER. Thank you very much.

We'll proceed, then, Mr. Secretary. Your entire statement, and that with the distinguished chief, will be put into the record.

STATEMENT OF HON. MICHAEL W. WYNNE, SECRETARY OF THE AIR FORCE

Secretary WYNNE. Thank you very much, Mr. Chairman. Thank you, Senator Levin, and thank you, members of the committee. Thank you for having General Moseley and me here today to testify on behalf of America's Air Force. We are grateful for this committee's steadfast support of our Nation's airmen and their families.

I have seen our innovative and adaptive airmen—Active, Guard, and Reserve—firsthand, and am inspired by their commitment and their patriotism. Nonetheless, as I told you back in October, our Air Force is challenged with trying to get 6 pounds into a 5-pound sack. I have broken these challenges down into three critical components.

First, personnel costs of an All-Volunteer Force are accelerating because of expanding benefits and rising health care costs.

Next, operations and maintenance (O&M) costs continue to rise. We are experiencing unyielding second-order effects that continue to drain our top line. Simply stated, we are exhausting all of our assets at a much higher rate than we had forecast, and absorbing costs to organize, train, and equip for evolving new missions.

Lastly, the acquisition, research and development (R&D), and investment accounts face severe pressure as a result of the foregoing must-pay bills. Nevertheless, we continue to mobilize fast and creative responses to achieve the technology and interdependence required to dominate in the global war on terror and the threats beyond.

So, where does our solution lie? With your assistance, we will responsibly attack all three of these challenges. To rein in personnel costs, we are using Total Force Integration, formerly future total force, started in the mid-1990s. It has exposed redundancies to capitalize on as we continue to operationalize the Guard and the Reserves. "Mission first" continues to be our beacon while partnering with both the Guard and the Reserve. In fact, we are in the process of releasing the post-base realignment and closure (BRAC) Phase 2 mission laydown, which has been cosigned by Active, Guard, and Reserve commanders.

In addition to using our people more efficiently through the Total Force Integration, we instituted Air Force Smart Operations-21 (AFSO–21)—smarter and leaner operations. No process or organizational construct is immune from this Air Force-wide critical review. Efficiencies from AFSO–21, Total Force Integration, and lessons learned from 15 years under fire permit us to forecast an end-strength reduction of 40,000 full-time equivalents across the Fu-

ture Years Defense Plan (FYDP). Using our manpower smarter has been found to be the key to retention and the key to force management.

AFSO–21 will also help us with our second challenge, O&M increases. But smarter operations cannot overcome the elephant in the room, fuel and upkeep for aircraft with decreasing military utility. Aircraft with 1950s-era engines and design expose us to soaring fuel prices, increased maintenance, and obsolete spare suppliers. Many planes are simply not deployable due to their declining military utility. We can harvest savings from cutting requirements, redundancies, and excess capacities in our aircraft and missile fleets. This lets me keep the force robust, while shifting resources to new missions, like Predator, Global Hawk, and long range strike. I need this type of flexibility, and this is where I ask for your help.

I need your help in lifting the legislative restrictions on retirements that prevent me from being the air-fleet manager that you expect me to be. Right now, these restrictions apply to nearly 15 percent of our fleet. Continued restrictive language will not only impede the shift to new missions now, but will lead to exhausting resources on aircraft with declining military utility in our future, and ultimately impact our technological edge for the future.

The final part of this 6-pound problem is the investment accounts: acquisition, and R&D. I reiterate to you my commitment to restore the Air Force to its premier status in acquisition and governance, and we continue to concentrate in this area, access intellectual capabilities, and make sure that we are not in a deficient status.

We must solidify our R&D investment stream, even while we are at war. Along with air dominance, space and cyberspace are keys to the future interdependent warfight. Investment today provides the gateway to tomorrow's dominance.

In summary, personnel, O&M, the investment accounts, acquisition, and R&D are our targets. Despite 15 years of continuous combat since Operation Desert Storm, we have transformed our force like no other. With Total Force Integration, AFSO–21, and your help, we intend to keep the title of the world's most agile and lethal Air Force. Our commitment is to increase the aggregate military utility across the entire spectrum of operations for the Joint Force Commander. This means modernizing, recapitalizing, and recognizing efficiencies as we manage this total force.

Thank you for your strong commitment to our Air Force and to the common defense. I look forward to your questions.

[The joint prepared statement of Secretary Wynne and General Moseley follows:]

JOINT PREPARED STATEMENT BY HON. MICHAEL W. WYNNE AND GEN. T. MICHAEL MOSELEY, USAF

SECAF/CSAF—WELCOME MEMO

We are America's airmen. Our mission is to deliver sovereign options for the defense of the United States of America and its global interests—we fly and we fight—in air, space, and cyberspace. For the past 15 years, our Air Force team has proven its mettle and skill every day. Since the days of Operation Desert Storm, we have been globally and continuously engaged in combat. We will continue to show the same ingenuity, courage, and resolve and achieve success in our three most impor-

tant challenges: winning the global war on terror; developing and caring for our airmen; and maintaining, modernizing, and recapitalizing our aircraft and equipment.

In the global war on terror we face vile enemies—enemies devoid of any positive vision of the future, who seek only to destroy the United States and the ideals and freedoms upon which America is built. We will win this fight. We will maintain our focus on winning this fight. While maintaining focus on winning the global war on terror we will also maintain vigilance—vigilance in defense of our homeland and vigilance against emerging threats in an uncertain world.

Our expeditionary fighting forces and culture, centered on the Air and Space Expeditionary Force, provide the foundation for our operations. We will more closely align our Regular Air Force, Air National Guard, and Air Force Reserve units with total force initiatives to enhance our overall capability. We will continue transforming to meet the challenges of a dynamic world.

We will remain focused on caring for and developing our airmen—our most valuable resource. We will continue to look for ways to maintain and improve their training, their personal and professional development, and their quality of life, so they will continue to meet the commitments of today while preparing for the challenges of tomorrow.

We are operating the oldest inventory of aircraft in our history, while maintaining the intense operations tempo required by the global war on terror, humanitarian crises, and routine requirements. Meanwhile, competitor states are developing air and air defense systems that could threaten our ability to maintain air and space dominance. These factors drive the urgent need to modernize and recapitalize our aircraft. We must act now to preserve our Nation's freedom of action in the future. The Secretary of Defense described future threats in terms of four quadrants—traditional, irregular, catastrophic, and disruptive. We must develop, acquire, and maintain systems that can counter threats in any of these quadrants. We will do so by incorporating lean principles that eliminate waste while providing transparency in our processes.

Our 2006 posture statement outlines our plan to accomplish these goals regarding global war on terror, our airmen, and our aircraft and equipment. It reflects our commitment to good stewardship of the resources entrusted to us, and our dedication to protecting our Nation in air, space, and cyberspace.

INTRODUCTION—HERITAGE TO HORIZON

Over a century ago, America crossed the threshold of powered flight and gave wings to the world. Soon military leaders realized the implications of this development, and warfare was changed forever. America was fortunate to have "great captains" with the vision to imagine the possibilities of air and space power—airmen like Billy Mitchell, Frank Andrews, Hap Arnold, Ira Eaker, Jimmy Doolittle, and Bennie Schriever. They have given us a proud heritage of courage, excellence, and innovation. In so doing, they also give us a sense of perspective and a way to understand the Air Force's future.

They have shown us an unlimited horizon. Each of them lived in dangerous times and faced many demanding challenges. Today, we also find ourselves as a Nation and an Air Force facing similarly dangerous and demanding challenges. Some are global or national in scope; others are specific to the Air Force.

During the last decade the United States Air Force transformed to a modular expeditionary force of 10 Air and Space Expeditionary Force (AEF) packages providing agile air and space power. Our airmen have proven tremendously successful across the spectrum of operations from humanitarian efforts to homeland defense operations and the global war on terrorism. We will continue transforming to meet the challenges of a dynamic world by rebalancing the force and realigning our structure into a total force that meets increased demands for persistent intelligence, rapid mobility, and precision strike capabilities. The AEF construct provides the ideal toolbox from which we can provide tailored, efficient, and lethal air and space forces to deal with future challenges.

The Air Force faces the broadest set of mission requirements across the entire spectrum of warfare. We will bolster our Nation's ability to respond swiftly, flexibly, and decisively to asymmetric, irregular, and emerging threats. We have embarked on a bold, new initiative known as Air Force Smart Operations for the 21st century (AFSO–21) as a means to best allocate our resources to meet this increasing set of challenges. All of these challenges will require the very best efforts of our airmen throughout the total force.

Winning the Global War on Terror

Our first priority is to maintain focus on winning the global war on terror. We will continue to operate as part of a true joint and coalition team, multiplying the

effectiveness of our partners to win this war. We fly and we fight—whether we're flying A–10s over Afghanistan; flying F–16s over Iraq; operating and maneuvering communications satellites in geosynchronous orbit; remotely piloting unmanned aerial vehicles (UAVs) patrolling over Baghdad; or maintaining vigilance over our Nation's homeland in an E–3 airborne warning and control system (AWACS) aircraft. All airmen, no matter what their specialty, contribute to this mission.

We must keep in mind that the global war on terror is not defined by today's headlines or locations. It will be a long war, with shifting venues and constantly evolving threats. The character and capabilities of potential U.S. adversaries are increasingly uncertain, veiled, growing, and changing, as both state and non-state actors acquire advanced technology and the means to either acquire or develop weapons of mass destruction (WMDs).

We can foresee serious threats posed by increasing numbers and sophistication of ballistic and cruise missiles; chemical, biological, radiological, and nuclear weapons; advanced surface-to-air missiles (SAMs); and sophisticated combat aircraft. We also anticipate the real threat of potentially crippling attacks on our Nation's critical infrastructure, including space networks. Not only must we be prepared to confront known threats, but we also must be ready for unexpected, disruptive breakthroughs in technology that may undercut traditional U.S. advantages.

Maintaining a strong defense able to overcome and defeat these threats remains an imperative for our Nation. Currently, the Air Force can command the global commons of air and space and significantly influence the global commons of the sea and cyberspace; however, we cannot indefinitely maintain this advantage using the current technology of the air and space systems and equipment comprising our existing force structure.

Developing and Caring for Our Airmen

Our Regular Air Force airmen, Air National guardsmen, Air Force reservists, and civilians, who together form our total force, are building on their inheritance of courage, excellence, and innovation. They are highly educated and resourceful, and have created the most lethal Air Force that has ever existed. We must continue to look for ways to maintain and improve their training, their personal and professional development, and their quality of life, so that they may continue to meet the commitments of today while preparing for the challenges of tomorrow.

Airmen today are contributing to combat operations in ways never before envisioned—as convoy drivers and escorts, detainee guards, and translators to give a few examples. Other airmen routinely serve "outside the wire" as special tactics operators, joint terminal attack controllers and special operations weather personnel. All of these airmen must receive the proper training to survive, fight, and win. We are working within the Air Force, as well as with our joint warfighting partners, to ensure that all airmen are fully prepared when they arrive in the combat zone.

Developing airmen involves more than combat skills. It is a career-long process that maximizes the potential of each member of the total force team. We will look at every airman as an individual and provide them with specialized training, relevant educational opportunities, and appropriate assignments in order to capitalize on the talent these brave airmen offer for this country's defense.

Every airman is a vital national resource and must be cared for as such. In addition to providing professional opportunities for our airmen and fostering an environment of mutual respect, the Air Force is committed to investing in health and fitness programs and facilities, world class medical access and care, and housing and morale programs for our airmen. Our airmen have proven themselves to be the best America has to offer—they deserve the best support available.

By ensuring that our airmen are prepared for combat, effectively developed and properly supported, we will continue to provide our Nation with the best Air Force in the world.

Maintenance, Modernization, and Recapitalization

One of our most daunting challenges is maintaining the military utility of our aircraft as reflected in mission readiness, maintenance costs, and other factors. We have been actively engaged in combat for the past 15 years. We currently maintain an air bridge to southwest Asia. Our state of alert for global war on terror requires us to operate at an elevated and sustained tempo of operations (OPTEMPO). Increased investment and increased maintenance tempo can keep our older aircraft flying and slow their decaying military utility, but equipment age and use are unrelenting factors.

Presently, we have the oldest aircraft inventory in our history. Our aircraft are an average of over 23 years old—older in many cases than those who fly and maintain them. In particular, our inventory of tanker aircraft averages over 41 years old,

and our C–130 tactical airlifters average over 25 years old. As our equipment ages, it requires more frequent maintenance and replacement of parts; meanwhile, increased OPTEMPO accelerates wear and tear on our equipment and operational infrastructure, exposes our equipment to extreme conditions, and, in some cases, delays routine maintenance.

We must recapitalize our aircraft and operational infrastructure, as well as modernize our processes for services, support, and information delivery in order to maintain the grueling pace required into the foreseeable future. We must do so in a fiscally prudent manner. This means retiring and replacing our oldest, least capable, and most expensive aircraft and equipment, as well as accepting a manageable level of risk in order to selectively maintain some older systems until newer systems are on the ramp.

These newer systems will cost far less to operate and maintain and are designed to defeat emerging threats. The U.S. no longer enjoys a monopoly on advanced technology, and we are already witnessing the emergence of highly sophisticated systems that threaten our capability to achieve joint air and space dominance. Along with ongoing robust science and technology (S&T) programs, transformational systems such as the F–22A Raptor, F–35 Joint Strike Fighter (JSF), Space Radar (SR), and Transformational Communications Satellite (TSAT) will ensure that we maintain the ability to provide overwhelming air and space power for our combatant commanders.

Concurrently, the Air Force is also focusing on reforming, modernizing, and improving processes for acquisition of new systems and equipment. We will achieve greater efficiencies and higher productivity by reforming our business practices. By incorporating lean processes and transparent accounting, and reinforcing a culture of continuous improvement, the Air Force will maintain the high standards of our heritage. We will continue our tradition of transformation, realize both lethality and efficiency in our capabilities in this new century, and stand ready for the challenges of the future.

The future is what you bring with you when tomorrow comes. Our 2006 Air Force posture statement outlines our flight plan into the future. By focusing on winning the global war on terror, maintaining the excellence and maximizing the potential of the America's airmen, and maintaining, modernizing, and recapitalizing our aircraft and equipment, we will provide air and space dominance for U.S. forces well into the future.

AIR AND SPACE POWER TODAY—BUILDING ON OUR HERITAGE

Current Security Environment

The current security environment is marked by seemingly constant change and uncertainty. Our security environment is also marked by the threats posed by terrorist organizations and rogue states around the world bearing ill will toward our Nation. In times of uncertainty and heightened threat, our citizens turn to the military to defend this great Nation at home and abroad. Our airmen stand alongside soldiers, sailors, marines and coast-guardsmen—a joint team poised and ready to defend the Nation.

Throughout the history of American air and space power, airmen have often faced complex challenges during times of change and uncertainty—times when our Nation's survival was at stake. In early 1945, General "Hap" Arnold reported to the Secretary of War, ". . . our Air Force must be flexible in its basic structure and capable of successfully adapting itself to the vast changes which are bound to come in the future. Whatever its numerical size may be, it must be second to none in range and striking power." In retrospect, Hap Arnold's words were amazingly prescient.

Today our force is still second to none in range and striking power. Potential adversaries, well aware of the strength of our Air Force, seek to limit our range and striking power through development of new and emerging threat systems. These systems, coupled with the proliferation of weapons of mass destruction, form a formidable threat to the joint force and to our Nation.

In order to achieve victory in the global war on terror and meet the challenges of emerging threats, the Air Force looks to build on the great heritage established by decades of airmen—airmen who have confronted daunting challenges and succeeded as vital members of the joint warfighting team.

Global War on Terror

Several key elements—ideologies of hatred, vast resources, mutual support structures, as well as veiled state and private sponsorship—provide linkages across the array of enemies confronting us in the global war on terror. The general terrorist

threat also spans several regions of the world, often acting on a global scale. While the strategy to prosecute and win the global war on terror is an enterprise necessarily involving many agencies and actions in addition to military forces, the Air Force, in particular, serves a vital role in our Nation's battle against terrorist networks.

America's airmen have become seasoned veterans of Post-Cold War conflicts and are postured to answer any contingency or challenge on a moments' notice. The Air Force has been taking the war to America's enemies for 15 consecutive years. Our constant presence in Southwest Asia since Operations Desert Shield and Desert Storm kept regional instability in check. Airpower effectively controlled two-thirds of Iraq for over a decade, setting the conditions for Iraq's stunning military collapse in Operation Iraqi Freedom.

Recognizing the new reality of rapidly emerging global threats in the Post-Cold War environment, the Air Force has significantly reduced its force structure and transitioned from a Cold War legacy paradigm to a vastly more agile, responsive, and scalable force structure built around the AEF concept. The AEF construct provides the combatant commanders and the joint force with the agility and lethality required to engage U.S. adversaries anywhere in the world with correctly tailored forces—all in a matter of hours to single-digit days. The AEF construct presents air and space forces in a continuous rotation cycle—currently a 20-month cycle with nominal 4-month deployments—and provides the combatant commands with greater capability and stability of forces in theater while providing more predictability for our airmen.

As defined by our national leadership, the global war on terror strategy seeks to reduce both the scope and capability of terrorist networks globally, regionally, and locally. This strategy requires global perspective and regional focus. It also demands an ability to simultaneously conduct long-range strikes and humanitarian relief on opposite sides of the world. In order to execute effectively, the strategy requires unparalleled command, control, communications, computers, intelligence, surveillance, and reconnaissance (C^4ISR). These are all activities our Air Force conducts for the joint force on a daily basis—activities critical to successfully prosecuting the global war on terror.

As an essential part of the joint team, the Air Force contributed to defeating the Taliban and eliminating Afghanistan as a safe haven for al Qaeda. While the Air Force remains actively engaged in operations in Afghanistan, our national strategy is simultaneously focused on Iraq as the central front for the war on terror. While the United States and its partners have defeated Saddam Hussein's regime of terror, the enemies of freedom—both members of the old regime and foreign terrorists who have come to Iraq—are making a desperate attempt in the name of tyranny and fascism to terrorize, destabilize, and reclaim this newly-liberated nation and aspiring democracy.

The Air Force continues to lead the fight in defending the home front as well. The Air Force recently conducted an Air Force-Navy strategy conference addressing the global war on terror and counterinsurgencies. The conference report forms the basis for an ongoing Air Force study to further improve the Air Force's posture for homeland defense. The Air Force has also taken a leadership role in developing a concept of operations for joint maritime interdiction to defend our shores and those of our allies. In addition, Air Force aircraft maintain a 24/7 alert status in defense of the United States and its approaches, against both airborne and maritime threats.

From a global perspective, we are continually bolstering airman-to-airman relationships with our allies and partners to build interoperable and complementary capabilities as well as to ensure access to foreign airspace and support infrastructure. We are using training, exercises, personnel exchanges, cooperative armaments development, and foreign military sales to expand and cement these vital coalitions that are essential to prosecuting the global war on terror and to our future joint air operations.

In addition, from local, regional, and global perspectives, foreign internal defense is an indispensable component of successful counterinsurgency strategies. The Air Force is partnering with Special Operations Command to rapidly expand Air Force foreign internal defense forces to bolster partner nations on the front lines of the global war on terror.

From direct support of special forces, to maritime interdiction, to global strike, the Air Force remains prepared to engage those who would threaten our friends, our interests, or our way of life.

Emerging Threats

The threats airmen will encounter in the coming years are changing dramatically. Adversaries are developing and fielding new ground-based air defenses, improved

sensor capabilities and advanced fighter aircraft. These capabilities will increasingly challenge our legacy aircraft, sensors, and weapons systems.

Advances in integrated air defense systems, to include advanced sensors, data processing, and SAMs continue trends noted in the 1990s. SAM systems are incorporating faster, more accurate missiles, with multi-target capability, greater mobility, and increased immunity to electronic jamming. Currently possessing ranges of over 100 nautical miles (NM), these anti-access weapons will likely achieve ranges of over 200 NM by the end of the decade. These advanced SAMs can and will compel non-stealthy platforms to standoff beyond useful sensor and weapons ranges. Proliferation of these long-range SAMs is on the rise, with projections for 2004–2007 indicating a twofold increase over the number of advanced SAM system exports during the mid to late 1990s.

Another trend is the development and proliferation of upgrades to older, 1960/70's-era SAMs. At a fraction of the cost of a new advanced, long-range SAM, many African, Asian, and Mid-East nations are looking to upgrade older SAMs to revitalize their aging air defense forces. By bringing in modern technologies, improved missile propellants, and increased mobility, older SAM systems are becoming more reliable and more credible threats.

Finally, the threat from manportable air defense systems (MANPADS) continues to grow. Large, poorly secured stockpiles of these weapons increase the chances of highly capable MANPADS ending up in the hands of an insurgent or terrorist group.

The threats from advanced fighter aircraft also continue to grow. Currently there exist 31 nations already fielding 2,500 or more airframes. Increased use of state-of-the-art radar jammers, avionics, weapons, and reduced-signature airframes/engines are becoming the norm in fighter design. Additionally, countries like India and China are now able to produce their own advanced fighters, thereby increasing the quantity and quality of adversary aircraft the Air Force may face in the future. By 2012, China will more than double its advanced fighter inventory to over 500 airframes, most with advanced precision-guided munitions and air-to-air weapons. Similarly, self-protection jamming suites are growing in complexity and proliferation, potentially eroding our ability to target adversary aircraft.

The threat from the development, fielding, and proliferation of standoff weapons such as long-range cruise missiles will also provide potential adversaries with offensive capabilities of ever-increasing accuracy and range which, when combined with their relatively small size, presents an increasing challenge to detection and tracking.

Many nations are enhancing the utility of advanced fighters by pursuing, procuring, and integrating support aircraft as force multipliers. They acquire aerial refueling tankers to extend the range of strike operations and increase on-station time for fighters. Furthermore, airborne early warning aircraft are extending the reach of many nations through datalink capabilities that provide control of fighter operations well beyond the reach of land-based radars. Several nations are also purchasing standoff jamming assets in both manned and unmanned platforms to attempt to deny our traditional sensor advantages. UAVs of all varieties are in high demand and are becoming increasingly available on today's market, providing low-cost, but highly effective reconnaissance capabilities. This situation represents a new and increasingly prolific and complex challenge on the battlefield.

Additionally, the combination of improved C^4ISR with improved ballistic and cruise missile capabilities will increasingly threaten regional and expeditionary Air Force basing. China, in particular, has a growing over-the-horizon intelligence, surveillance, and reconnaissance capability from a combination of ground, air, and space-based systems. Coupled with its large and growing inventory of conventionally-armed theater ballistic missiles, China's increasing capabilities and reach collectively present a serious potential to adversely impact allied and joint air and space operations across the Asian theater.

Worldwide advancements in the development, deployment, and employment of foreign space and counterspace systems are challenges to U.S. space superiority. Adversaries, including terrorists, are more and more easily obtaining a number of increasingly sophisticated space services. Furthermore, they are developing the means to degrade U.S. space capabilities, freedom of action, and access. The intent of U.S. adversaries combined with the capabilities of foreign space and counterspace systems will increasingly threaten U.S. military forces and interests worldwide.

Threat of WMD Proliferation

The threat of proliferation of WMD to countries with advanced military capabilities has changed dramatically since the end of the Cold War. India and Pakistan became overt nuclear powers in 1998, adding to their formidable conventional capa-

bilities. North Korea claims and is assessed to have built nuclear weapons, while Iran is suspected of pursuing them; both countries face intense international pressure to halt their efforts.

Less catastrophic, but of equal concern, are chemical and biological weapons (CBW). Chem-bio WMDs can range in sophistication from World War I-vintage gases or traditional agents like anthrax, to highly advanced "fourth-generation" chemical agents or genetically modified bacterial or viral weapons that challenge state-of-the-art defenses and countermeasures. It is much less expensive and more technologically feasible to produce CBW than it is to obtain nuclear weapons or fissile materials. Furthermore, CBW can be concealed very effectively and inexpensively, veiled under a veneer of legitimate civilian industry or "dual-use" activities.

Future adversaries, deterred from challenging the U.S. openly, may seek to offset U.S. warfighting advantages by developing, using, or threatening to use these weapons. As such, the acquisition of WMD capabilities by terrorists/non-state actors is a grave concern. Many groups have declared their desire to pursue such a goal, and evidence is growing they are attempting to obtain the necessary financial means, weapons knowledge, and necessary materials.

Air Force Contributions to Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and Operation Noble Eagle (ONE)

Air and Space Operations in OIF and OEF

Over 26,000 airmen are currently forward deployed in support of combatant commanders throughout the world. These airmen continue to deliver key Air Force capabilities of precision engagement, rapid global mobility, and information superiority to OEF and OIF missions.

Pulling from 89,000 tailored deployment teams built around specific capabilities, the Air Force has flown the preponderance of coalition sorties in support of OIF and OEF. In Iraq, the Air Force has flown over 188,000 sorties, while in Afghanistan, airmen have flown over 130,000. Overall, the Air Force has flown a total of over 318,000 sorties, or approximately 78 percent of the total coalition air effort. Counted among these sorties are missions ranging from airlift and aeromedical evacuation, to close air support (CAS) missions to protect ground troops as well as provide them with precise fire support and sensor capabilities.

In 2005, Air Force fighters and bombers supporting OIF and OEF expended over 294 munitions (bombs), 90 percent of which were precision-guided, including the Joint Direct Attack Munition (JDAM). These trends represent a 10 percent increase over 2004 totals in the use of precision-guided munitions (PGMs). Our airmen have also provided nearly all of the in-flight refueling for joint and coalition forces.

Leading the way in reconnaissance and imagery, the Air Force is currently flying Predator UAV missions 24 hours a day, 7 days a week. This capability will grow from 8 to 12 total orbits in 2006 to meet increased demand. Predator aircraft are able to transmit live video pictures to ground-based targeting teams equipped with the Remote Operations Video Enhanced Receiver (ROVER) system. Linking precision engagement and persistent C^4ISR capabilities to forces on the ground, ROVER has been used repeatedly to detect, target, and destroy improvised explosive devices (IEDs) and disrupt insurgent activities across the region. Bolstering these capabilities are Tactical Airborne Reconnaissance System (TARS) equipped F–16s flown by Air National Guard units. In recent testing, TARS has demonstrated the ability to aid in the location and destruction of IEDs.

Air Force operations in Iraq and Afghanistan also highlight the importance of space-based C^4ISR capabilities to U.S. and coalition forces. These capabilities have become integral to effective warfighting operations and include secure communications, global weather, persistent worldwide missile warning, and intelligence gathering. Commanders continue to rely extensively on the all-weather precise position, navigation, and timing capability provided by the Air Force's Global Positioning System (GPS) constellation, satellite communications (SATCOM) and timely observations of weather and enemy activity to conduct operations in Iraq and Afghanistan. In strikes against time-sensitive targets, nearly 40 percent of all munitions used in OIF were GPS-guided, which made them unaffected by sand storms and inclement weather. Additionally, at the senior leadership level of warfighting, the Joint Force Air and Space Component Commander's duties as the Space Coordination Authority have become critical to successful joint planning and execution of space capabilities for joint forces. Holding the ultimate high ground, Air Force space professionals keep a constant vigil over a global battle space—planning, acquiring, maintaining, and operating the systems that sustain our Nation's advantages in space.

Sister Services and U.S. Government agencies continue to heavily rely on Air Force capabilities. Running the spectrum from logistics expertise to medical care, the Air Force is fully partnered with the Army and Marine Corps units running con-

voys throughout Iraq with more than 1,000 transportation, security forces, and medical airmen trained to support convoy missions.

Moreover, Air Force capabilities are saving soldiers' lives and simultaneously reducing our required footprint in southwest Asia. Increased use of Air Force airlift capabilities—notably the unconventional yet highly effective use of workhorse C–17s as well as C–5 aircraft to increase our intra-theater airlift capabilities in Iraq—has dramatically reduced the need, number, and frequency of ground convoys along the most dangerous roads and routes in Iraq. These capabilities and optimized theater airlift mission planning methods have also contributed to a planned reduction of the number C–130s required for OIF support.

Additionally, Air Force support personnel are taking a more active role in the direct protection of personnel and resources. In early 2005, Air Force security forces at Balad Air Base, Iraq, in conjunction with the Army, were assigned a sector outside the base to patrol and clear of insurgent operations. This aspect of the air base defense mission has not been seen since the Vietnam War, yet Task Force 1041 was successful in reducing attacks on Balad Air Base by 95 percent.

Airmen also worked to strengthen relationships, develop capabilities, and enhance the self-reliance of Afghanistan, Iraq, and other regional global war on terror partners. For example, Air Force air traffic controllers helped return safety and commercial viability to Afghan airspace. At Ali Airbase, Iraq, a cadre of Air Force instructors taught Iraqi airmen how to fly and maintain their newly acquired C–130 aircraft. In Kyrgyzstan, Air Force C–130s air-dropped U.S. Army and Kyrgyz National Guard troops over a drop zone in the capital of Bishkek during a joint training exercise. Additionally, United Arab Emirates (UAE) recently acquired American-made F–16 Block–60 aircraft. This acquisition provides them with cutting edge aviation technology and a capability complementary to the UAE's new Gulf Air Warfare Center, which has become a tremendously successful training venue for our regional and global coalition partners.

Finally, Air Force innovations in command and control (C2) technologies have allowed airmen to seamlessly automate and integrate efforts of critical air assets. The systems baseline in use in the Falconer Air and Space Operations Center (AOC) at Al Udeid has improved automated support for the daily air tasking orders, while the capabilities of the battle control system-mobile communications module reduces the number of airmen needed at forward locations in Iraq, resulting in fewer airmen exposed to hostile fire.

Air and Space Operations in ONE

While engaged in OEF and OIF, the Air Force simultaneously contributes to Operation Noble Eagle—the defense of the homeland. Through a variety of efforts, the Air Force continues to guard the skies of our Nation from coast to coast. The Air Force's principal homeland defense mission is air defense and preserving the air sovereignty of the United States and its territories.

Since September 11, 2001, over 41,000 fighter, aerial refueling, and airborne early warning sorties have been flown in defense of the U.S., while over 2,000 air patrols have responded to actual incidents and suspicious flight operations. This is a true Total Force mission, leveraging the combined capabilities of the Air Force Reserve, Air National Guard and Regular Air Force components to provide seamlessly orchestrated C2 and refueling support for fighter aircraft operating from alert sites throughout the U.S.

The range, flexibility, persistence, and precision inherent in U.S. air and space power provide joint warfighters with a unique tool set for creating war-winning results with a relatively small footprint. Air and space operations stand ready to continue providing these important resources to OIF, OEF, and ONE, as well as exploring new ways to lead the way in the global war on terror.

Air and Space Power—An Essential Element of the Joint Fight

Innovation is a central theme in Air Force heritage. It is a strength the Air Force lends to the overall effort to transform joint operations into a more seamless, integrated, and interdependent team effort. U.S. military performance during ongoing operations in Iraq and Afghanistan demonstrates unprecedented joint interdependence. We've gone from struggling with C2 and coordination of air and ground forces on the battlefields of Operation Desert Storm to demonstrating a high degree of integration among joint and coalition forces engaged in OIF.

Overall success of future interdependent joint force efforts will place greater demands on Air Force capabilities. As ground forces seek to increase their agility and speed, they will rely increasingly on air and space power to move them throughout the battlespace; provide the information needed to outmaneuver numerically superior or elusive adversaries; and deliver precise, rapid strikes across multiple, distrib-

uted operations areas. The future joint force concept of seabasing, as yet another means to project power and support ground forces, further underscores the requirements for land-based air and space power. Clearly, the need for rapid mobility, persistent C4ISR and precision engagement will only increase in the future.

Concurrently, as we reduce prepared, garrisoned overseas bases in the out-years, the Air Force will increasingly operate from expeditionary air bases. The Air Force, having transformed over the past 15 years to an AEF construct and culture, continues to innovate and evolve with new expeditionary concepts. AEF contingency response groups (CRGs) are organized, trained, and equipped to provide an initial "open the base" capability to combatant commanders. The theater CRG provides a rapid response team to assess operating location suitability and defines combat support capabilities needed to AEF operating locations. In addition, basic expeditionary airfield resources (BEAR) will provide the scalable capability necessary to open and operate any austere airbase across the spectrum of AEF contingency or humanitarian operations. BEAR will provide vital equipment, facilities, and supplies necessary to beddown, support, and operate AEF assets at expeditionary airbases with limited infrastructure and support facilities.

Battlefield Airmen

Airmen are increasingly engaged beyond the airbase and "outside the wire," bringing ingenuity and technology to joint warfighting on the ground by using advanced systems to designate targets, control aircraft, rescue personnel, and gather vital meteorological data. The Air Force is optimizing this family of specialties, known as battlefield airmen. So far, we have identified program management, acquisition and sustainment synergies across the combat rescue, combat control, terminal attack control, and special operations weather functional areas. Air Force personnel are an integral part of the battlespace, and we are continuously identifying and updating common training requirements for these airmen.

We are organizing battlefield airmen for maximum effectiveness in the modern battlespace. In addition, we will train battlefield airmen in the skills required to maximize airpower and standardize that training across those battlefield airmen. Finally, we must equip our battlefield airmen with improved, standardized equipment for missions in the forward and deep battlespace. This will expand the commander's ability to employ battlefield airpower professionals able to integrate unequaled accuracy, responsiveness, flexibility, and persistence into air operations supporting joint ground forces.

From forward positions, joint terminal attack controllers (JTACs), a subset of Battlefield airmen, direct the action of combat aircraft engaged in CAS and other offensive air operations. Recently JTACs have become recognized across the Department of Defense (DOD) as fully qualified and authorized to perform terminal attack control in accordance with a joint standard.

In addition to night vision equipment, JTACs carry a hardened laptop computer and multi-channel radio. We've significantly reduced the weight these battlefield airmen must carry while simultaneously providing them with greater ability to perform critical tasks such as designate targets ranging up to several kilometers away. We are striving to further decrease the weight of their gear while increasing the capabilities and interoperability of their equipment with other air, space and ground assets. This combination of technology facilitates the direct transfer of information to combat aircraft, minimizing errors in data transfer. This equipment will increase situational awareness, assist in combat identification, maximize first-attack success, shorten the kill-chain, and provide better support to ground forces.

Innovative Uses of Technology

Innovation—our Air Force heritage and strength—is critical to success in defeating enemies on the battlefield as well as in defending our homeland. Each day, airmen across the world produce military effects for the joint team through ingenuity or with advancements in technology.

To meet U.S. Central Command's (CENTCOM) urgent operational needs, the Air Force is accelerating the modification of our Sniper and LITENING advanced targeting pods (ATPs) with video datalink transmitters to share information more rapidly. The high resolution images from our targeting pod TV and infrared video is generations better than the low altitude navigation and targeting infrared for night (LANTIRN) pods used during previous conflicts, and they provide tactical information in greater volume and relevance than ever before.

The Air Force is quickly adapting new tactics, techniques, and procedures for integrating the ROVER III and ATPs into nontraditional intelligence surveillance and reconnaissance (NTISR) missions. These include convoy escort, raid support, and infrastructure protection missions in addition to traditional CAS missions. Equipped

with air-ground weapons, our ATP-equipped aircraft have the flexibility to provide responsive firepower and unprecedented tactical reconnaissance, making our fighters and bombers more effective and versatile than ever.

Furthermore, some ROVER IIIs were diverted to support disaster relief and humanitarian assistance in the aftermath of Hurricanes Katrina and Rita. Instead of flying ATPs on fighter or bomber aircraft, we located video transmitters on rooftops or attached them to helicopters to provide overhead video streams to the recovery teams equipped with ROVER III.

Predator UAV systems continue to demonstrate the Air Force penchant for innovative application of technology for fighting the global war on terror. Current operations allow airmen in Nevada to pilot and control Predators operating in the Iraq and Afghanistan theaters of operations. Increasing experience in these novel approaches to flight and mission control operations have led to revolutionary advances in the execution of military capability.

Equipped with an electro-optical, infrared, and laser designator sensor, and armed with Hellfire missiles, Predator has not only shortened the sensor-to-shooter timeline—it has allowed the sensor to become the shooter. Since 1995 Predator has amassed over 120,000 total flying hours. From January through September of 2005, Predators logged more than 30,000 flight hours, over 80 percent of which were in direct support of combat operations. In August 2005, the Predator program flew four aircraft controlled by a single pilot and ground control station, successfully demonstrating the multiple aircraft control concept. Complementing the Predator's capabilities, the Global Hawk is a high altitude, long endurance, remotely piloted aircraft (RPA). Through the innovative use of synthetic aperture radar as well as electro-optical and infrared sensors, Global Hawk provides the joint warfighter persistent observation of targets through night, day, and adverse weather. Global Hawk collects against spot targets and surveys large geographic areas with pinpoint accuracy, providing combatant commanders with the most current information about enemy location, resources, and personnel. The Global Hawk program is delivering production systems to the warfighter now and is in constant demand by combatant commanders.

Since its first flight in 1998, Global Hawk has flown over 8,000 hours—including over 4,900 combat hours and over 230 combat missions with prototype systems deployed in support of global war on terror. In OIF and OEF the prototype systems have produced over 57,000 images.

The long-established ISR stalwart, the RC–135 Rivet Joint continues to demonstrate its adaptability to a changing and evolving threat environment with the application of progressive technologies and upgrade programs.

The RC–135 Rivet Joint continues to field improvements in tactical signals intelligence (SIGINT) capabilities and platform performance, including re-engining and avionics modernization, to support the full spectrum of combat operations and national information needs. Additionally, Rivet Joint has become the cornerstone for airborne, net-centric development. Rivet Joint plays a key role in the network-centric collaborative targeting advanced concept technology demonstration and serves as the platform of choice for implementation of new reachback technologies to enhance national and tactical integration. Adding yet another chapter to Rivet Joint's continuous record of support to CENTCOM since 1990, the platform flew over 550 airborne reconnaissance missions in support of OEF and OIF.

Aeromedical Evacuations

As early as 1918, the military has used aircraft to move the wounded. The Air Force continued this proud tradition with the aeromedical evacuation of over 11,000 wounded personnel from Afghanistan and Iraq. The aeromedical evacuation system has transformed to ensure the Air Force can conduct rapid and precise operations in an expeditionary environment. The placement of aeromedical crews in forward locations continues the chain of survival that starts on the battlefield with self-aid and buddy care. The chain continues through expeditionary medical support hospitals, to aeromedical in-flight care and finally to stateside medical centers within as little as 72 hours. Expeditionary aeromedical operations reduce the necessity and large footprint of theater medical assets and conserve valuable health care resources.

The force mix of aeromedical evacuation crewmembers consists of 12 percent Regular Air Force and 88 percent Air Reserve component. This use of the total force was best demonstrated in the fall of 2005 during the swift aeromedical evacuation of over 3,800 sick and elderly people threatened by Hurricanes Katrina and Rita.

As modern medicine evolves, the aeromedical system continues to adapt to meet future challenges. The Air Force continues to lean forward by looking at future threats such as biological warfare. We are leading the way in the development of

a litter transportable patient isolation unit for the movement of contaminated patients. The aeromedical evacuation system demonstrates the Air Force's commitment to providing the best capabilities to the joint team and our coalition partners.

Adaptive Airmen: Airmen Filling Nontraditional Roles

Presently, airmen are meeting the challenges of filling CENTCOM shortfalls in several critical roles which are nontraditional for airmen, including convoy support, detainee operations, protective service details, law and order detachments, military transition teams, and provincial reconstitution teams.

Detainee operations and convoy support are our most heavily supported missions. Airmen attend training at Fort Lewis, WA or Fort Dix, NJ where they learn the fundamentals of detainee security, handling, and interaction. At the conclusion of this training, airmen move forward to a detainee facility in theater and receive additional on site training. Airmen provide convoy support in the form of heavy weapons teams supporting long haul convoy operations. These airmen attend heavy weapons training followed by a convoy-training course. From that training platform, airmen deploy forward to support theater operations.

Air Force intelligence personnel are also fulfilling non-standard, unconventional roles as members of the joint team. Air Force intelligence analysts attend the Enhanced Analyst and Interrogation Training Course at Fort Huachuca, AZ, where they learn to provide analytical support for interrogations. At the conclusion of this training, intelligence personnel deploy forward as part of the interrogator teams to joint interrogation detention centers in Southwest Asia.

Law-and-order detachments provide vital joint support missions throughout the area-of-operations. In this capacity, Air Force security forces personnel provide garrison law enforcement and security. Never routine, these missions occasionally support operations outside the confines of an installation.

Military transition teams are comprised of specially trained personnel who work within the organizations of indigenous forces. They are responsible for training these forces to support and sustain themselves without the assistance of advisors. Provincial reconstruction teams are organizations that move into a different region within the area-of-operations and provide additional support, training, and sustainment.

With the exception of the law-and-order detachments, none of these missions fall within the traditional skill mix of Air Force security forces. Additional training varies from 1 to 5 months, and deployments are normally longer than the standard 120-day deployment. We are understandably proud of the outstanding adaptability and professionalism with which our airmen have filled the shortfalls in required skillsets on the joint roster and accomplished these nontraditional yet critical missions on behalf of the joint team.

Other Operations

In addition to our major contingencies and defense of the homeland, the Air Force remains engaged in numerous other operations around the world ranging from humanitarian relief and disaster response to maintaining our strategic nuclear forces and space assets. The presence of forward deployed forces is just the leading edge of a greater effort representing the totality of Air Force daily support to the combatant commanders.

Humanitarian and Disaster Relief Operations

In December 2004, nearly 60 years after the great Berlin Airlift of 1948–1949, the Air Force, while fully engaged in operations in Afghanistan and Iraq, once again answered the call for help in the wake of the tsunami that devastated Indonesia and South Asia—one of the worst natural disasters in history. Our airmen responded immediately, and in the course of the first 47 days following the disaster led an allied effort that airlifted over 24 million pounds of relief supplies and over 8,000 people. The entire world witnessed the absolute best of America at work—agility, strength, resolve, and compassion—just as it had witnessed nearly 60 years before.

At home, the Air Force leveraged the agility, scalability, and responsiveness inherent in our AEF structure and culture to speed support to civil authorities for Hurricanes Katrina and Rita. Hurricane Katrina devastated an entire region of the southern U.S. While destruction of infrastructure stifled ground transportation, airmen continued to reach flooded areas and bring relief. The Air Force flew over 5,000 sorties, airlifting more than 30,000 passengers and 16,000 tons of cargo and accomplishing 5,500 search and rescue saves. Additionally, Air Force operations were a Total Force effort, incorporating Guard and Reserve capabilities into airlift and rescue operations as well as into the establishment of state-of-the-art medical facilities that treated over 17,000 patients.

Air Force support during Hurricane Katrina and Rita recovery operations illustrated how persistent C4ISR can integrate with other agencies and proved critical to supporting U.S. Northern Command (NORTHCOM) and the Department of Homeland Security during civil support operations. Our airborne reconnaissance platforms, ranging from C–130s to U–2s, combined with military satellite communications (MILSATCOM) capabilities like the Global Broadcast Service (GBS), provided detailed imagery critical for decision makers and aided in directing relief efforts to the worst hit areas.

Additionally, our civilian auxiliary, the Civil Air Patrol (CAP) provided capability to NORTHCOM, Federal agencies, and State and local governments during all phases of the hurricane rescue and relief efforts. The CAP provided nearly 2,000 hours of air and ground search and rescue, airborne reconnaissance, and air transport of key personnel. The CAP leveraged the skills and vigilance of 60,000 non-paid volunteers in over 1,700 units to bolster the Nation's defense during these national crises.

Future natural disasters and relief operations will likely be similar to those faced by the U.S. over the past year. Major populations requiring immense support are often isolated from the infrastructure that is their lifeline. Airpower provides the capability to overcome terrestrial obstacles and deliver aid directly to those in need. Always seeking new ways to innovate and improve, the Air Force will continue its ongoing transition to a force with unprecedented capability for civil support and homeland defense.

Maintaining Our Nuclear Deterrent

The DOD's new strategy of employing a capability-based approach vs. threat-based approach to planning led to the ongoing transformation of the existing triad of U.S. strategic nuclear forces, consisting of intercontinental and sea-launched ballistic missiles and bomber aircraft armed with cruise missiles and gravity weapons, into a new triad composed of a diverse portfolio of systems. Elements of the new triad will include nuclear and non-nuclear strike capabilities; active and passive defenses; and robust research and development programs; and industrial infrastructure for developing, building, and maintaining offensive and defensive weapon systems. Maintaining our traditional nuclear strategic forces is a key capability in an effective new triad.

National security presidential directives outline the future force structure and requirements for U.S. nuclear forces. To meet National Military Strategy, Nuclear Posture Review and the Moscow Treaty requirements, near-term capability and sustainment improvements must be made to the legacy forces while development and procurement of follow-on systems proceed. These efforts will enable Air Force nuclear forces to continue to provide critical capabilities to policymakers. The nuclear forces will dissuade current and potential adversaries from pursuing policies or military initiatives that are unfavorable to our interests or those of our allies.

Our intercontinental ballistic missiles (ICBMs) and cruise missiles are poised to decisively defeat an adversary if deterrence fails. The cruise missile inventory, both air launched cruise missile and advanced cruise missile, is being upgraded through a service life extension program (SLEP) to maintain a viable and flexible bomber-delivered weapon. Additionally, the Department of Energy is conducting a SLEP on the cruise missile warhead.

The Air Force is committed to the new triad and the associated nuclear C2 systems. To provide survivable strategic communications, the Air Force fielded and currently operates the Milstar SATCOM system. We are preparing to field the next generation advanced extremely high frequency (EHF) SATCOM system to replace it, as well as a single terminal to provide reliable, redundant, and secure radio and satellite communication links with Minuteman ICBM forces. The Air Force recognizes the importance of the Nation's nuclear C2 resources and will continue to pursue the new triad strategy for our strategic systems to ensure they are always ready to respond to the direction of our national leaders.

Space Support for Operations

The U.S. depends upon the Air Force to supply critical space capabilities to meet the needs of joint operations worldwide, and also the needs of national missions across the instruments of diplomatic, informational, military, and economic power. The National Security Strategy commits us to assuring allies, dissuading military competition, deterring threats, and decisively defeating adversaries. The robust space capabilities our airmen provide and maintain will continue to ensure our Nation's goals are met.

As the DOD Executive Agent for Space, and the Under Secretary of the Air Force released a coordinated national protection framework in 2005. This framework will

aid senior decision makers by stating how space systems will be expected to operate during and following an intentional attack. The framework supports senior leaders in creating a total force solution across the national security space community. Air Force satellite communications will ensure our Nation's leaders can communicate globally through times of crisis while providing warfighters instant access to information. As evidenced by the hurricanes in the Gulf of Mexico, space environmental monitoring has become essential in saving lives and property as well as ensuring ground, sea, and air forces prepare effectively for weather impacts.

In support of worldwide military operations, the Air Force launched eight DOD and national satellite systems in 2005 from Air Force-managed and maintained launch ranges at Cape Canaveral Air Force Station, Florida and Vandenberg Air Force Base, California. That number is expected to increase to 13 in 2006 as the evolved expendable launch vehicle (EELV) program takes over as the foundation for U.S. assured access to space.

We have seen the first challenges to U.S. advantages gained from space assets. During OIF, the Iraqis employed GPS jammers in an attempt to reduce the precision of U.S. and allied strikes. We defeated this threat through a variety of methods including space system design, munitions design, and tactics development to operate in a GPS-hostile environment. As technology develops and becomes available to more countries, organizations, and individuals, new types of threats to space capabilities will emerge. Preparation now using non-materiel and materiel solutions to address the variety of potential realistic threats will lead to continued success in the battlespace.

Comprehensive space situation awareness (SSA) and defensive and offensive counterspace capabilities are the foundational elements of our space superiority efforts. Enhanced, ground-based, and new space-based SSA assets will provide the necessary information to gain and maintain space superiority. With respect to defensive counterspace, we maintain a diversified ground-based C2 network, and we are developing increased protection for our satellites and space-based services to ensure that the vital capabilities they provide are available when needed. We also recently fielded the counter-communications system to deny these same services to our adversaries. A well-balanced, multi-tiered architecture enables execution of a robust, effective space superiority strategy.

Even as the first challenges to our space superiority have arisen, the Air Force is already working toward responses to the next set of potential challenges. First, the U.S. would like to deter potential adversaries from attacking or exploiting our space capabilities. To accomplish this objective, worldwide space operations must be monitored, assessed, and understood. SSA involves those capabilities that allow the interagency and joint communities to find, fix, track, characterize and assess space operations on orbit and inside the various combatant commanders' areas of responsibility. SSA capabilities will allow the Air Force or other members of the Joint community to target, if necessary, our adversaries' space capabilities. As part of the C2 process, we will evaluate options ranging from diplomatic to economic to military actions to determine the best flexible option to achieve the desired outcome. By understanding how friendly and hostile actors are leveraging these space capabilities in their operations, senior decisionmakers can deter potential adversaries while preventing unnecessary escalation and allowing for a range of response options to meet national objectives.

The Air Force will protect space capabilities vital to the success of the Joint Force and the defense and prosperity of our great Nation. Some defensive measures will be integrated into new satellite designs. Other space systems, such as the Rapid Attack Identification Detection and Reporting System (RAIDRS) will be specifically designed to conduct defensive operations. We are also leaning forward on the development of new tactics, techniques, and procedures to mitigate potential threats to Air Force space systems. Furthermore, experimentation has aided us immensely by facilitating risk reduction and providing interim defensive capabilities today—RAIDRS is an excellent example. The Air Force developed a prototype RAIDRS and demonstrated the capabilities of the system during Joint Expeditionary Force Experiment 2004 (JEFX 04). The inclusion of this prototype laid the groundwork for both tactics development and for design improvements for future development programs. As a result of JEFX 04, CENTCOM requested this prototype to support real-time joint operations in theater. The results and lessons of this operational employment will certainly shape future capabilities by improving our understanding and providing further opportunities for innovation.

Priorities

Developing and Caring for Our Airmen

Force Shaping

For the past 18 months, the Air Force has reduced our Active-Duty end strength to congressionally authorized levels taking action to relieve some of our most stressed career fields. The 2004–2005 force shaping program allowed officers and enlisted personnel to separate from Active-Duty service earlier than they would otherwise have been eligible. In addition to voluntary force shaping measures, the Air Force significantly reduced enlisted accessions in 2005 to help meet our congressional mandate.

While the Air Force met our 2005 end strength requirement, we began 2006 with a force imbalance: a shortage of enlisted personnel and an excess of officer personnel, principally among those officers commissioned from 2000 to 2004. This imbalance created several unacceptable operational and budgetary impacts. Consequently, the Air Force took several actions to ensure our force is correctly sized and shaped to meet future challenges and to reduce unprogrammed military pay costs. First, we increased our enlisted accession target for 2006 to address the enlisted imbalance. Second, we continued to encourage qualified officers, especially those commissioned in 2000 and later, to consider voluntary options to accept service in the Air National Guard, Air Force Reserve, civil service, or as an interservice transfer to the Army.

Additionally, we are institutionalizing the force shaping authority granted in the National Defense Authorization Act for Fiscal Year 2005 to restructure our junior officer force. Only after exhausting all efforts to reduce officer end strength by voluntary means, the Air Force will convene a force shaping board in 2006 to consider the performance and potential of all eligible officers commissioned in 2002 and 2003. This board will be held annually thereafter, as required, to properly shape and manage the officer corps to meet the emerging needs of the Air Force. Essentially, the force shaping board will select officers for continued service in our Air Force. Current projections indicate that we need about 7,800 of these eligible officers (2002 and 2003 year groups) to continue on Active-Duty. Approximately 1,900 officers will be subject to the force reduction. Exercising this authority is difficult, but our guiding principle is simple—we must manage our force to ensure the Air Force is properly sized, shaped, and organized to meet the global challenges of today and tomorrow.

Balancing the Total Force

In addition to maintaining and shaping the Active-Duty Force, we must continue to focus on the balance of forces and specialties between Regular, Air National Guard, and Reserve components—the total force. We are diligently examining the capabilities we need to provide to the warfighter and to operate and train at home. We continue to realign manpower to our most stressed areas and are watchful for any new areas that show signs of strain.

As we look to the future in implementing Base Realignment and Closure (BRAC) and Quadrennial Defense Review (QDR) decisions, we must ensure a seamless transition to new structures and missions while preserving the unique capabilities resident in our Regular Air Force, Air National Guard, and Reserve communities. Examining functions for competitive sourcing opportunities or conversion to civilian performance will continue to be one of our many tools for striking the correct balance of missions across the total force.

Force Development

The Air Force's force development construct is a total force initiative that develops officers, enlisted, and civilians from the Regular Air Force, the Air National Guard, and the Air Force Reserve. The fundamental purpose of force development is to produce leaders at all levels with the right capabilities to meet the Air Force's operational needs by leveraging deliberate training, education, and experience opportunities.

The Air Force Personnel Center created a division dedicated to supporting corporate and career field development team needs. Development teams have now been incorporated into the officer assignment process and they now guide assignment of all officer career fields. Additionally, development teams recommend officers for special selection boards and developmental education opportunities.

The Air Force is also deliberately developing our enlisted airmen through a combined series of educational and training opportunities. We are exploring new and

exciting avenues to expand our process beyond the current system in place today. Each tier of the enlisted force will see changes to enlisted development. Airmen (E–1 to E–4) will be introduced to the enlisted development plan, increasing their knowledge and solidifying future tactical leadership roles. The noncommissioned officer (NCO) tier will be encouraged and identified to explore career-broadening experiences and continuing with developmental education. Our senior NCO tier will see the most dramatic changes as we explore the use of development teams in conjunction with assignment teams to give career vectoring and strategic level assignments. Institutionalizing the practice of development as a part of enlisted Air Force culture is paramount for supervisors, commanders and senior leaders.

On the civilian side, the Air Force is making significant progress in civilian force development as we align policy, processes and systems to deliberately develop and manage our civilian workforce. We have identified and mapped over 97 percent of all Air Force civilian positions to career fields and have 15 career field management teams in place with three additional management teams forming this year. Additionally, we manage various civilian developmental opportunities and programs, with our career-broadening program providing several centrally funded positions, specifically tailored to provide career-broadening opportunities and professionally enriching experiences.

Recruiting/Retention

After intentionally reducing total accessions in 2005, the Air Force is working to get the right mix of officer and enlisted airmen as we move to a leaner, more lethal, and more agile force. We will align the respective ranks to get the right person in the right job at the right time to meet the Air Force mission requirements in support of the global war on terror, the Joint Force, and the Air Force's expeditionary posture.

A key element for success is our ability to continue to offer bonuses and incentives where we have traditionally experienced shortfalls. Congressional support for these programs, along with increases in pay and benefits and quality-of-life initiatives, has greatly helped us retain the skilled airmen we need to defend our Nation.

Personnel Services Delivery

To achieve the Secretary of Defense's objective to shift resources "from bureaucracy to battlefield," we are overhauling Air Force personnel services. Our personnel services delivery initiative dramatically modernizes the processes, organizations and technologies through which the Air Force supports our airmen and their commanders.

Our goal is to deliver higher-quality personnel services with greater access, speed, accuracy, reliability, and efficiency. The Air Force has been able to program the resulting manpower savings to other compelling needs over the next 6 years. This initiative enhances our ability to acquire, train, educate, deliver, employ, and empower airmen with the needed skills, knowledge, and experience to accomplish Air Force missions.

National Security Personnel System (NSPS)

Our civilian workforce will undergo a significant transformation with implementation of the DOD NSPS. NSPS is a simplified and more flexible civilian personnel management system that will improve the way we hire, assign, compensate, and reward our civilian employees. This modern and agile management system will be responsive to the national security environment, preserve employee protections and benefits, and maintain the core values of the civil service.

NSPS design and development has been a broadbased, participative process to include employees, supervisors and managers, unions, employee advocacy groups, and various public interest groups. We plan to implement these human resource and performance management provisions in three phases called "spirals." The first spiral will include approximately 89,000 general schedule and acquisition demonstration project civilian employees in the Air Force. NSPS is the most comprehensive new Federal personnel management system in more than 50 years, and it's a key component in the DOD's achievement of a performance-based, results-oriented total force.

Caring for Airmen

Combat capability begins and ends with healthy, motivated, trained, and equipped airmen. We must remain committed to providing our entire Air Force team with world class programs, facilities, and morale-enhancing activities. Our "Fit to Fight" program ensures airmen remain ready to execute our expeditionary mission at a moment's notice, and our food service operations further complement an Air Force healthy lifestyle.

Through various investment strategies in both dormitories and military family housing, we are providing superior living spaces for our single airmen and quality, affordable homes for our airmen who support families. Our focus on providing quality childcare facilities and programs, on and off installations, enables our people to stay focused on the mission, confident that their children are receiving affordable, quality care. The Air Force is a family, and our clubs and recreation programs foster and strengthen those community bonds, promoting high morale and an esprit de corps vital to all our endeavors.

Additionally, we are equally committed to ensuring that all airmen in every mission area operate with infrastructure that is modern, safe, and efficient, no matter what the mission entails—from depot recapitalization to the bed down of new weapon systems. Moreover, we must ensure airmen worldwide have the world class training, tools, and developmental opportunities that best posture them to perform with excellence. We also continually strive to provide opportunities and support services that further enable them to serve their Nation in a way that leaves them personally fulfilled, contributes to family health, and provides America with a more stable, retained, and capable fighting force.

Housing and Military Construction (MILCON)

One of the highlights in our emphasis on developing airmen is our focus on housing investment. Through MILCON and housing privatization, we are providing quality homes faster than ever before. Over the next 2 years, the Air Force will renovate or replace more than 49,000 homes through privatization. At the same time, we will renovate or replace an additional 10,000 homes through military construction.

Investment in dormitories continues to accelerate in order to provide superior housing to our unaccompanied members—evidenced by nearly 8,600 dormitory rooms programmed for funding over the next 6 years. Approximately 75 percent of these initiatives will rectify currently inadequate dormitory conditions for permanent party members. Our new "Dorms–4-airmen" standard is a concept designed to increase camaraderie, social interaction, and accountability by providing four single occupancy bedroom/bathrooms with a common kitchen and living area in each module. Finally, the remaining dormitory program initiates modernization of inadequate "pipeline" dormitories—those dormitories that house young enlisted students during their initial technical training.

The Air Force has taken risk in facility and MILCON funding in order to support modernization and transformation. However, we continue to fund our most critical requirements to include new mission projects, depot transformation, dormitories, fitness centers, and child care centers. The Air Force is committed to improving its infrastructure investment by meeting the DOD's recapitalization goal through the Future Years Defense Plan (FYDP).

Common Airman Culture

An airman culture manifests the totality of our commonly transmitted behaviors, patterns and beliefs. Our Air Force clearly recognizes the relationship between mission capabilities and our Air Force Core Values. Integrity, Excellence and Service, remain critical guideposts to every airman's personal and professional flight path. Principles of dignity, self-worth, respect, and diversity are firmly embedded elements of these values. Together, our core values are reflected in every airman's pride, dedication to mission, subordination of their own needs for those of their wingman, and devotion to duty and this great Nation. In this past year, we have made significant strides in our efforts to promote, reinforce, and inculcate our core values across the Air Force and throughout the total force team—including our regular, Guard, Reserve, civilian, and contractor teammates. We expect and accept no less from everyone on the Air Force team.

Certain behaviors are absolutely incongruous with the common airman culture and our core values. Among these is sexual assault. The Air Force has created the Sexual Assault Prevention and Response Program to ensure that every airman is provided the respect and dignity they deserve as their Nation's air and space warfighters. We have trained and fielded sexual assault response coordinators and victim advocates to ensure every airman has access to immediate assistance, should it be required. We are rewriting our education and training curricula at every level to ensure airmen understand how these crimes occur, how they are often unwittingly facilitated by bystanders and third-party witnesses and how we can better take care of our people by preventing sexual assault crimes from occurring to them, their wingmen, friends, and family members.

Reflecting our belief that diversity adds strength to our organization, the Air Force has accepted the challenge to "create a diverse and an inclusive total force

which reflects and leverages the talents of the American people to maximize the Air Force's combat capabilities." We created the Office of Air Force Strategic Diversity Integration in the summer of 2005 to lead the Air Force's diversity efforts. This office provides leadership guidance and strategic support for the understanding, furtherance, and advantage of diversity within the ranks of the Air Force.

Inherent in our common airman culture is a belief in professional and personal dignity and a deep respect for individual religious beliefs. The protection of every airman's freedom of religion, while also defending the constitutional prohibition on official establishment of religion, is an area of significant emphasis. As airmen, we take an oath to support and defend the Constitution. In that endeavor, we are striving to assist Air Force personnel, in the course of their official duties, to meet and balance their multiple constitutional obligations and personal freedoms, regarding the free exercise of religion, avoidance of Government establishment of religion, and defense of the Nation. This is an area of national debate. Balancing these foundational American principles demands common sense, good judgment, and respect for each airman's right to hold to their own individual personal beliefs.

We also recognize our airmen must have the ability to interact with coalition partners and local communities at home and abroad, and the Air Force is transforming how it engages friends and partners in the expeditionary environment. Operations in this dynamic setting necessitate extensive international insight to work effectively with existing and emerging coalition partners in a wide variety of activities. Through the Air Force International Affairs Specialist program, we are developing leaders who are regional experts with foreign language proficiency. Our focus is on building a cadre of officers with the skills needed to foster effective relationships with global partners in support of the combatant commanders and U.S. global interests.

Over the next year, the Air Force will continue to vigorously reinforce our common airmen culture, our belief in professional and personal dignity and most importantly our enduring core values of Integrity First, Service Before Self and Excellence in All We Do.

Training at Keesler Air Force Base Following Hurricane Katrina

In August 2005, Hurricane Katrina struck the Gulf Coast of the United States. Keesler Air Force Base (AFB), Mississippi lay in its direct path. The Air Force is attempting to rapidly reestablish Keesler's critical training missions. Of 56 enlisted initial skills training "pipelines," 90 percent have already resumed operation. Additional pipelines have been temporarily reestablished at other locations. Significant challenges remain ahead, but training and developing our expeditionary airmen remains one of our highest priorities. We take exceptional pride in the work our airmen have done, and continue to do, in restoring Keesler AFB's training capability.

Maintenance, Modernization, and Recapitalization

Our airmen are the best in the world. However, they can only be as effective as the tools we give them. Within today's fiscal constraints, we must fight the global war on terror and protect the homeland while transforming the force and maintaining an appropriate level of risk. The Air Force is committed to the modernization and recapitalization necessary to maintain the health of the force and bridge our current capabilities to systems and capabilities required in the future.

Aircraft

Our primary fighter modernization and recapitalization program is the F–22A Raptor. The F–22A is a fifth generation fighter aircraft that delivers joint air dominance to counter persistent and emerging national security challenges. Given its vast improvements in every aspect—air-to-air, air-to-ground, all-aspect stealth, and an open, adaptable architecture—the F–22A is an insurance policy against future threats to Joint Air Dominance and represents the absolute best value for the American taxpayer. The F–22A is the only fighter currently produced that will defeat conceivable threats to joint air dominance in anti-access environments over the next 20–30 years.

The F–22A is flying today and is in full rate production. Its performance continues to meet or exceed key performance parameters and spiral modernization will enhance its air-to-air and air-to-ground target engagement capability.

The F–35 Joint Strike Fighter (JSF), also a fifth generation fighter, will complement the tremendous capabilities of the F–22A. The JSF will recapitalize combat capabilities currently provided by the F–16 and A–10. Optimized for all-weather performance, JSF will specifically provide affordable precision engagement and global attack capabilities. In 2005, the JSF program continued to address design challenges to develop three aircraft variants and coordinate the requirements of the Air Force, Navy, and Marines, along with our international partners.

The C–17 continues to be a success story for the joint warfighter, deploying troops and cargo to Iraq and Afghanistan, as well as numerous locations around the world. The Air Force is on schedule for delivery of the next 40 aircraft through 2008—for a total of 180. During the past year, C–17s flew over 63,000 sorties, bringing the total number of OEF and OIF missions to over 109,000. Additionally, the C–17 flew over 100 humanitarian and disaster relief missions following Hurricanes Katrina and Rita, as well as the October 2005 earthquake in Pakistan. The C–17, in concert with C–5 modernization programs, is critical to meeting our U.S. inter-theater airlift requirements.

To meet continuing intratheater airlift demands, we have a two-pronged approach to modernize our C–130s. First, but most problematic, we are striving to replace our oldest aircraft with new C–130Js. Second, the remaining C–130s are being standardized and modernized via the C–130 avionics modernization program and center-wing box replacement programs. C–130s have been the workhorse for intra-theater airlift during numerous contingencies. C–130Js have supported global war on terror and humanitarian operations since December 2004 and have proven to be a force enhancer as they deliver more cargo in a shorter time than older C–130s. C–130 modernization, coupled with the wing-box modification, reduces operation and sustainment costs and improves combat capability.

The Air Force is developing the next generation combat search and rescue (CSAR) recovery vehicle, called CSAR–X. We are planning to replace the current and aging CSAR inventory of "low-density, high-demand" (LD/HD) HH–60G Pave Hawk helicopters with 141 CSAR–X aircraft. The CSAR–X will address deficiencies of the current HH–60G by providing increased capabilities in speed, range, survivability, cabin size, and high altitude hover operations. The CSAR–X will provide personnel recovery forces with a medium-lift, vertical take-off and landing aircraft that is quickly deployable and capable of main base and austere location operations for worldwide recovery missions. The CSAR–X will be capable of operating day or night, during adverse weather conditions, and in all environments including nuclear, biological, and chemical conditions. Onboard defensive capabilities will permit the CSAR–X to operate in an increased threat environment, and in-flight refueling capability will provide an airborne alert capability and extend its combat mission range.

UAVs

UAVs are demonstrating their combat value in the global war on terror. The Air Force rapidly delivered operational UAV capabilities to the joint warfighter and is continuing to mature and enhance those capabilities.

Predator is transforming the way we fight, providing a persistent ISR, target acquisition, and strike capability against critical time sensitive targets (TSTs) in direct response to warfighters' needs. Today, by controlling combat operations remotely from the U.S., Predator provides a truly revolutionary leap in how we provide persistent military capability to the warfighter.

The Air Force will continue to enhance Predator's ability to support the joint warfighter. We are developing the ability to operate multiple aircraft by a single pilot, which will increase our overall combat effectiveness. We demonstrated this capability in August 2005. We are also developing and deploying the Predator B, a larger, more capable, more lethal variant. In its role as a "hunter-killer," Predator B will be capable of automatically finding, fixing, tracking, and rapidly prosecuting critical emerging TSTs.

Global Hawk is a high-altitude, long endurance RPA providing robust surveillance and reconnaissance capabilities. Despite being a developmental prototype system, Global Hawk has flown over 4900 combat hours. This year the Air Force moved beyond the proven capability of the Global Hawk prototypes by deploying two production aircraft to support global war on terror operations.

Airborne ISR

E–8C Joint Surveillance Target Attack Radar System (J–STARS) continues to be a high-demand asset. J–STARS aircraft provide wide theater surveillance of ground moving targets. Crews from the 116th Air Control Wing at Robins AFB, Georgia, the first-ever "blended wing" of Regular Air Force, Air National Guard and Army, operate these aircraft. Modernizing these aircraft while maintaining the current high OPTEMPO in combat theaters will be ongoing challenges. The recent installation of the Force XXI Battle Command Brigade and Below module, the reduced vertical separation minima module, and the Airborne Battlefield Command and Control Center are some of the latest capability upgrades. The most urgent modernization needs for J–STARS include re-engining, radar upgrades, installation of the traffic alert collision avoidance system and integration of a self-protection suite.

The E–10A program will highlight the advanced capabilities of the Multi-Platform Radar Technology Insertion Program (MP–RTIP) sensor by demonstrating advanced cruise missile defense, interleaved ground tracking, and ground imaging capabilities in 2010 and 2011. A smaller variant of the MP–RTIP sensor, developed within the E–10A program, will be integrated into the Global Hawk in 2008 to begin developmental and operational testing. These demonstrations will advance critical sensor technology and provide vital warfighting capabilities.

Space and Nuclear Forces

Air Force modernization and recapitalization efforts also continue for space systems. The Air Force is modernizing critical capabilities across the spectrum of global strike, navigation, weather, communication, missile warning, launch, surveillance, counterspace, and ground-based space systems.

The Minuteman intercontinental ballistic missile (ICBM) was originally designed in the late 1950s and deployed operationally in October 1962. Modernization programs have been crucial to this system originally designed to last just 10 years. Service life extension programs are underway to ensure the Minuteman III remains mission capable through 2020. These programs, nine in all, will replace obsolete, failing, and environmentally unsound materials while maintaining missile reliability, survivability, security, and sustainability. These efforts are critical in sustaining the ICBM force until a follow-on system can be fielded.

The Air Force is also addressing the need for a follow-on ICBM system. This system will address future warfighter needs, reduce ownership costs, and continue to provide policymakers the critical capabilities provided by the ICBM. The effort to modernize the ICBM force is vital to the U.S. for the foreseeable future.

Continued, unhindered access to space is vital to U.S. interests. As the Air Force continues programs to upgrade and modernize America's launch ranges, the EELV program will continue to provide the U.S. with assured access to space for both DOD and national space assets. The EELV program includes two launch vehicle designs—Delta-IV and Atlas-V—with each design comprising a family of scalable, tailorable launch vehicle variants.

The TSAT program will employ Internet Protocol networks, onboard routing, and high-bandwidth laser communications relays in space to dramatically increase warfighter communications connectivity. TSAT capability enables the realization and success of all DOD and Joint visions of future network-centric operations, such as the Army's Communications-on-the-Move (COTM) and Future Combat System (FCS) concepts and the Navy's Sea Power 21 vision and Fleet FORCEnet/FORCEview concepts.

GPS modernization and development of the next-generation GPS–III will enhance navigation capability and improve resistance to jamming.

In partnership with the National Aeronautics and Space Administration and the Department of Commerce, the National Polar-orbiting Operational Environmental Satellite System (NPOESS) will accurately calculate surface winds over the oceans and gather meteorological data for our forces deployed overseas.

The Space Based Infrared System (SBIRS) will provide a transformational leap in capability over our aging Defense Support Program satellites. Complementing the space-based system are ground-based missile warning radars, being upgraded to support the missile defense mission.

Another future transformational space-based ISR program is the Space Radar (SR) system. SR's day-night and all-weather capabilities will include Synthetic Aperture Radar (SAR) imagery, high-resolution terrain information (HRTI), surface moving target indication (SMTI), geospatial intelligence (GEOINT) and open ocean surveillance (OOS), and rapid revisit. It will support a broad range of missions for the joint warfighter, the Intelligence Community, and domestic users. SR will be integrated with other surface, air, and space ISR capabilities to improve overall collection persistence and architecture effectiveness.

Modernization of our ground-based space systems will provide new capabilities to keep pace with the satellites they support and will continue to provide assured C2 for our satellites and space-based capabilities. This effort includes the modernization of ground-based radars, some of which are over 25 years old. Through programs like the Family of Advanced Beyond Line of Sight Terminals (FAB–T) and the Ground Multi-band Terminal, the Air Force is modernizing its ground-based space capabilities with satellite communications terminals that consolidate logistics support, provide increased satellite throughput and laser communications, and ensure seamless C2. Additionally, enhanced ground-based and new space-based SSA assets will provide the necessary information to gain and maintain space superiority.

As part of the broader space control mission, the ground-based, theater-deployable Counter Communications System (CCS) has achieved initial operational capability

(IOC) and provides the combatant commander with a non-destructive, reversible capability to deny space-based communication services to our adversaries. Incremental upgrades to the CCS will continue to enhance our offensive counterspace capabilities. Overall counterspace enhancements also include ongoing RAIDRS development, which is a defensive counterspace system designed to assist in the protection of our space assets. RAIDRS will provide a capability to detect and geolocate satellite communications interference via fixed and deployable ground systems. Future developments will automate data access analysis and data fusion and provide decision support tools.

Operational Infrastructure and Support Modernization

Finally, the Air force is pursuing to modernize its operational infrastructure and the tools we use to manage operational support to our airmen and joint warfighters. The Air Force's ongoing Operational Support Modernization (OSM) program will improve operational support processes; consolidate personnel and financial service centers; and eliminate inefficiencies in the delivery of services, support, and information to our airmen and the combatant commanders. Realizing these economies, OSM will improve Air Force-wide enterprise efficiency and provide a resources shift from business and combat support systems, thereby returning resources to Air Force operations, equipment modernization, and long-term investments.

Air Force efforts also continue in the development of an effective, holistic asset management strategy for the restoration and modernization of operational infrastructure—facilities, utilities, and natural resource assets—throughout their useful life cycles. Operational infrastructure is critical to the development and testing of new weapon systems, the training and development of our airmen, and the conduct of joint military exercises.

Acquisition Reform

The Air Force will meet the challenges of the 21st century, including asymmetric threats, through continued exploitation of our technological leadership and with our ability to respond quickly to the demands of a rapidly changing world. Effective leadership in research and development, procurement, and sustainment of current and future weapons systems depends upon the integrated actions of professionals in the acquisition, as well as the requirements generation, resource, and oversight processes. Everything we do in Air Force acquisition drives toward the goal of getting an operationally safe, suitable, and effective product of best value to the warfighter in the least amount of time.

Program cost and schedule growth have drawn widespread criticism and undermined confidence in the defense acquisition process. A recent Government Accountability Office (GAO) study of 26 DOD weapon systems reports average unit costs have grown by 50 percent and schedules have stretched an average of 20 percent, to nearly 15 years, despite numerous attempts at reform.

In an effort to address these concerns, the Air Force formed the Acquisition Transformation Action Council in December 2004. This group is comprised of general officer and senior executive service representatives from the Air Force product centers, labs, air logistics centers, and headquarters. The group continues to lead the transformation of Air Force acquisition from its present state into that of an agile acquisition enterprise. The goals of agile acquisition include shortened acquisition process time and improved credibility with both internal and external stakeholders. Achieving these goals will be critical to making the delivery of war-winning capabilities faster, more efficient, and more responsive.

The Acquisition Transformation Action Council's short-term focus is on incremental improvements and eliminating non-value-added processes in areas such as conducting acquisition strategy panels, meeting immediate warfighter needs, and effectively incentivizing contractors. A more comprehensive strategic plan for acquisition transformation, due later this year, will detail not only where the near-term changes fit into the big picture of acquisition reform, but also the longer-term actions needed to achieve the goals of agile acquisition.

The Air Force is also pursuing initiatives aimed at improving the Air Force's cost analysis capability. Among these initiatives are efforts to strengthen the Air Force cost analyst career field, improve the quality, quantity, and utilization of program cost and technical data and estimating methods, and establish new policy requiring robust independent cost estimates for programs—earlier and more often. These improvements will promote realistic program cost and technical baselines as well as strengthen the Air Force's capacity to produce accurate, unbiased cost information for Air Force, DOD, and congressional decisionmakers.

The Air Force is on a bold, ambitious, yet necessary journey to provide our commanders and decisionsmakers with accurate, reliable real-time business and finan-

cial management information that is validated by a "clean audit" opinion. Basic building blocks for this effort include a revitalized emphasis on transparency in our business processes and an enterprise-wide financial management capability that is modern, comprehensive, and responsive to the warfighter. Sound financial management and improved accountability are at the core of our financial management transformation.

Initiatives in Air Force contracting include development and implementation of the Enterprise Architecture for Procurement, consolidation of Major Command (MAJCOM) Federal Acquisition Regulation Supplements, standardization of the strategic sourcing process, and assessment of current contracting organizational alignments.

The Air Force will continue to promote small business participation in our acquisitions. Partnering with small businesses—including historically underutilized business zones; women-owned small businesses; service disabled veteran-owned small businesses; small disadvantaged businesses; and historically black colleges, universities, and minority institutions—helps ensure we maintain a strong defense industrial base and have the widest range of products and services available to support the joint warfighter.

The Air Force is also working with the Office of the Secretary of Defense (OSD) to understand the demand on our acquisition personnel and to appropriately size our workforce. Our objective is to have the right mix of military and civil service acquisition professionals with the appropriate education, experience, and training.

Focus Areas

Total Force Integration

The Chairman of the Joint Chiefs of Staff, General Pace, stated, "We must transform if we are to meet future challenges." One of the Air Force's more significant commitments to long-term transformation is the creation of the Total Force Integration Directorate. This new directorate is responsible for future force structure, emerging-mission beddown, and development of total force organizational constructs. Working with our partners in the Air National Guard and Air Force Reserve, the Air Force is maximizing our overall joint combat capability. Our efforts will enable the Air Force to meet the challenges of a shrinking budget, an aging aircraft inventory, and new and emerging missions.

The Air Force plans to shift investment from "traditional" combat forces, with single-mission capabilities, to multi-role forces by aggressively divesting itself of older systems. The result will be a force structure with expanded capability to combat conventional threats while continuing to wage the global war on terror. Simply stated, the Air Force will become a smaller, yet more capable force through modernization and recapitalization of selected weapon systems with a commitment to networked and integrated joint systems.

Our total force initiatives will maximize efficiencies and enhance combat capability through innovative organizational constructs. We have developed an organizational construct based on the success of an associate model in use by the Regular Air Force and Air Force Reserve since 1968. Associate units are comprised of two or more components operationally integrated, but whose chains of command remain separate. This model capitalizes on inherent strengths of the Air Force's three components, ensuring partnership in virtually every facet of Air Force operations, while preserving each component's unique heraldry and history. Increased integration allows Regular Air Force personnel to capitalize on experience levels inherent in the Guard and Reserve, while building vital relationships necessary to sustain successful combat operations.

Air National Guard and Air Force Reserve members will continue to support the Air Force's global commitments and conduct vital homeland defense and security missions. Total force initiatives will integrate Air Force components into missions critical to future warfighting: ISR, UAV operations, and space operations. These missions are ideally suited for the Guard and Reserve since many provide direct support to the joint warfighter from U.S. locations. Using this approach will improve our operational effectiveness, reduce our overseas footprint, reduce reliance on involuntary mobilization, and provide more stability for our airmen and their civilian employers.

Ongoing total force transformation benefits from a robust, dynamic, cross-functional coordination process, involving the headquarters, all regular component MAJCOMs, the National Guard Bureau and Air Force Reserve Command.

The Air Force continues to make significant progress on total force initiatives such as the Richmond-Langley F–22A integration in Virginia; community basing in Vermont; F–16 Integration at Hill AFB, Utah; new Predator missions in Texas, Arizona, New York, North Dakota, California, and at the Air Force Warfare Center in

Nevada; and C–17 associate units in Alaska and Hawaii. We are also working additional initiatives such as C–130 Active Associate units in Colorado and Wyoming; a C–5 Flight Training Unit in Texas; C–40 Integration in Illinois; and Centralized Intermediate Repair Facilities in Illinois, Connecticut, Louisiana, Utah, South Carolina, Georgia, North Carolina, and Florida.

The Air Force, through its Total Force Integration Directorate, is continuing a broad effort to ensure that new total force concepts are embedded in our doctrine, policy directives, instructions, and training. We are creating procedures to ensure resource and other decisions related to total force initiatives become routine parts of the planning and programming processes. The goal is clear, albeit ambitious: take greater advantage of total force elements and capabilities in the way the Air Force does business.

The Air Force is transforming from a Cold War force posture to a structure that supports expeditionary warfare and leverages total force capabilities. More efficient use of our Regular Air Force, Air National Guard and Air Force Reserve assets increases our flexibility and capacity to be a more agile and lethal combat force and a more vigilant homeland defender.

Science and Technology

The Air Force develops and exploits new technologies to meet a wide range of conventional and asymmetric threats. To achieve required future capabilities, we continue to support science and technology (S&T) investments for the major tasks the Air Force must accomplish to support the combatant commanders.

Air Force S&T is focused on high payoff technologies that could provide current and future warfighting capabilities to address not only conventional threats, but also those threats encountered in the global war on terror. The Air Force has embraced a new technology vision to guide our S&T program—"anticipate, find, fix, track, target, engage, assess . . . anytime, anywhere." We are integrating this vision into our annual planning activities to ensure we develop and transition relevant technology to the joint warfighter.

Air Force technological advantages and superior warfighting capabilities are the direct result of decades of Air Force investment in S&T. Similarly, today's investment in S&T will produce future warfighting capabilities as we adapt to continually changing threats. The Air Force continues to seek ways to create a significantly greater advantage over these threats. Investment in technologies such as nanotechnology could provide stronger and lighter air vehicle structures, while investment in hypersonic research could provide on-demand access to space and reduced time-to-target for conventional weapons. New information assurance technologies should allow real-time automatic detection and reaction to network attacks, enabling us to automatically isolate the attack and collect forensic evidence, all while continuing uninterrupted network operations. Research in sensor and information technologies should provide increased battlefield situational awareness, which will provide unprecedented insight and understanding of events in the battlespace. These are but a few examples of developing technologies that could lead to operational systems that are smaller, lighter, smarter, faster, stronger, and more effective, affordable, and maintainable than they are today.

The Air Force directed energy (DE) master plan is on track and some DE applications are already being fielded, especially for defensive purposes. For example, the Large Aircraft Infrared Counter Measures has now been used extensively and successfully in OIF and OEF on C–17s. Also, the airborne laser program continues to move DE technology forward. The capabilities possible through DE hold the potential to profoundly transform how we fly, fight, and defend ourselves.

Impressive as our technological advances have been, maintaining an advantage relies, in part, on our commitment to future S&T investments. These investments also clearly highlight that air and space power is an asymmetric advantage for the joint warfighter and the Nation.

Air Force Smart Operations for the 21st Century (AFSO–21)

To meet the challenges of the road ahead, we have embarked on an Air Force-wide journey embracing continuous process improvement, lean thinking and six sigma quality. This major initiative is called AFSO–21. Achieving excellence in all that we do requires us to institutionalize the precepts of AFSO–21 throughout all of our operations, across the Total Force, and in our daily lives as airmen. The Air Force is stepping up to the challenge and making the commitment necessary to achieve true process excellence. AFSO–21 focuses on the identification and elimination of activities, actions, and policies that do not contribute to the efficient and effective operation of the Air Force. We will seek out and discontinue any activity not ultimately contributing to creating military utility and mission capability. Con-

tinuous identification and systematic elimination of so-called "non-value added" activities are the keys to improving service, reducing costs, and enriching the lives of our airmen.

We are seeking three outcomes from this approach. First, we want airmen who are fully aware of the importance of their work and how it contributes to the mission; airmen must look to improve what they do every day. We want airmen to see their role in a fundamentally different way: by focusing on increasing value and eliminating waste. Second, we want to make the most of our existing budgets and free resources for future modernization by systematically identifying and eliminating the waste in our day-to-day processes. Finally, we want to enhance our ability to accomplish our mission and provide greater agility in response to rapidly changing demands.

Institutionalizing this new way of thinking and operating will allow the Air Force to meet the enormous challenges of the next decade and ultimately to sustain and modernize the world's best air and space force.

Fuel Conservation and Efficiency

The Air Force is the largest renewable energy power purchaser in the U.S. and is set to continue making large buys that will not only greatly reduce reliance on petroleum-based fuels but, over time, will reduce utility costs.

The Air Force is pursuing an aggressive energy conservation strategy and is committed to meeting and surpassing the energy goals mandated by the Energy Policy Act of 2005 and other overarching policies and mandates. We have been successful at reducing our energy consumption in accordance with past legislation and will continue to use a variety of programs aimed at reducing our use of petroleum-based fuels.

Our overall ground fuel conservation efforts in accordance with mandates and guidance have yielded some notable reductions. Specifically, Air Force motor vehicle gas and diesel consumption has fallen significantly alongside a corresponding increase in Air Force use of alternative fuels. Air Force progress in these areas will be driven largely by commercial research and funding since we do not substantially drive alternative fuels technology and infrastructure changes. The Air Force is partnering with the Army to develop and use a hybrid electric-diesel engine for the High Mobility Multi-purpose Wheeled Vehicle (HMMWV) with a planned delivery starting in 2008. Other alternative fuel-technology is still in the development stage.

Michigan's Selfridge Air National Guard Base (ANGB) will become the demonstration center for the latest fuel-efficient and environmentally compliant technologies for use in Air Force support equipment to include basic expeditionary airfield resources (BEAR) and ground vehicle inventories. Tests at Selfridge ANGB, Michigan will look at fuel cell powered vehicles and hydrogen fuel infrastructure requirements and will ultimately provide models for future Air Force/DOD procurement.

Our use of energy from renewable sources and construction and infrastructure improvement programs are designed to create cost effective energy efficiencies in new and existing facilities. In addition, our aggressive pursuit of on-base renewable power generation is rapidly increasing. We have bases where power is being produced from wind, solar, geothermal, and biomass resources, and we have projects planned, in design, or under construction to greatly expand this capability. Some of our bases are already using 100 percent renewable power from purchases and onsite production. With our combined purchase/production strategy, the Air Force is poised to surpass the renewable goals set by the Energy Policy Act.

We realize our reliance on petroleum-based fuels must be curtailed and it will take a concerted and coordinated effort to meet the energy reduction needs of the Air Force. We use the tools available to improve infrastructure while we continue to strive to instill an energy conservation mindset in our airmen.

C^4ISR

Future transformational C^4ISR capabilities will provide all-weather, persistent surveillance to the joint warfighter and the Intelligence Community, and they will be tightly integrated with space, air, and land assets to deliver even more precise and responsive situational awareness in support of national security objectives.

The Air Force's biggest challenge with its world-class C^4ISR systems remains the proper integration of these systems. The goal of our technology improvements is to integrate intelligence and operations capabilities. An integrated enterprise solution will enhance joint, multi-agency, and multi-national C^4ISR collection and dissemination capabilities and will eliminate information seams among air, ground, and space based assets. It will also expand information superiority and accelerate decision-making. This integration allows us to achieve decision dominance, leading to knowl-

edge-enabled operations and supporting the development and execution of sovereign options using air, space, and cyberspace capabilities.

Knowledge-based operations are critical to closing the seams between joint forces. We anticipate a future in which each force element, no matter how small, is constantly collecting data and "publishing" it to a joint warfighter network. Information will flow from every corner and element of the joint force, from ISR collectors to the warfighters. A key aspect of future C4ISR capabilities will involve replacing time-consuming human interfaces with machine-to-machine digital integration to ensure commanders have ready access to the information they need to execute their missions.

The concepts of intelligence fusion and streamlined sensor-to-shooter processes imply a high level of system interoperability at many levels. Information technology increases the ability to send ISR information to any point on the globe in near-real time. The Air Force is adapting doctrine, tactics, techniques, and procedures to manage this ever-changing growth in C4ISR capabilities.

To maximize our C4ISR capabilities, the Air Force is eliminating organizational restrictions that inhibit the flow of information between these systems. Advances in information technology are removing historical limitations inherent in legacy systems, such as line-of-sight data links, incompatible C2 systems and manual collection-management processes. Our goal is to increasingly "share" rather than "own" information.

Overcoming past shortfalls through improvements in the timeliness, accuracy, and completeness of battlespace knowledge will also bring tactical-level information to command functions that previously had access to only the operational or strategic levels of war. The AOC is the focal point for operational C2 of air and space assets delivering combat effects to the warfighter. To make this capability more effective, we made it a weapon system—the Air Force provides manpower and training as it does for every other weapons system—standardized, certified and lethal. We injected the technology necessary to increase machine-to-machine connectivity. Through both technical and procedural improvements, we have increased the system's capacity for information fusion and accelerated the decision-to-shooter loop. All five of our full-function AOC weapon systems (Falconers) should be fully operational in 2006.

In support of DOD and the joint community's broader efforts to adopt and transition to network centric warfare, the Air Force is aggressively integrating existing C4ISR platforms across a distributed processing environment. The Network Centric Collaborative Targeting Program (NCCTP) will initially integrate capabilities that include airborne C2, ground surveillance, signals intelligence, and operational C2 at the AOC. The Air Force will expand NCCTP into a broader airborne networking capability that will support the full and expanding range of future joint air and space operations.

The Air Force is actively pursuing the extension of global information grid (GIG) networked capabilities out to the extreme edge of tactical air operations. Programs like Family of Advanced Beyond-Line-of-Sight Terminals (FAB–T), the Joint Tactical Radio System (JTRS), tactical targeting network technology (TTNT), the Battlefield Airborne Communications Node (BACN), and, eventually, the TSAT constellation will provide rich connectivity and interoperability for joint air operations as well as tactical users and warfighters.

The Air Force is working closely with the other Services and agencies to define new doctrine and organizational structures to optimize joint warfighting operations. Consequently, we are developing the necessary technical capabilities, refined processes, and trained personnel to achieve desired effects.

Warfighting Headquarters (WFHQs)

The Air Force is transforming our C2 structure by establishing new WFHQs. These will be positioned globally, replacing our old Cold War structures and providing the Joint Force Commander (JFC) with the most effective means to lead air and space forces in support of national security objectives. These forces will be organized and resourced to plan and deliver air and space power in support of combatant commanders, enabling a seamless transition from peacetime to wartime operations. WFHQs will maximize usage of C4ISR technology and reachback to minimize required manpower. The WFHQs are also designed to act as the combined/joint force air component commander headquarters, or joint task force headquarters.

Joint Warfighting Space (JWS)

The JWS concept is an outgrowth of Air Force efforts to develop operationally responsive space (ORS) capabilities. JWS and ORS will enable rapid deployment and employment of communication, ISR, and other vital space capabilities and services.

JWS will emphasize agility, decisiveness, and integration to provide dedicated, responsive space and near-space capabilities and effects to the JFC.

In 2005, the Air Force successfully conducted the first JWS demonstration. By capitalizing on an existing commercial communications capability using free-floating platforms, the Air Force was able to extend line-of-sight communications for ground forces from 5–7 miles to over 300 miles. This demonstration was the initial step in exploiting existing off-the-shelf technologies in a long loiter environment.

In 2006, the Air Force will team with our sister Services to conduct the first in a series of small (1,000 pounds or less) satellite experiments. These demonstrations are designed to enhance and incorporate space capabilities in joint training and exercises, increase space integration, and allow the joint force to take advantage of the many synergies multi-service space professionals provide. Lessons learned from these activities have the potential to further evolve and improve space doctrine and help the joint community in developing innovative space-derived effects.

JWS and ORS demonstrations will continue to explore ways of achieving new, more effective ways of providing space capabilities to the joint warfighter. As technologies mature, JWS will bring the joint force more persistent, responsive, and dedicated capabilities.

Long-Range Strike

To further refine its rapid strike capabilities, the Air Force is transitioning its long-range strike strategy to focus on effects instead of platforms. We view long-range strike as the capability to achieve desired effects rapidly and persistently on any target set in any operational environment.

Our forces must be simultaneously responsive to multiple combatant commanders and be able to strike any point on the planet. Today, we provide deep strike capabilities through a variety of platforms and weapons. Future capabilities must continue to enhance the effectiveness of the system. Responsive capabilities will combine speed, stealth, and payload to strike hardened, deeply buried, or mobile targets, deep in enemy territory, in adverse weather and with survivable persistence.

Improving CAS

Detailed integration of each air mission with the fire and movement of supported joint forces is the trademark of CAS. In the past, aircrews and ground forces shared information through lengthy voice descriptions. When providing CAS or time-critical-targeting, this dialogue often took several minutes and occasionally resulted in missed opportunities. To increase integration and lethality, the Air Force has developed new equipment and training to increase situational awareness in CAS operations. We also continue to sustain and modernize the A–10, the only Air Force aircraft dedicated to the CAS mission.

With video downlinks, battlefield airmen can share time-sensitive information instantaneously and complete target coordination in mere seconds. Most JTACs are already equipped with ROVER III receivers to display video feeds from most UAVs and ATPs.

In 2006, the Air Force will begin operational fielding of the precision engagement modification that integrates ATPs and data links and enhances employment of GPS-aided munitions. This modification will greatly enhance the pilot's situational awareness and improve both the responsiveness and accuracy of A–10 targeting. This will increase the A–10's lethality while reducing the probability of fratricide incidents. The Air Force will also improve the sustainability of its A–10s by continuing a SLEP that doubles the flight hour life of the A–10, helping to ensure the A–10 can remain in service for as long as the warfighter requires.

In 2006, the A–10 Propulsion Upgrade Program will enter the system design and demonstration phase. This program will upgrade the A–10's current TF34–100A engines to provide approximately 30 percent more thrust. This will help overcome some limitations that the A–10 faces when operating from expeditionary airfields at high field elevations and temperatures. It will also improve the A–10 performance at medium altitudes and increase its weapon load, thus improving survivability and more fully leveraging the capabilities of the precision engagement modification and ATPs.

Special Operations Forces (SOF)

Air Force Special Operations Command offers combatant commanders specialized airpower and ground forces to conduct and support special operations and personnel recovery missions. These forces offer a unique combination of capabilities and personnel that the U.S. can call upon for the global war on terror, homeland defense, and disaster response missions.

To meet operational requirements, we will add 4 AC–130U gunships to the force structure in 2006, followed by 10 MC–130H Combat Talon IIs by 2010. The first

CV–22 Osprey combat unit anticipates IOC in 2009. The Osprey will add a long-range, self-deployable, vertical lift mobility aircraft to sustain SOF in remote environments.

We will support expanding our SOF combat aviation advisory forces so they can assess, train, advise, assist, and integrate more nations' Air Forces into the global war on terror and other combined operations and contingencies. We have begun the CSAR–X program in an effort to provide a fast, long-range, all-weather aircraft to achieve IOC in 2010 and replace the HH–60 CSAR aircraft.

The Air Force is also developing the persistent surface attack system of systems as the follow-on to the current AC–130 gunship. This gunship follow-on will provide responsive, survivable, persistent, and precise fire support in the low-threat to selected high-threat engagements in the 2015 timeframe.

BRAC

BRAC 2005 will transform the Air Force for the next 20 years to meet new challenges as a total force. The BRAC results improve Air Force warfighting effectiveness, realign Cold War era infrastructure to meet future defense strategy, maximize operational capability by eliminating excess physical infrastructure, and capitalize on opportunities for joint teaming with our sister Services. We will continue the excellent record established in prior BRAC rounds by closing bases as quickly as possible so savings are realized and properties expeditiously turned over for viable reuse, in concert with community plans for development and economic revitalization.

SUMMARY—HERITAGE TO HORIZON

We have received a proud heritage forged through the ingenuity, courage, and strength of the airmen who preceded us. Our duty today is to deliver their Air Force to the limitless horizon ahead of us. The mission of the Air Force remains to fly, fight, and win whether we are delivering lethal effects against insurgents in Iraq, protecting the skies of the U.S. against terrorist attacks, providing a global positioning system that is essential to our modern military and the global economy, or providing relief to victims of natural disasters both at home and abroad.

The Air Force of today and of the future will strengthen the entire joint and coalition team. Dominance of air, space, and cyberspace paves the way to overall success. In keeping with the current emphasis on innovation and transformation, our future Air Force will be a more capable yet smaller force. As such, the future Air Force will increase the capability and flexibility of the joint force and, subsequently, will increase the depth and breadth of options available to the President and the Secretary of Defense. These military options will be crucial to the defense of the Nation as the U.S. continues to wage the global war on terror while transforming and strengthening the joint force for any future contingency.

The Air Force offers an unparalleled set of combat capabilities to directly influence any joint, coalition, or interagency operation, as well as the enabling capabilities to improve joint warfighting in conjunction with our partners on the ground, on or under the sea, and through space and cyberspace. Recognizing that no Service, or even the DOD, can achieve success by itself, the Air Force has focused on increasing the integration and effectiveness of the joint force and interagency team.

To achieve new levels of integration and effectiveness, the Air Force will take advantage of our Nation's long-held command of the global commons—air, space, sea, and cyberspace. The Air Force will extend its current air and space power advantage. As part of the joint force, the Air Force is positioned to leverage its persistent C^4ISR, global mobility, and rapid strike capabilities to help win the global war on terror, strengthen joint warfighting capabilities, and transform the joint force—while maintaining good stewardship of public resources.

The Air Force faces the broadest set of mission requirements across the entire spectrum of warfare. We will bolster our Nation's ability to respond swiftly, flexibly, and decisively to asymmetric, irregular, and emerging threats. We have embarked on AFSO–21 as a means to best allocate our resources to meet this increasing set of challenges.

To accomplish this requires continued, focused investment in our people, science and technology, and the maintenance, sustainment, modernization, and recapitalization, and, where it makes sense, retirement of our aging aircraft and weapon systems.

We are America's airmen. Our heritage is innovation. Our culture is expeditionary. Our attitude is joint. Our mission is clear. As threats change and America's interests evolve, we will continue to adapt, evolve and remain the world's premier air and space force. Together with our fellow Services, we stand resolute, committed to defending the United States, and defeating our enemies.

Chairman WARNER. Thank you, Mr. Secretary. A very fine statement.

General Moseley.

STATEMENT OF GEN. T. MICHAEL MOSELEY, USAF, CHIEF OF STAFF, UNITED STATES AIR FORCE

General MOSELEY. Mr. Chairman, Senator Levin, members of the committee, thank you so much for watching over this great joint team in this Air Force, which is so special to the defense of this country.

Mr. Chairman, thank you for including my remarks in the record. If you would humor me, I'd like to take my time and introduce four American heroes, four great airmen, to the committee.

Chairman WARNER. Yes, but you can do the introductions, as well as comment on your statement. We'll provide you that flexibility.

General MOSELEY. Sir, I'd rather just use my time to introduce these great Americans.

Chairman WARNER. We'll accept that. Go right ahead.

General MOSELEY. Yes, sir.

First—and as you would please stand up when I introduce you—first is Senior Airman Polly Ann Bobseine. She has three combat deployments under her belt. She's a fire-team member in a security forces group. She's participated in allied and coalition offensive ground combat operations in Iraq over those three combat tours. These include over 100 combat patrols, 45 offensive missions. She's been engaged in 30 ambushes, 5 direct-action missions against Iraqi insurgents. She's just earned U.S. Army jump wings, and has been given, by the Army, the combat patch for the big red one, the 1st Infantry Division. Sir, you can see why we're proud of these folks.

Chairman WARNER. Not only that, but it underscores the risks associated with today's modern warfare, that it's a 360-degree perimeter, and men and women are equally engaged in those actions and taking the risks. We thank you, airman, for your service to the country.

Senator INHOFE. Mr. Chairman, it also means that they're getting this training. A lot of people don't realize what the airmen are getting right now in the field. We're aware of this, of course, from Altus and other places. So, they are performing well. But they also have to be trained for that, and they are getting proper training.

General MOSELEY. You bet, sir.

Chairman WARNER. That also underscores—if I might interrupt, Chief—we, understandably, focus the attention on the Army and the Marines valiantly carrying out those ground operations, but there are literally thousands of your people integrated, in one way or another, in those ground ops, as well as the Navy, and it's truly a joint-force operation.

General MOSELEY. Sir, we have close to 5,000 airmen involved in this business today.

Chairman WARNER. In country?

General MOSELEY. Either in prep or in country, actually in combat, just like Senior Airman Bobseine.

Chairman WARNER. Thank you.

General MOSELEY. Sir, next is Tech Sergeant Bradley Reilly. He is one of those joint tactical air commands (JTACs) that you're talking about. He's had four combat deployments. He's just earned the Silver Star, which we're going to award to him down at Tampa when he's with his family, and he wears a Purple Heart. This particular action, he was part of a quick-reaction force moving to reinforce ambushed Afghan security forces. Upon arrival, his helicopter drew heavy fire. His detachment overran the enemy position, but then came under reinforcing fire from three positions, three sides. Tech Sergeant Reilly was wounded, as were other members of his team. While caring for his team members, he provided lifesaving medical skills for others, controlled close air support (CAS) and aircraft fire into the fight, and provided suppressive fire himself against the numerous hostiles for approximately 2 hours, while wounded. So, sir, here's that JTAC that you were talking about, in person.

Next, Lieutenant Colonel Ann Konmath. Mr. Chairman, she has spent a lifetime in the world of space in maintaining America's high frontier. She is now the squadron commander of the Weapons School Squadron at Nellis. She is the expert, teaching experts about space and space operations and the orchestration of space effects through strategic and operational and tactical levels. She not only commands the squadron, but she teaches the courses out there, and she teaches the courses not just to space professionals, but to fighter pilots, bomber pilots, combat rescue pilots, et cetera. She started life as a distinguished Reserve Officers Training Corps (ROTC) graduate. She is a graduate of the Air Force Weapons School. She has been an orbital analyst in Cheyenne Mountain. She's operated several space control systems, and she served as a space weapons officer at 8th Air Force Operations Center, and also in Pacific Command.

So, sir, here is one of those people that you almost never see, because they live in a world that's incredibly complicated and technical, and she is the expert of all experts teaching those new folks.

Last, we have Lieutenant Colonel Luther, or "Trey," Turner. He is the commander of our 17th Reconnaissance Squadron, which is our UAVs that are doing special missions. He was a naval officer in a previous life, Top Gun graduate, 1992, interservice transfer to the Air Force in 2003. He's a command pilot with 4,000 hours, F–18, F–14, A–4, 376 carrier landings, and proficient in all missions of the current and the future UAV world. He is the expert that's taken us there. He has deployed to Iraq, flown Predator missions in support of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), and he's had three combat deployments.

So, sir, thank you for the time to introduce four American heroes and four great airmen in lieu of an oral statement. Thank you for the opportunity to bring them here today, also. [Applause.]

Chairman WARNER. What a marvelous way to start a hearing. But if you would allow me, as I understand it, one of our senior staff members was your squadron commander, and I want to know how you let him go. Would you stand, please, and give the answer to that question?

Mr. O'CONNOR. He is a great credit to this Nation, and I'm so glad to see that he's continuing to serve this Nation.

Chairman WARNER. Why did you let him leave the Navy? [Laughter.]

Mr. O'CONNOR. That was his decision, sir. [Laughter.]

Chairman WARNER. Thank you very much.

We'll now proceed with a 6-minute round of questions.

Mr. Secretary, your Department is presenting the defense committees with a nontraditional funding strategy for the F–22A that would result in a multiyear procurement of the aircraft from fiscal years 2008 through 2010, at 20 aircraft per year, with no aircraft procurement in fiscal year 2007. However, to do this, the Air Force would require an economic order quantity (EOQ)—that's an EOQ authorization under a firm, fixed-price contract in fiscal year 2006, and a waiver to carry the cancellation ceiling as an unfunded contingent liability. This appears to be an incremental funding plan procuring 3 years of aircraft over 4, for the F–22. Please provide the committee with your understanding of how this would work and whether it's in compliance with current regulation and law.

Secretary WYNNE. The intent of this stretch-out, which it is a stretch-out, is to hedge the bet, if you will, because this is our only fifth-generation fighter that is in warm production today. I was able to work with the Office of the Secretary of Defense (OSD) to convince them that it was not in our Nation's interest to terminate this fifth-generation fighter before we got access to another fifth-generation fighter. The second fifth-generation fighter is the JSF, which comes alive in the 2011–2012 timeframe. To do this, they have stretched the F–22 program out, added four aircraft to it, and allowed us to do a 3-year multiyear at 20 a year to try to salvage some of the foregone cost savings that were requisite with the volume, I think, at 27 and 28 airplanes a year.

The zero that is currently there is a reflection of the desire on the part of the Department to buy subsystems in this period of time, and to comply with the law. It does make it a little bit more difficult to contract for those, but you basically write in the items that you're going to get on an economic order quantity, such that there is no impact to the production line in Fort Worth or Marietta.

These means and methods have been vetted, apparently, with senior acquisition officials in the Department and the legal—necessary legal—to bound it, and they required a waiver, as you properly indicated to make this happen.

We were, frankly, thrilled with the opportunity to extend this program, because I don't think that anyone here would rejoice in seeing the only fifth-generation fighter line taken away as an option should we get into a hot engagement. That having been said, we did not object to the funding that went down to allow us to do that.

Chairman WARNER. General Moseley, your perspective on this?

General MOSELEY. Sir, as we looked at the portfolio and the choices made in the QDR of long-range strike and global strike, and of balancing the funding sources that we had, we were very happy to be able to extend the line 2 more years and to have the authorities to begin to work with the committees on a multiyear to be able to get the cost down even further. Out of that, we were able to buy four more aircraft from the PBD–753 decision of two Decembers ago. So, we came out with four more airplanes, plus the line

extended 2 years at Marietta, plus an opportunity to work a multiyear to get the cost down even further.

So, sir, that's the endstate of this and the ability to work this. We're now working hard with the OSD staff and with Lockheed Martin on Lot 6 negotiations, which will be the lead item, then, for working with the committee and with OSD and Lockheed on the multiyear.

Secretary WYNNE. I have advised the OSD staff that it would probably be prudent, just because of the mechanics of, "How do I get a follow-on, should this hedge not be sufficient?"—and there may be a need for a follow-on 20 airplanes, that maybe we should price an unfunded fourth-year option so that I can find out when I need permission to go forward, because I am somewhat concerned that I may have boxed in our ability, if you will, to buy number 184, should that become an option for the Nation.

Chairman WARNER. Thank you.

I'd like to bring up the subject of this engine problem with the JSF. I recounted here, earlier, the correspondence that Senator Levin and I forwarded, and the indication by the Deputy Secretary, in a very courteous manner, that he'll adhere to our recommendations. I will soon be advising the committee of my intentions, in consultation with Senator Levin, to hold a special full committee hearing on this subject, because I think it's so important—important from two standpoints. One, this is the fighter aircraft, which holds the future for the free world to deter such aggression as might be involved in the missions that this plane is designed for. We have eight nations participating in the program, estimated at between 2,000 and 3,000 aircraft. Clearly, it seems to me that it's prudent that we continue to go forward with the decision of two engines—I must express to you forthrightly my own present inclination—because of any number of reasons. I respect, here this morning, that you're here to defend the President's budget and I shall not elicit from you your views as to where you think this program should go. It's obvious that you have that obligation.

But it is important, as we in the committee prepare for these hearings, to have a better understanding of the decision to drop the second engine—referred to as the General Electric (GE)/Rolls engine. Did it originate, Mr. Secretary as an option in your Department? If so, what consultation among your peer group—namely, the Chief of Staff and others—took place? What consultation did you take with the other nations and their corresponding Secretaries of Air or whatever the political situation is in those countries? Would you kindly put that on the record?

Secretary WYNNE. Yes, sir. Thank you.

[The information referred to follows:]

During fiscal year 2007 budget deliberations, the Department considered maturity of the F135 primary engine, the investment cost of developing a second engine, and findings of past engine assessments. The Department has reasonable confidence in the reliability of the F135 engine due to its initial test results. However, given the approximately $2.4 billion investment cost for developing a second engine, the Department's analysis concluded that a second source would not yield program cost savings. Therefore, the Department concluded that a single engine supplier provides the best balance of risk and cost.

The Services did not discuss the budget proposal to cancel the engine with our international partners since it was considered a Department of Defense internal

issue until official submission of the President's budget request. We have, however, had discussions with several partners following the submission that I am aware of.

Secretary WYNNE. This is a question of reliability, because you want to have two engines as this is going to be a relatively large program. I think it's going to be more than 3,000 airplanes but I appreciate that we are talking now about 3,000 airplanes.

The Navy had a bigger play in this, if you will, because they are buying a smaller fleet than the Air Force. So, we can amortize the cost of a second engine over it. Frankly, we would benefit from having a second engine because of our larger fleet size.

The impact on other nations is problematic, in that the British Rolls-Royce company is partnered with GE, I agree, and they formed a partnership, but they supply many of the same components to Pratt & Whitney. They're just not partnered with Pratt & Whitney and are treated on a little bit different scale.

So, the issue really is reliability of the core engine. During the early stages of the F–16 program, we did have problems with the F–101 and the F–100 engine. But those problems have long been resolved, and we have not had a history of unreliable engines. The 119 engine has been very good.

So, when it was brought forward, there were cost savings tabled up by a lot of folks, and the senior leadership of the Department gathered around relatively quickly and tried to sort through this thing by doing some analysis and trying to make sure that the savings that they would expect for this—two engines versus one engine would be——

Chairman WARNER. Do I infer that your Department, then, put that into the——

Secretary WYNNE. I would say that the Navy brought it forward, and we did not object.

Chairman WARNER. So, the Navy originated it, and Department of Air Force did not object, and, therefore, it was elevated to the Deputy Secretary/Secretary level for selection among the various options as to where to save some money?

Secretary WYNNE. That is correct.

Chairman WARNER. General Moseley?

General MOSELEY. Sir, I wouldn't have anything to add, other than that it is $1.8 billion.

Chairman WARNER. I am fully aware of that.

General MOSELEY. Yes, sir.

Chairman WARNER. From an operator's standpoint, clearly, throughout history, and, I'm sure, into the future, there will be problems associated with these highly complex engines, and particularly when this particular engine is designed to perform three different functions. I don't know that it's ever been done before in aviation history.

Now, if you had to have a standdown of aircraft while your technical people and other people had to ascertain what the problem is, that's a big fleet of aircraft worldwide to stand down. It seems to me there's some advantage in having the two engines so that presumably a substantial portion of the fleet could continue to operate rather than standing down. Isn't that an advantage?

General MOSELEY. Yes, sir, it is. We've had histories of fleet stand-downs in the Air Force and the Navy has, as well—with our

F–100 engines and also with our GE engines, on occasion, with bearings and with oil seals that have shut us down for a while until we could fix them. The Navy had historic problems with their TF–30 engines on their F–14s. So, the redundancy and the depth of the engine technology and the availability of an additional engine is an attractive option, operationally.

Chairman WARNER. Mr. Secretary, I would say to you, because you're an acknowledged expert on procurement, hasn't history taught us that competition can generate savings?

Secretary WYNNE. There's no doubt it has. I think that was one of General Abrahamson's principal arguments. He actually created the second engine for the F–16 program, after it had gone into production, primarily to drive competition. I think his realization was on the 20 to 30 percent range. At least that was his expectation, as I recall, when I left the program.

The realization is—I don't know, I just don't recall. What I think is here is that this is a program that—first of all, everything costs more these days. So, it takes longer to amortize any savings.

Chairman WARNER. I'm just talking about historically, throughout military procurement history, competition has generally brought about savings, correct?

Secretary WYNNE. Yes, sir, it has.

Chairman WARNER. General, on the technical side of the second engine, it's roughly 3 to 4 years following the initial engine, isn't that correct, in R&D?

General MOSELEY. Yes, sir. That's my understanding.

Chairman WARNER. I've been informed that that engine probably will have some advantages over the Pratt engine, simply because 3 or 4 more years of technology is being incorporated, perhaps additional thrust. Is that correct?

General MOSELEY. Perhaps so, sir. That's my understanding also.

Chairman WARNER. So there is the potential for the second engine—and I'm not critical of the Pratt engine—but it is possible that that engine could have certain attributes that would make it, say, better suited for the vertical-thrust missions. Is that correct?

General MOSELEY. Perhaps, sir.

Chairman WARNER. Talking like a lawyer, I think. We'll see.

To a different subject, this committee has focused tremendous attention, and will continue to do so, on the IEDs. Has the Air Force, General Moseley, increased the number of C–130s in Central Command (CENTCOM) area ops to transport supplies in Iraq in order to reduce the Army and Marine Corps dependence on convoys? What capabilities does the Air Force provide in CENTCOM's area of operation that support the defeating of these IEDs?

General MOSELEY. Sir, we've been involved, alongside the Army and the Marines and the Navy explosive ordinance disposal (EOD) efforts, from the very beginning, when we stood up the IED Task Force, about a year and a half or so ago. We now have a general officer who's a part of that. That's his full-time job. We have several bodies of effort, to include a battle lab that's looking at applications of anti-IED work from an air perspective, and we are sharing everything that we have, as well as the other Services, on electronic warfare applications, surveillance and reconnaissance applications, et cetera.

Sir, we have everything deployed forward that plays into this war for John Abizaid and for George Casey, to include the EC–130s, which we will like to have to shut the schoolhouse down here within the next few weeks, if not a month or so, because we have all of the assets forward. We have 31 of 31 combat-coded Predators forward. We have all of our EOD effort forward, alongside the Navy's EOD effort, plus Tactical Air Reconnaissance System (TARS) pods that Selfridge and Richmond bring to the fight in the Guard units—it is a wonderful pod—as well as our sniper and LITENING pods aboard our F–15s and F–16s.

Chairman WARNER. I thank you, General. I think that shows the full support.

General MOSELEY. Yes, sir. This is a frustrating effort, because I'm not sure any of us have an answer for this that's satisfying to John Abizaid and George Casey, but we're trying.

Chairman WARNER. We'll keep working.

Secretary Wynne, I omitted one question on the engine. To what extent was there consultation with our allies that are a part of this program with the JSF?

Secretary WYNNE. I don't know exactly the extent of the consultation, sir.

Chairman WARNER. That wasn't incumbent upon your Department? Aren't you the primary manager of it?

Secretary WYNNE. At this point, I would tell you that the acquisition, technology, and logistics (AT&L) group is the primary manager, but I am the designated service acquisition executive, yes, sir. I do know that the British were advised. Also, the Italians were advised.

Chairman WARNER. Is that after the fact, or were they advised, and, "Look, this is before us"?

Secretary WYNNE. I would say that it was during the final stages of the deliberation, if not after the fact.

Chairman WARNER. All right. Where could I go to check into the——

Secretary WYNNE. I would say probably the Defense Acquisition Executive, and ultimately the program office.

Chairman WARNER. I'd like to have you fully answer that question for the record.

Secretary WYNNE. I will do that for you, sir. Absolutely.

[The information referred to follows:]

SECRETARY OF THE AIR FORCE
WASHINGTON

MAR 1 3 2006

The Honorable John Warner
Chairman, Committee on Armed Services
United States Senate
Washington, DC 20510-6050

Dear Mr. Chairman:

Thank you for the opportunity to testify March 2 regarding the FY07 President's Budget submission. During the hearing you asked several questions with regard to the cancellation of the F136 alternate engine for the F-35 Joint Strike Fighter. In particular, you asked if the F-35 international partners were involved in the Department's decision to cancel the program.

During FY 2007 budget deliberations the Department considered maturity of the F135 primary engine, the investment cost of developing a second engine, and findings of past engine assessments. The Department has reasonable confidence in the reliability of the F135 engine due to its initial test results. However, given the approximately $2.4 billion investment cost for developing a second engine, the Department's analysis concluded that a second source would not yield program cost savings. Therefore, the Department concluded that a single engine supplier provides the best balance of risk and cost.

The Services did not discuss the budget proposal to cancel the engine with our international partners since it was considered a Department of Defense internal issue until official submission of the President's Budget request. We have, however, had discussions with several of the partners following the submission that I am aware of.

I appreciate your attention to the F-35 Joint Strike Fighter program and I am hopeful that you will support this request.

Sincerely,

Michael W. Wynne

cc:
The Honorable Carl Levin

Chairman WARNER. Thank you.

Senator Levin.

Senator LEVIN. Thank you, Mr. Chairman. Thank you, General Moseley, for introducing the four airmen sitting behind you. More importantly, thanks to each of them for standing up for us and for all the support that you provide this Nation and all the people you represent.

General Moseley, at a briefing last week the Air Force told our staff that Air Force readiness had dropped to historic lows. Can you describe what that situation is and what steps are being taken to remedy it?

General MOSELEY. Sir, we struggle with readiness across the board with a fleet of aging systems, with cost per flying hour going up, and maintenance issues going up. Our readiness is sustainable

now, given our deployments, but it's always a concern. I don't know that I would agree that it's at an all-time low. I would say that we're maintaining this deployment schedule, but we're maintaining it with an aging fleet, and it's costing us more at every increment to do that.

We have spent a lot of money, with the help of this committee, on readiness and on spares and on streamlining depots, to try to keep this equipment operating. So, sir, I don't know that I would say an all-time low, but I would say this is a challenge.

Chairman WARNER. Is it unacceptably low?

General MOSELEY. Sir, we're getting to a margin where it's going to be unacceptable in our low-density, high-demand deployable assets of airborne warning and control systems (AWACs) and our combat rescue helicopters, our U2s, and some of our aging systems, yes, sir.

Senator LEVIN. Secretary Wynne, your posture statement reflects that the Air Force began 2006 with a force imbalance consisting of a shortage of enlisted personnel and an excess of officers, primarily junior officers commissioned between 2000 and 2004. This imbalance creates some unacceptable operational and budgetary impacts. Apparently, you are going to remedy the imbalance by proposing to cut almost 20 percent of the 2002 and 2003 commissioning class, which is 1,900 of the 9,700 total officers that were commissioned in 2002 and 2003. Is that accurate? If so, by what process will those cuts be made?

Secretary WYNNE. Yes, sir, I believe that is an accurate reflection. We are very respectful, and value every member of our Service. We have advised those classes on their options. One of their options, of course, is to resign, the other option is to go from blue to green. There is an option to take a Civil Service position, and we are trying to be respectful of the fact that they joined the United States Air Force to bring value to our Air Force. We value and respect every one of our Active volunteers.

Senator LEVIN. What is the budgetary implication of that imbalance for fiscal year 2007 and for subsequent years?

Secretary WYNNE. Sir, I analyzed it as a total impact, across the board, and, frankly, took advantage of it, in the sense of the 40,000 cut that we had proposed, which ended up, I think, with about $22 to $23 billion in savings across the breadth of the FYDP. I will have to get, for the record, the 2007 impact.

[The information referred to follows:]

There is no impact due to an imbalance of forces. We ended fiscal year 2006 slightly under authorized end strength levels and plan to meet 2007 authorized levels through increased numbers of separations using the Voluntary Separation Incentives Program, Selective Early Retirement Board, and Force Shaping Board for officers and the Career Job Reservation, Date of Separation rollback and the Limited Active-Duty Service Commitment Waivers for enlisted personnel.

Senator LEVIN. Mr. Secretary, last year you told the committee what the out-year funding wedge for the Missile Defense Agency (MDA) that the military departments would be budgeting for missile defense, starting in fiscal year 2008 was. Is the Air Force currently planning to budget for missile defense activities of the MDA in fiscal year 2008?

Secretary WYNNE. Sir, right now I cannot respond to that specifically. I know that we are partnering with General Trey Obering, and trying to pick up our share of the load. But I'm going to have to take that one, also, for the record.

[The information referred to follows:]

DOD guidance directs fielding of elements of the ballistic missile defense system (BMDS) as soon as practicable. Additionally, the BMDS will be managed in three phases: development, transition, and procurement/operations. The Missile Defense Agency is responsible to develop missile defense capabilities and then transition those capabilities to the Services to procure and operate. The Air Force funds base operating support for the ground based interceptors at Vandenberg Air Force Base in California and missile defense operations at Schriever Air Force base in Colorado. Beginning in fiscal year 2008, the Air Force will assume responsibility for the missile defense capability of the Cobra Dane radar at Eareckson Air Station in Shemya, Alaska. As additional missile defense capabilities are developed and transitioned, we will program funds to support those capabilities such as the Airborne Laser and Space Tracking and Surveillance System that will eventually transition to the Air Force.

Senator LEVIN. All right, that would be appreciated.

Mr. Secretary, the Air Force is intending to use incremental funding within the proposed multiyear procurement program for the F–22 aircraft. In essence, the Air Force wants to spread the funding for 3 years' worth of production over 4 years. Congress has sometimes resorted to incremental funding in the shipbuilding account, but, to my knowledge, has not used incremental funding when we buy aircraft. Are we, indeed, using incremental funding to buy F–22 aircraft in 2007? If so, why should we make the exception to our usual, full-funding policy when we buy aircraft?

Secretary WYNNE. We were extremely pleased that we were convincing to the OSD that we should not terminate a fifth-generation fighter line before we get another fifth-generation fighter line. Part of the agreement in doing that was to extend the line to 183, and lower the rate of acquisition by 7 or 9 airplanes to make it 20–20–20 across the 3-year multiyear.

An additional element of that was to understand that in this 2007 budget we would list a zero, and we would list all of the subsystems which we would be purchasing, to make sure that we were not, if you will, subject to the incremental funding, in specifics.

On the other hand, we did ask for a waiver on contingent liability, termination liability, so that we could proceed on with this multiyear. It is a bit tortuous for me to see my way to number 184. I would like to make sure I continue to offer the Nation a hedge, but, on the other hand, we were very pleased with the total outcome, and accepted it.

Senator LEVIN. General, the decision was made, apparently, to significantly reduce the B–52 fleet. My question is this: was a cost-benefit or other analysis conducted that discussed various issues that may have played a part in that decision? For instance, number of flying hours, flying hours per airframe, cost and maintenance issues? If so, would you provide a copy of that analysis to the committee?

General MOSELEY. Absolutely, sir.

[The information referred to follows:]

The Air Force performed an operational and programmatic risk assessment of the impact of a reduced B–52 force structure informed by the Air Force 2005 Capability Review and Risk Assessment and of planned/programmed modernizations and im-

provements across the entire Global Strike portfolio. This assessment concluded the proposed B–52 force structure/Global Strike portfolio met any single Combatant Commander's Operational War Plan or Major Contingency Operation's requirements.

The money gained from the B–52 drawdown will be used to aggressively recapitalize and modernize the remaining bomber fleet. The modernized bomber fleet will be more lethal, responsive, and survivable as a result of planned investments in advanced weapons, increased accuracy, integrated data links, improved connectivity, improved threat awareness systems, low observability upgrades, and improved electronic countermeasures.

Additionally, the impact of this reduction is currently being assessed as part of the PDM-directed U.S. Strategic Command B–52 Bomber Force Structure study.

Senator LEVIN. Can you just briefly, since my time is up, tell us why that decision was made?

General MOSELEY. Sir, we have a long range strike portfolio that we're looking at in three phases. The first phase is to bring the existing bomber fleet up to as high of a mission capability rate as we can, the B–1, the B–2, and the B–52. We have, I believe, close to $3 billion in that, in data links, pods, sensors, and electronic warfare capabilities, to bring those airplanes up, like we did with the B–1, to bring the fleet size down to 60, with 7 additional ones, so we could spend the money on the existing combat-coded airplanes.

Phase two of that is to look at a new program, which we are in the process of doing. The QDR validated that with an initial operational capability (IOC) of a new platform, at 2018, which may be unmanned, or it may be manned, or it may be both. We're beginning to work our way through that.

Then, phase three is out in the distance, relative to technologies on exoatmospheric or hypersonic propulsion.

The first step is the phase one, to get the existing bomber fleet the right size where we can spend the amount of money we have, and keep the combat-coded airplanes viable.

Senator LEVIN. Thank you.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

This morning I talked to the Guard Association. I shared with them my thoughts that I shared with each one of you individually in my office. I just wanted to get it on the record and keep talking about this.

These hearings bother me. We sit around and try to say, what is our need going to be 10 years from now? We're never right. I served 8 years in the House, and 11 years in the Senate. In the House Armed Services Committee, in 1994, we had someone testify that in 10 years we would no longer need ground troops. [Laughter.]

We're sitting here right now, recognizing how wrong we were at that time, and I don't care how smart we say we are now, we're not going to guess this right. I think the only answer is, something I brought up 6 years ago during the first Rumsfeld confirmation hearing, and that is, if you looked back historically for the last century, the defense budget has equaled about 5.7 percent of the gross domestic product (GDP). It went down during the Clinton years, down to 2.9 percent. We're at about 3.8 percent right now. I think we're going to have to look at the overall picture, because if we sit

here right now and try to do something with our lift capacity, anticipating where our needs are going to be 10 years from now, or with the F–22 or the JSFs, or with the non-line-of-sight (NLOS) cannon, we're going to guess it wrong. So, what we need to be doing is getting everything so that, no matter what situation we're facing at that time, we're going to be there.

I'm going to be striving for this, Mr. Chairman.

On the C–17s, last year we went through this thing, and we talked about going up to 220. Then, we find out that even right now—and I talked to General Schwartz—he said that today we're flying the C–17 at 160 percent of our planned utilization rate. I think you all would agree that General Schwartz is correct. Yet, we come up with the QDR in—which coincidentally happens to be the same as the Mobility Capability Study—saying no, we just need 180. I know this is wrong.

Now, I'd like to have your thoughts about this. You know, do you think that they took into consideration the utilization rate when they came up with the recommendation that, "No, we think the 180 is going to be adequate"? Or is it just that our top line is too low, and we just can't do all the things we're supposed to be doing? What are your thoughts on that?

Secretary WYNNE. I think that they took into account the total mobility assets in a portfolio analysis, and they presumed that it would maintain the mission capability rate because of increased maintenance activities along. So, they essentially took a capability analysis and broached it with a capacity analysis.

We have some of our aircraft that are on legislation restriction. We cannot retire them and we are working our way through some of that. That impinges upon where the capacity comes from that would factor into this C–17 decision.

That having been said, we're also looking for a way to get light cargo aircraft into the game. So, this whole C–17, and, oh, by the way, as the C–17 decision looms, we're finding interest overseas in the airplane, not only from the United Kingdom (U.K.) for additional airplanes.

Senator INHOFE. But you're making my case, Mr. Secretary. I mean, yes, I understand, with the light cargo aircraft and the Army's version of that, also, it's going to be necessary. Their needs for this are very obvious and I agree with that. But the point is, not at the expense of the C–17 program.

My first year in the House was when they started the C–17 program. Kind of like the B–1 and the B–2, we really went through it, and we ended up with this thing that far exceeded our expectations.

Secretary WYNNE. Right.

Senator INHOFE. Do you have any comments about that, real brief, General Moseley?

General MOSELEY. No, sir. The Mobility Capability Study did include some surge scenarios, but what it did not include was the Army Stryker system and the modularity that's out beyond the window of the study. So, there's another piece of this that will be in play.

Senator INHOFE. Okay, I appreciate that.

General MOSELEY. But, Senator, with the fixing of 112 C–5s, without the ability to retire them or do anything to the C–5 fleet, out of the Mobility Capability Study came a range of strategic airlifters that gave us about 300. That's the 180 program of record for the C–17 and 112 C–5s.

Senator INHOFE. I understand that. Last weekend, several of us—Senators from Utah, Georgia, and myself—went to the three air logistics centers (ALCs) in Georgia, Utah, and Oklahoma. We saw the results of this setting aside the $150 million. This leads me into the next question and the results are just incredible. I would invite both of you, either personally to go and see this for yourselves, or make sure your staff adequately briefs you on the success rates. Just issue by issue, the grounding due to parts has decreased by 37 percent, bettered our flying goal hours by 922,000 hours, the rate of aircraft incidents has dropped. Then the most important thing is your flow days. The flow days at all three—now, it was true with KC–135s in Tinker, but also with A–10s and C–5s in Warner Robins and Hill—we just about cut those flow days down in half right now. That means we have 50 percent more of those in the air right now, saving lives and performing their functions.

So, I would say to you that I would like to reconsider this whole notion of putting the $150 million back in the working capital fund. Now, you can all say, "Yes, it's going to be there, and the successes in the three ALCs are due to that." But, in fact, that's not the case, because your money is in jeopardy if it's in the working capital account. I can point out cases. I don't need to, both of you know that.

Now, what do you think about getting this back in its own separate bucket and out of the working capital account?

Secretary WYNNE. Sir, this is a very detailed subject. I can tell you this, that we are so proud of our depot personnel for the efforts that they have done. I have personally gone to Warner Robins and seen what they have done, and gotten briefed by the other two while I was there. They have been the genesis of AFSO–21, and springing it on the entirety of the Air Force.

This is one of those cases where they have used the invested capital in the very best way to focus their attention on how to do it better, and actually gave a lot of strength, if you will, to the Mobility Capability Study about the goodness of the maintenance activity to maintain the capacity.

All of this is working around to your question. I think, no matter where the $150 million lies, we will use it right.

Senator INHOFE. I would agree with you, if we know for a fact that the $150 million is going to be there, as it was set up to be there, all the way from 2004 to 2009, then I would agree wholeheartedly with you. I'm not saying this in a critical way of you. I'm just saying that that's a success story.

Secretary WYNNE. Oh, yes.

Senator INHOFE. The very thing that you saw at Warner Robins, you would see the same percentages, in terms of flow days, both in Utah, as well as Oklahoma.

General Moseley, any comments?

General MOSELEY. Yes, sir. I would agree. Sir, there is another initiative that we're getting close to being able to talk to your staff

and you about, which is a different scheme, through Air Force Materiel Command (AFMC), to fund the depots upfront and provide the money to General Carlson at Wright-Patterson, so industrial enhancements or growth at the depots would not be dependent on the major command (MAJCOM) end of your money, but we would fund it upfront. That's to the tune of $2 or $3 billion over the FYDP that we hand to AFMC to be able to manage the real property better than we have in the past. We have some information technology opportunities here for visibility on movement of the money that's going to make this possible.

So, this is exciting to me, because it lets us get at these things upfront, instead of waiting until the end of the year.

Senator INHOFE. Yes. My time's expired, but I would hope that you really take a good look at what is happening at those three locations. It's pretty miraculous.

Chairman WARNER. Thank you very much, Senator.

At this time, I must depart, as did Senator Levin, to go to our markup, but I shall be back. Senators McCain and Inhofe, it's in your able hands with these two gentlemen.

Secretary WYNNE. Thank you, sir.

Chairman WARNER. Senator Roberts, you're next.

Senator ROBERTS. I note, Mr. Chairman, you indicated it was just Senator McCain and Senator Inhofe, not myself, which I certainly appreciate. [Laughter.]

I have my hands full? Yes, okay. All right, thank you. Mr. Chairman, thank you very much.

I have a rambling-rose question that Senator McCain will be interested in. It's about tankers. General Moseley, I want to thank you for coming out to McConnell last August. We were talking about the three studies that were going to be held at that particular time, the analysis of alternatives (AoA), the Mobility Capability Study, and the fleet viability study. Let me toss a bouquet to Senator McCain. I don't think any of you said—perhaps maybe one or two of them may have been done—without his insistence that we do this right in regard to tankers. I don't think that would have happened and I think we're in a better position to at least take a look at the challenges that we have.

I don't need to be telling you about the importance of tankers in regard to our global reach. I understand that. We want to be of help to you. My question to you, which is the last thing that I'll say, is, is there anything we can do to help you in this endeavor?

But General Kelly went over to the House, on Tuesday, and he testified before the House Armed Services Projection Forces Subcommittee, that to buy 12 next-generation tankers next year, at costs ranging between $150 million to $200 million per aircraft, it's going to take 38 years to replace the KC–135 fleet capability. Now, that's about $1.9 billion to $3.2 billion a year. I don't know how we do that. He indicated that 38 years—and if your average aircraft today, or tanker, is 46 years old, that's an 85-year-old airplane. I can't imagine anyone, other than maybe Jim Inhofe, flying a plane like that. He flies planes, and the propeller drops off, and he still lands. It's an amazing feat. But I don't think even Jim Inhofe would do that.

These planes were started back in the Ike era. I still like Ike, you know, being from Kansas, but I just don't really think that that is the answer. So, we need, really, to answer this challenge, if we possibly can.

By the way, the Mobility Capability Study indicated that there are four domestic aircraft that would qualify, and three that are nondomestic like Airbus. I just want you to know that the Airbus issue, with the EU subsidy, to me, is like the Dubai Port Authority issue to many others in Congress. So, just consider that for the record.

There is a Defense Science Board that met a couple of years ago that said, "No problem with the tankers." I doubt if any of the scientists have ever been in the tanker. There is the AoA that was put on hold for a year, for obvious reasons—and I understand that was conducted by RAND and the Air Force. I don't know if they ever got on a tanker. But I do know somebody that did and it's the husband of a young lady that works in the pharmacy at Bellehaven—close to where I live—and her husband is age 32, and the tanker that he was flying is 52. Every time I would get my prescription for my various maladies, she would look at me and say, "I know you. I've seen you on television," mainly because we both had the same haircut and we can—you know, people understand who we are. So, consequently, she said, "My husband's going to get out of this business. He doesn't think that aircraft is safe, and he's the pilot."

So, I guess what I'm asking is, how on Earth do we match this tremendous cost challenge that we have and still maintain the global lift? We have the three studies that are completed, and we're going to do it the right way this time. So, how can we be of help to you so we can get there from here and we don't have an 85-year-old aircraft sitting somewhere that can't fly?

There's a rambling rose for you. I'm talking to General Moseley and thank you for all you've done on this issue.

General MOSELEY. Sir, thank you. The AoA and the other studies are done, and they're in the DOD. I've not been privy to read the entire thing. I've read the executive summary. But they're in the DOD.

The program is on hold now by the Deputy Secretary of Defense. When he releases that, then there will be an opportunity for release of a request for information (RFI) which will then begin the upfront, visible, competitive process to see what's possible out there with a set of options.

We asked, this morning, to refresh us, or confirm to us, that there are no options that are off the table, that now, as we go through the RFI, and the way the RFI should be written, and the request for proposal (RFP) that comes after that, that OSD will help us with, that nothing is precluded or off the table or any set of options.

Senator, we're anxious to be able to move on this program, but we're also anxious to be able to move on this program in a way that the committee's comfortable with and with full transparency and competitive notions of what's next.

Senator ROBERTS. How many tankers on a given day are nonmission capable because of maintenance repairs? Can you give me an

idea on how many of these maintenance repairs you would characterize as unscheduled?

General MOSELEY. Sir, let me take that for the record and get you the accurate number.

Senator ROBERTS. All right. I'll be happy to.

[The information referred to follows:]

Since January 2006, an average total of 168 tankers (KC–10s and KC–135s) per month were nonmission capable for maintenance repairs. These repairs include scheduled maintenance inspections and programmed depot maintenance. Of the 168 nonmission capable aircraft, approximately 57 were nonmission capable for unscheduled maintenance repairs.

General MOSELEY. Sir, I'll tell you, the depots have done a great job. I used to be able to say that a third of our tankers were in depot, broke, and it took 400-plus days to get them out. That's not the case. Senator Inhofe is right, we're down to less than 200 days' flow through the depots. So, the guys out there maintaining these things have done a great job.

Senator ROBERTS. I'm going to yield back the remainder of my time.

Senator MCCAIN [presiding]. Senator Chambliss.

I apologize. Senator Thune is next. I apologize, Senators.

Senator THUNE. Thank you, Mr. Chairman.

I, too, want to thank our witnesses, Secretary Wynne and General Moseley, and echo what has already been said, and express my enormous appreciation to the men and women that you introduced today for their extraordinary service to our country, as well as all the folks who are serving under your command.

Secretary Wynne and General Moseley, I have a question that I'd like to direct to both of you. I would like to have you explain to me your policy on how the Department plans to deal with the rising problem of aviation congestion and airspace capacity. As airspace capacity in many regions of the country becomes more congested, and unfettered, open airspace become more scarce, what actions is the Department taking to work with the Federal Aviation Administration (FAA) to establish additional military operations areas (MOAs) in restricted airspace so that we preserve the valuable training areas for the future?

Secretary WYNNE. Senator Thune, I know that we have been constantly in touch with the FAA to make sure that we have open airspace where we need it. This occasionally, as you point out, causes reroute of commercial flights, and adds to their clock, if you will. But I will have to take, for the record, the specifics of the interaction, because it usually goes on at the local level, when a training thing—there's a notice to airmen, just like when we fire a missile downrange, that we have a restricted airspace. The commercial people have been very cooperative with us and the FAA is very cooperative with us in taking care of that.

So far, it has not impacted the training, that anybody has advised me of. But I must tell you, I must get an answer for the record for you on that.

[The information referred to follows:]

Air Force use of the National Airspace System (NAS) is determined by its operational requirements. These requirements necessitate certain volumes of airspace within close proximity of our installations that possess the appropriate characteris-

tics (chaff, flares, supersonic) and associated ground assets. This airspace is to be used for the exact amount of time required to perform the training activities. With the support of the Federal Aviation Administration (FAA), the Air Force is continually developing and refining this dynamic training space in order to accomplish our fundamental mission to train and equip our forces. At this time, we have over 30 actions pending in collaboration with the FAA that delineate new or modified airspace requirements.

The DOD is actively engaged with the FAA through the Policy Board on Federal Aviation in advocating our needs while balancing the increasing demands of the commercial and general aviation community. The unique nature of Air Force activities in the NAS will be planned for as a vital component of the Next Generation Air Transportation System Concept of Operations, which is currently in development. The Air Force will be an active participant in developing a dynamic paradigm for the future designed to meet our evolving mission needs.

Senator THUNE. General Moseley, we are already encountering problems with the FAA when it comes to permitting, for example, UAVs to fly in anything but unrestricted airspace, for safety reasons. I guess my question is, is it not in the best interest of the Air Force to begin to identify and establish additional military aerial training areas sooner rather than later?

General MOSELEY. Senator, let me go back and answer. I think I can help with part of your first question. We have ongoing dialogue with the FAA, because we fly most of the military things inside the continental United States. We deal with them as a partner. They have some unique challenges in the contemporary civil aviation world, because now people don't necessarily fly on established jet routes. Because of GPS navigation, they can fly point to point off of established jet routes. So, it makes their airway traffic control system incredibly more complicated, which then complicates our training ranges and space.

Sir, we have multiple bogeys. One of my first activities was to get a range view and a range concept of operations put together, in partnership with the Navy and the Army, on possible opportunities for joint enhanced composite force training. What does that mean for us in the future with aircraft that need bigger footprints, not less footprint?

Also, the UAV thing has been a bit of a challenge, but we have been able to work memoranda of agreement with the FAA to cross corridors. But that will always be a challenge. It would make it easier if we were operating inside military airspace with the airplane, which is what makes the big ranges very attractive to us in Utah, Arizona, and Nevada, but it also allows us, with the MOAs, to begin to look at these new locations of the UAVs to do exactly what you've said, to be able to partner with local entities and local air traffic centers to be able to work with the FAA as a combined team.

So, sir, this is on the top of our list every day: ranges and access to ranges, supersonic airspace, bombable ranges, and ranges to conduct joint activities.

Senator THUNE. I would just add, because I think that the FAA study of the issue reveals that aviation congestion, as you have noted, around major airports and busy airspace around and between metropolitan areas, is reducing the amount of available airspace capacity. It would certainly seem to me that it ought to be a matter of policy now to begin funding and claiming available airspace for training before the airspace is gone, because clearly some

of the demands and the needs that we have are exceeding the supply of available airspace and creating these types of problems between the FAA and the military.

Just one other question. I would like to come back to something that Senator Inhofe was talking about, and associate myself with some of his remarks with respect to the funding challenges that we face. I will preface it by saying that I just believe that the defense of our Nation in providing the troops with the equipment and resources they need to execute their mission has absolutely got to be our top priority. It's been referenced to some degree already that the number of C–17s and F–22s place them in the low-density, high-demand category. Secretary Rumsfeld was once quoted as saying that "low-density, high-demand asset is just a euphemism meaning we didn't buy enough of what we need."

I guess my question is, is this situation any different, or are we going down that same road again?

I would also associate myself with the comments that were made with respect to the need for adding to, or increasing, that top-line number, the amount that we're spending as a percentage of our GDP on our military, because I think that is a very serious challenge, as you look around the planet, in what our future needs are going to be.

But could you speak to that particular comment, the low-density, high-demand asset, and it just being a euphemism, meaning we didn't buy enough of what we need, and whether or not this is a situation that's any different from what we've encountered in the past?

Secretary WYNNE. Senator Thune, I know that he made that comment. I think that the Mobility Capability Study tried to figure out what was going to be the acceptable risk within the context of the whole mobility portfolio.

As to the F–22s, we've tried to do a comprehensive tactical fighter look. I would postulate that there are extremes in which you could find yourself with quantity having a quality all its own. But the studies done to date demonstrate that your Air Force, in accepting the FYDP that we have here has no desire to cede its dominant position in the world.

Senator THUNE. I thank you very much for your testimony and for your response.

Mr. Chairman, I yield back.

Senator MCCAIN. Senator Chambliss.

Senator CHAMBLISS. Thank you.

General Moseley, thanks for introducing these four great men and women over there. I know they're representative of all the thousands and thousands of folks that serve under the two of you. We, needless to say, are very proud of not just these four, but all those great men and women.

I was just talking outside. I had to step out for a minute to visit with a long-time family friend, who is the father and stepfather of two Air Force special operations folks. He was telling me that his son and daughter-in-law are deployed somewhere in the world today. He doesn't know where, but they have a pretty good idea. He, just like all of us, is very proud of those folks, as well as these folks.

I want to associate myself also with the remarks of Senator Inhofe, relative particularly to what's going on at our ALCs. This $150 million in the President's budget that is earmarked—and I hate to use that term—but that's set aside, let me say that, for depot maintenance, and has been for the last couple of budgets, that somehow it gets transferred into working capital, and all of a sudden those of us who visit our depots on a regular basis understand that we're not always getting the amount of funding that we need to maintain and in the case of Robins Air Force Base, F–15s, C–130s, C–5s and other items. But I would urge you, as Senator Inhofe said, let's see if we can't make sure that we maintain that $150 million going to the depots.

General Moseley, I'd like to talk to you about our strategic airlift capability. I see that the number one request in the Air Force's unfunded priority list is the national defense airlift fund, which includes funding for 7 new C–17s, 4 new C–130Js, and 16 C–130 center wingbox replacements. I am a strong advocate for buying new aircraft. Secretary Wynne, you and I have had this conversation many times. I know we need to. The C–17 and the C–130J are great weapons systems. All you have to do is ask the men and women that are flying them, and look at the missions that they're carrying out today in theater, and you know what great systems they are.

However, I also believe that in order to make good use of the taxpayers' resources, we must also look at modernizing the equipment that we have. It's my understanding that the two studies recently completed by DOD, the QDR, as well as the Mobility Capability Study, both affirm that the Nation's airlift requirements could be met with 180 C–17s and 112 modernized C–5s. My sense is that that may be technically true, although those numbers, on the C–17, particularly, don't leave much margin for error. I would like the assessment, General Moseley, from you on what you think about those particular numbers put forth in those studies.

General MOSELEY. Sir, we're restricted from language doing any divestiture of the C–5. So, we have the 112 C–5s, which are the 50 C–5Bs, the 60 C–5As, and the 2 C–5Cs. We have the program now for a complete Avionics Modernization Program (AMP) of the entire fleet, and we have the Reliability Enhancement and Re-engineering Program (RERP) that were conducting the tests on a couple of these, and an A model, which will take us 2 or 3 years to get the data on that. That money is laid in with the program to completely upgrade all of the C–5s, As, Bs, and the two Cs.

Senator, what I don't know is at what point does even an AMP'd and RERP'd C–5A become so expensive to fly, or the readiness rates or the in-commission rates or the availability on the aircraft, become troublesome for us in the future? So, I've asked the staff to take a look at a program so that we can discuss with the committees, and with others on the third floor, about a full AMP on all of the airplanes, and perhaps look at only pylons and new engines for the B models and the two C models, and see what that would do. Sir, I don't know what that would do yet.

But if you have 112 full-up C–5s, and you live with the conditions and the assumptions of the Mobility Capability Study, the program of record for the C–17 is 180. The challenge with that is,

we are using these aircraft at a rate that we didn't program, no different than the Navy's F–18s or the Army's vehicles. We're flying the C–17 like a C–130 now. We're using it for intertheater lift, as well as intratheater lift. We're using it as flying hospitals. We're using it to do things we never envisioned prior to this conflict that a strategic airlifter would do. The airplane is proving itself to be gold in doing that.

The downside is, we're burning the airplanes up at a much higher consumption rate. That's why we put those aircraft into a general mobility fund, on an unfunded priority list, to see if there's not some assistance that we could get.

Senator CHAMBLISS. It's my understanding that the Air Force's fleet viability board found no major structural or corrosion issues for the C–5A. Is that correct?

General MOSELEY. At the time of the study, no known. Yes, sir.

Senator CHAMBLISS. Okay. It seems to me that, given that the Air Force's own studies have validated that C–5s have 70 percent of their usable service life left in them, and that modernization of the entire C–5 fleet produces double the return on investment, that that should support modernizing C–5s. Would you not agree with that?

General MOSELEY. Sir, for sure the avionics modernization program, which will get us a much more reliable A, B, or C is a good thing and, as I said, I've asked to have some more data and to take a look at the re-engining piece, because I'm not sure.

Senator CHAMBLISS. Okay. Is it your intention now to move ahead with the modernization of the C–5?

General MOSELEY. Yes, sir.

Senator CHAMBLISS. On the C–130, I know that our mix in the multiyear procurement on the C–130J is nine and four, Air Force and Marine Corps. Last year, we had some changes in that. We went to eight and five, and also advanced procurement on eight and five for this year. Would you give me your thoughts on what that proper mix might be? I'm sure, when we have General Hagee here, we'll talk about this with him, also.

General MOSELEY. Sir, we're partnered closely with the Marine Corps on the recapitalization of their airplanes also. There's not been any of this that we haven't done together. Whether it's nine and four, or eight and five, our partnership with him is solid and I have no issues with going from eight or nine to four or five, because we're still operating the same airplane in a joint sense, and we're still in this together.

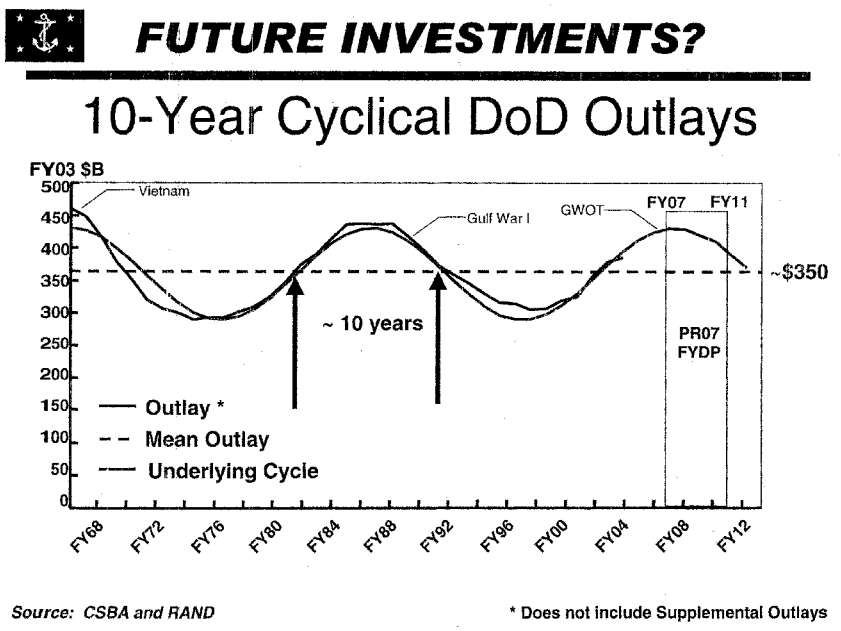
Senator CHAMBLISS. Thank you, General and Mr. Secretary.

Senator MCCAIN. Thank you very much, Senator Chambliss.

Mr. Secretary, I'm looking at a chart here that shows, historically, what I know you're familiar with, and that is the cyclical aspect of defense spending. It seems, about every 10 years, we go through an increase and then a decrease. It's obvious that the deficit, even including information we received today, is going to be extremely large and, if history means anything, we are going to see a decrease in defense spending, or at least a leveling off and that's not counting the continued cost of the war in Iraq and the global war on terror, et cetera.

Have you thought about how you're going to procure the F–22A, JSF, new tankers, new cargo aircraft, new combat search-and-rescue helicopters, UAVs, and other programs? Have you thought about how you're going to pay for all of this? Do you think that we may, at some point, run into a brick wall here?

[The information referred to follows:]



Secretary WYNNE. Senator, first of all, I think your cyclical chart is dead-on and I've told my colleagues, about 6 years of growth followed by a topping off. My fear is that we are going to have to really look hard at all of our follow-on procurements, and perhaps department-wide, to take a look at exactly how you prioritize and, what you really need, to fight the war. Of course, as the war drags on, as we've talked about, the secondary effects of wear and tear will really begin to show. I share your concern, and right now I can tell you, from my opening comments about trying to get 6 pounds into a 5-pound sack, I fear the day when I have to get 6 pounds into a 3-pound sack.

Senator MCCAIN. Let me suggest that you embark on a study looking at the cost of all of these new acquisitions, which I certainly don't argue are very necessary. I also think you ought to crank in a little historical data, particularly recent years, over the escalation in costs that's been associated with every new weapon system. I don't mean just Air Force. We had a hearing yesterday about the Future Combat Systems, which has increased more than 50 percent in cost, although there have been some changes in the kinds of equipment they're procuring. But, still, we are seeing escalating costs throughout. JSF cost has gone up 14 times, and we're now spending—what? At one time the Air Force was going to pur-

chase 750 F–22s, now it's $320 million a copy. We're down to 180. I think that Congress and the American people should be warned, sooner than later, that we're going to have to make some tough choices.

I look at all of these new requirements, and it's not only the new requirements, it's replacement for existing equipment. Small example—every time I go to Iraq, I'm flown around by Guard C–130 personnel. Those C–130s, as we all know, are wearing out at a far higher rate than we had ever anticipated, particularly Guard assets.

So, particularly where the Air Force is concerned, I'd like you to embark on some kind of study, using historical data, on increases in cost. There's not been one system that's come in under cost. We all know that. Cranking in some kind of inflationary aspect of it.

Secretary WYNNE. In fact, sir, I would offer that we even went to a buy-to-budget. What tends to occur is, yes, it's great to talk about buy-to-budget, but what happens is, the costs go up, your quantity comes down. As your quantity comes down, you end up in a program death spiral. So, your point is extremely well taken, that these things are just not forecasts, because, you know, we're hesitant to forecast that. But I think that's a prudent thing to do, sir.

Senator MCCAIN. Maybe you could bring in some of our friends at RAND and other organizations that could provide you with some estimates. Because if we're going to have to make a decision between F–22 and JSF, I'd like to make that decision sooner rather than later. I'm not saying we are. But I just don't see how we're going to afford replacement of existing equipment, plus all of the new systems that obviously, there is a need for. I don't question the need for them. I'm a little cynical about the F–22 now being just an air-to-air fighter.

I'm very worried about it. I'd like for you to embark on some kind of study and drop me a letter saying what you intend to do. It really should be done DOD-wide, but I think a lot of the new programs, understandably, are in the United States Air Force.

Secretary WYNNE. You're right. Our focus is recapitalization, so we are, understandably, underway here. The F–22 has dropped a joint direct attack munition (JDAM), by the way. I think some of the precision aspects are there. But what General Moseley and I wanted to do was to make sure we set a baseline that we did not have the technologists simply piling on. We could really wring out the costs of that air fleet. So, you're correct in that assessment.

Senator MCCAIN. There is just one other issue I want to raise with you. In the 1980s, we had fixed-price contracts. Now we have cost-plus contracts, with incentives. These incentive payments have been over 90 percent awarded, even though both scheduling delays and cost escalation have occurred. We need to stop that. People should be able to enter into contracts for the product, whether it be of a widget or an F–22, and if they don't meet the scheduling—and I know what the answer is, "Well, the Air Force demanded changes." Well, stop demanding changes. If you haven't—if you can't figure out what you need when you enter into the contract, then don't give them the out. I think this whole issue of incentive fees, certainly according to—90 percent of the available award fees

are almost—$850 million has been spent. These are on programs that are behind schedule and over cost.

Just one other thing I want to mention to you. I still don't think we're giving enough priority to the UAVs. When we lose a pilot that's captured, it has a huge effect. We can remember when one pilot was captured in Lebanon, how that skewed things. We have a border that, despite the desires of some of my colleagues, we're not going to be able to build a wall all the way across, nor is there a need to. But a UAV can loiter, as you know, for 12 hours, can surveil, and provide information so that we can counter either good people or bad people trying to come across our border illegally.

I just don't see enough on the UAV front. I sometimes think—I'm sorry to—I'm not a conspiracist, maybe they don't have a strong enough lobby here—that the uses of UAVs are phenomenal, both in combat and as far as border security. One of the big issues that we're debating right now is, how do we secure our borders? I don't know a cheaper way than UAVs. Now, that's not the only answer. But it seems to me that a big part of the solution is to be able to detect individuals or goods or whatever is coming across our borders.

So, I'd like you to go back and look and see whether we're doing enough in the UAV area. They're still relatively inexpensive. The uses of them—not according to me, I'm not that smart—but everybody I talk to says that this is an arrow in our quiver that can be of tremendous utility in a broad variety of areas.

So, we seem to be moving much more slowly in both the development, procurement, and especially deployment of UAVs.

Secretary WYNNE. Sir, we have the premier UAV commander, a former Navy pilot, here today. I think he would jump up—and I'm surprised he hasn't jumped up in applause. These Predators—and other UAVs, lighter ones—have proven themselves. Our inventive soldiers and airmen, the tactical air control posts (TACPs) have learned how to use them in concert with other assets. So, you are right, we are getting tremendous coverage on the battlefield. I don't know how that would be translated to a border situation, but I suspect, as you probably suspect, that we are using it in some border situations right now—not necessarily in this country, but in other countries, trying to maintain some control over who comes in and who comes out of our battlefront.

That having been said——

Senator MCCAIN. I'm told that they have been effective in Iraq on the Syrian/Iraq border.

Secretary WYNNE. Yes, sir.

I would tell you that we have been wanting to—and I know the Special Operations Command has been wanting to—expand the Predator fleet, at least. We also have tried to put some money in for expansion of UAVs. In total we have, I think, $2 billion——

General MOSELEY. A little over $2 billion.

Secretary WYNNE.—over the course of the FYDP. I mean, we are onsides, if you will, on that one, in the sense that we believe they are a future for us.

Senator MCCAIN. General Moseley?

General MOSELEY. Sir, I agree. We have a desire for 189 of the Predator A models, which is the MQ–1. We've taken delivery of a

number of them. We've lost 58 of them, for a variety of reasons, shot down or training incidents with them. So, we're looking to recap that entire fleet back out to 189 of the Predator As, the MQ–1s.

The MQ–1, which is what our squadron commander's squadron flies, is a good little airplane. When you hang missiles on it, you lose station time, you lose 4 hours per pylon per missile but that's not the real issue. It offers some incredible capability with the infrared, the electro-optical imaging, which is the application that you're talking about, perhaps, at looking at a border. We have 60 of the bigger ones, the MQ–9s. We have one in combat now in one place, and one about to be in combat in another place and we're beginning to take deliveries of the operational ones now.

The Global Hawks are a different issue, I believe, than what you're addressing, but we'll have a program of 50 of those. We have two of the operational birds in combat now, and we've brought the test birds back to be able to get back into that program.

Sir, we've begun to partner, in a more robust manner, with the Air National Guard on this to look at building out to 21 orbits. Because one of the fascinating things about this that we've learned since the beginning—well, since the spring of 1996—is that we can fly them in combat in Afghanistan or Iraq. His squadron is at Nellis, in Las Vegas, and he flies every day and every night in combat in Afghanistan.

So, the reachback to this thing provides incredible opportunities in combat, but also in perhaps a homeland defense or homeland security role, which is why we had talked to General Rataczak about an Arizona application and a Texas application first, because we can get additional orbits. We're continuing to engage with him on opportunities to do that. We have six of his Arizona Guard guys now trained, three pilots, three sensor operators, and we're working our way through the Guard Bureau and with him to see if we can't incentivize more manpower moves to be able to stand that up. Those were the reasons those two States were picked first.

Senator MCCAIN. Again, I'm not putting in a plug for Arizona, but there are hundreds of miles of literally trackless desert—New Mexico, Texas, California, all across our border—and we're never going to have enough people to patrol it. It seems to me that, with all the emphasis that all of our colleagues, understandably, and America, are placing on the fact that we don't control our borders, that this is a tool that we need to use more of. I'm sure I've made my point.

Secretary WYNNE. Yes, sir.

Senator MCCAIN. I thank the witnesses.

General MOSELEY. Sir, could I dogpile, just 1 minute? The other reason that I believe that Arizona and Texas—not because you're the Senator from Arizona—matters is because Fort Huachuca is there, and we can partner with the Army, with additional applications. Also, the Goldwater Rangers are there that we can train with folks out of Luke and out of Yuma and out of Davis-Monthan, which has the other assets that we need. Texas is the same, with Fort Hood and close to Fort Sill. So, we have applications not just from San Diego to El Paso, and El Paso to Brownsville, but we have co-located joint capabilities and ranges that we can get into

and take this to a completely different level. They're live ranges that we can fire on, which make a big difference for us.

Senator MCCAIN. Thank you very much.

Senator Talent.

Senator TALENT. Thank you, Mr. Chairman. I really want to associate myself with your comments, really pretty much across the board.

Secretary, when you say you're trying to cram a 6-pound sack of potatoes into a 3-pound sack—and, by the way, I don't know what supermarket you're buying potatoes in. I haven't seen any 6-pound sacks. But you can certainly buy 10-pound sacks that you try and cram into a 5-pound sack and the pressures you get—at a certain point, when the pressure gets to be too high—it ends up actually costing you money. I was thinking, during Senator McCain's questioning, that if you have to reduce, for example, the number of platforms that you buy beyond a certain point, then, of course, the per-copy cost goes up. So, in order to save money, you reduce the number you buy, and then the per-copy cost goes up even more. So it's tremendously inefficient. The urgent can crowd out the important.

You mentioned UAVs. We all believe in UAVs, but we have to have a new-generation strike fighter. So, in other words, if you don't have enough money, or you're putting it all into F–22, which I think, given what's happened with the Chinese, I mean, it's validated the requirement that you all think you need it, and then it's hard to find the money to fund important, but not as urgent, programs, like the UAV.

So, all this argues, to me, in favor of a mixed approach where we really search hard and make the tough decisions, try and do better, in terms of reducing build cycles and the rest of it, but also get the top line up. I know Senator Inhofe was talking about that, as well.

Senator Inhofe, I think, asked you all about the rate of usage of C–17. I just want to make certain you have a chance to address that specifically. My sense of it is that we're flying C–17 at a rate well above what we had anticipated; and, therefore, using the aircraft up faster, just to put it in layperson's terms. Would you agree with that? What implications would that have on your ability to have the necessary lift in the future?

General MOSELEY. Sir, that's correct. Some numbers are 160 percent above program rates, some numbers are 168 percent above program rates. But if General Duncan McNabb were standing here as the commander of Air Mobility Command, he would tell you that we're using the airplanes up a lot faster than we thought we would. The success of the airplane is a direct result of the design, because the airplane offers so much more capability and so many more options, because you can operate it as if it's a C–130, you can operate it tactically or strategically, you can convert it to a hospital, or you can fly it to do medevac missions. Therefore, it has become the gold standard of being able to move things in a theater, or to a theater, which is the direct result of the success of the airplanes and the crews that fly them, as we're burning them up.

Senator TALENT. I'm sure that bore on your decision to put attrition aircraft high up on the unfunded priorities list.

General MOSELEY. Sir, just exactly as if Pete Schoomaker were standing here to talk about vehicles and tanks and up-armored Humvees, or if Mike Mullen were here to talk about F–18s or other assets, or Mike Hagee, to talk about other ground equipment, we're burning these things up, just like everything else.

Secretary WYNNE. One thing, sir, is that, from a reliability and structural analysis, once a crack appears, you can fix that crack, but it is highly likely that another crack will appear somewhere in that airframe. This is really the essence of wear and tear, and why you might, after you discover a crack, put it on flight restriction so it does lighter duty. If we're going to do that, we need those extra airplanes, then, to retain our capacity.

Senator TALENT. Yes, and I just don't think anybody anticipated that you would need C–17s so much for intratheater lift. We know how much it's being used within CENTCOM, and I just think everybody always thought of C–17 in terms of intertheater lift. But General Schwartz has told me that you're using it much more for intratheater lift, and that really wasn't a factor in the Mobility Capability Study. Do you want to comment on that at all?

General MOSELEY. Senator, one of the other factors that is not a Mobility Capability Study issue, but it is our desire to get as many vehicles off the roads as we possibly can to prevent exposure to IEDs or hostile fire. So, our desire to get 350 to 400 to 450 vehicles off the road, we can fly as much of that in C–130s or C–17s as we can. So, young airmen and young soldiers, like our senior airman back here, who has 100 or so convoys in combat, we can reduce that exposure by flying these assets. So, the C–17, again, is the gold standard for large amounts of that, and we never foresaw that.

Senator TALENT. Yes, and just because it's war, things are messy, and you don't foresee everything. I mean, the Mobility Capability Study was a snapshot, and a fair snapshot, based on assumptions that you have to make. But you don't always know what's going to happen in war, and you may have additional needs. Is that a fair statement?

General MOSELEY. Sir, the other part is just the inherent flexibility of air power, that you can take the vehicles off the roads by putting it in a C–17 or a C–130, and preclude exposure to young soldiers along those convoy routes.

Senator TALENT. Yes. We've mentioned the top line before. This is one of a number of areas where resetting the force is a reality that we're just going to have to confront at some point. We all talk about the pressure of the budget. I think it's important to keep you all under some pressure, because we want you to be looking for reforms and making the tough decisions. But, at the same time, I don't think people should view this as something that's not within our capabilities or our economic abilities as a Nation. I know Senator Inhofe has talked about, and I talked about, you know, if we move the percentage of GDP that we're spending on defense up two-tenths of a percent, I think it would make it much easier to get the new platforms we need, as well as resetting the force.

You talk about flexibility, but if the C–17 line should close, then that really does cut off our flexibility, does it not, in terms of addi-

tional purchases? So, it's a priority, would you agree, to keep that option available for the future?

General MOSELEY. Sir, we have money laid into the program to keep the line and the tooling hot so that if we have to come back to that, it's $245–$265 million, I think. But that is a downstream issue and you don't know what you don't know, so I don't know how hard it would be to reopen a line.

Senator TALENT [presiding]. Okay. I'm not going to push you, probably, as far as I should, in terms of the budget submission. I do recall that in the early 1980s a decision was made to buy C–5Bs in lieu of developing C–17, and then, in the late 1980s, we had to reverse that decision, and reconstituting that pool of expertise, even though we had not actually started the program and produced the aircraft—was very expensive. So, I think this is just another situation of what I referred to before, that sometimes if the pressure becomes too great and the urgent crowds out the important in the long-term, it ends up actually costing you more money because we do have to meet these needs at a certain point.

I'm now stating, I think, what we all probably agree with.

That's all I have. I've just been handed a note asking me to put the hearing into recess rather than adjourning. I'm assuming that I'm now the chairman of the committee, by default. [Laughter.]

So, I guess I'll go ahead and do that. I assume Senator Warner wishes to return and probably ask some more questions.

All right, we know your time is very valuable. We appreciate it. I appreciate very much your service, as well. These are difficult decisions and difficult times. I have full confidence, though, in the ability of this country and our leadership to meet the needs of the future.

I'll put the hearing into recess, and appreciate your indulgence, and I'm sure Senator Warner will be back soon. [Recess.]

Chairman WARNER [presiding]. Thank you very much. Again, Senator Levin and I apologize for the requirement to go upstairs. He may join me here momentarily. I wanted to finish up on one or two matters.

I had a colloquy with the Secretary of the Air Force regarding the JSF engine, and the Secretary indicated that he would provide me and the committee with a more complete recitation of the procedures and the facts relating to consultation with our allies. I stress the need for that, Mr. Secretary, because as our industrial base shrinks—and in my 28 years here, I have seen it—I might add another 5 to that, when I was in the Pentagon, so it's over 30 years that I've had the privilege of being able to participate in the process of our defense procurement—but it has shrunk, by necessity and for other reasons. We then have a dependence on our allies overseas who have an industrial base and I don't doubt that that base has shrunk, also.

Consequently, I think we have to maintain the closest and best possible relationships we can when we enter into these joint contracts with our allies, to see that all aspects of the contracts are conducted in a manner in which they are, should we say, partners.

Now, my understanding is that, in this contract, Great Britain, because of its significant financial contributions to the program, is really, in a sense, a full partner. Would that be a correct?

Secretary WYNNE. Without a doubt, sir, they are a full partner with us.

Chairman WARNER. Right. The other countries, although partners, are of a lesser—I don't think anybody's established a protocol, but they are very interested, and they're——

Secretary WYNNE. Certainly we value Italy and the Netherlands and all of our partners in this program.

Chairman WARNER. Surely. All right. That's fine. That's the reason that I'm going to have a special hearing on this in the very near future, at which time we'll ask the Deputy Secretary of the Defense, Mr. England, to be the lead witness, and, quite possibly he'll be joined—it's up to him—by yourself and the Chief of Staff, followed by panels, probably two panels, with those partners, to get their views, and then we'll allow the engine manufacturers themselves to come forward and give us information so that we can make a technical evaluation. So, I just sort of advise the community of interest of my program for that engine.

Now, on the question of recruiting, I'm not sure that was covered fully, and I'd like to go back into it. Recruiters in the Active and Reserve components face significant challenges. Today, we received reports of shortfalls in achieving goals. At the same time, we want to ensure that retention of experienced enlisted personnel remains high. Could you give us the situation report on your Department, Mr. Secretary?

Secretary WYNNE. Sir, right now, with the exception of the Guard, which has some unfulfilled requirements, I think we're doing very well. Our recruiters are not having a problem. Our retention is very high. So, I think it's a credit, and it's something we need to guard in the future, to make sure that every airman has noble work and challenging work. Right now I'm very proud of all of that. I hope I'm not too corrected by my partner, the Chief of Staff.

Chairman WARNER. Chief?

General MOSELEY. No, Mr. Chairman, we're online with the Active and the Reserve. The Guard, though, is lagging a bit behind. What we don't know is, we'll normally have a bump in the spring and the summer. We're not there yet, so we don't know what the end of the fiscal year will look like. But if our Guard is like the Army Guard, there will be some challenges out there. We will not get, probably, to 100 percent. We'll be above 90 percent. Sir, remember the Guard recruits locally so a Guard unit on the east coast is different than a Guard unit in Alaska. So we're having those dynamics across the board.

But right now, the trend lines are positive, just with that bump in the Guard and we don't know what'll happen in the spring and the summer.

Chairman WARNER. Could you address the retention of Active personnel and Guard personnel to have a repeat enlistment for officers who wish to continue in service?

General MOSELEY. Sir, our retention is high in the Active——

Chairman WARNER. Is it above expectations or your projections? I know that the Army is experiencing that now.

General MOSELEY. Yes, sir, we are. Please let me take that for the record, to get you the exact numbers.

[The information referred to follows:]

The Air Force measures retention by Average Career Length (ACL). The ACL is a measure that estimates how long airmen are staying in the Air Force. It is based on year-group retention over the previous 12-month period. The observed measure is compared to a goal, typically the historic average.

Based on data at the end of September 2006, the enlisted ACL is 12.34 years (124 percent of goal) and the officer ACL is 14.90 (110 percent of goal). Note that during Air Force strength reduction efforts, additional losses obtained from force shaping programs are excluded from the ACL measure since they are not part of "normal" loss patterns. Although overall retention is good, there are specific career fields such as medical and special operations that require special incentives to maintain retention and the desired manning levels.

In the Guard and Reserve, we measure our success of retaining members through attrition rates, rather than retention rates like the Active Force. Retention does not have the same meaning for the Guard and Reserve as it does for the Active Force, and attrition rates provide a more comprehensive and applicable measure for the Guard and Reserve. The Air National Guard (ANG) once again remained below their enlisted attrition ceiling of 12.0 percent in fiscal year 2006 with a 10.9-percent enlisted attrition rate; the officer attrition rate was an excellent 7.7 percent; and, the composite (officer plus enlisted) ANG attrition rate was 10.5 percent, reflecting a very motivated and highly experienced force.

General MOSELEY. But in some of the career fields, we're seeing 110–120 percent, which is troublesome in a different way. The Active and the Reserve, we're not seeing issues. Only in a small percent of the Guard are we seeing the issues, and those are the non-prior-service first-term Guard. We're seeing a bit of a hiccup in retention and we're focusing everything we can on trying to hang onto those people.

Chairman WARNER. It's been my observation—I've been privileged to travel extensively to military operations throughout the world—flying with the Air Guard. I'll never forget one time in the Balkans campaign. I approached an Air Guard 130, and said, "I'd like to go into Sarajevo," and the guy never blinked an eye, and he said, "Let's go," and I went. I think I was the first United States Senator to go in there during those tragic operations that were taking place. There was sort of a civil war going on in that one city. I remember the day very well, because there was a tragic accident by another aircraft in that airlift.

I just think the record of the Air Guard is exceeded by no one.

Secretary WYNNE. Sir, I'll tell you, as a Service Chief—and I'm, of course, partial to the United States Air Force—I view us as a flock that is imperceptibly different, whether it's Guard or Reserve or Active. I'm equally proud of the air guardsmen who are doing the things that they do every day for Operation Noble Eagle, and in Afghanistan and Iraq. Unbelievable set of people.

Chairman WARNER. I've been with them so many times, I'll never forget one time, we were flying over the high mountains in Afghanistan, and I was up in the 130 cockpit with these gents up there, and suddenly there were a couple of bells that rang, and, in a very calm manner, the plane captain shut down an engine, kind of leaned over to me and said, "Well, we lost one up here at 22,000 feet." I'm looking down at those mountains, and—absolute calm. Then I checked the number, and it was an old 1961 or 1962 model, and he sort of said, "You know, Senator, we could use a little help in this area, getting some new aircraft." So, he got my attention. [Laughter.]

General MOSELEY. I'm sure that was an Active Duty airplane if it's 1960 or 1961, yes, sir.

Chairman WARNER. It was an Active?

General MOSELEY. It probably was, sir. The Guard has the H–2s and the H–3s, which are the best C–130s.

Chairman WARNER. Well, all right, whatever he was. But I just remember the calm, professional manner in which that crew went on with the mission and kind of lobbied me.

Of course, now we're upstairs in this other room, which I just left, requiring all lobbies to be registered. I'm not sure whether that's going to apply to you or not, but we'll have to figure that out.

General MOSELEY. I will be happy to lobby for the Air National Guard.

Chairman WARNER. Good.

Secretary WYNNE. What I was going to say, sir, is that this whole concept of Total Force Integration really looks at reachback, which means that we're flying Predators, we're doing a lot more space operations, and tries to identify the magnificent part of the experience base that comes from the Guard and comes from the Reserve and take full advantage of that in training and mentoring and things that they don't have to leave their hometown for. I do think they're still going to have flying missions. They're probably still going to be joining us in wars to come, if you will, or conflicts to come. But this is all about trying to make sure that we get the best out of them. They want to help.

Chairman WARNER. You know, there have been some stories that have appealed to me greatly here recently about men and women who have had long service in the various military branches, who are now going to Iraq. One fellow flew in Vietnam. Maybe you saw that story.

General MOSELEY. I saw that.

Secretary WYNNE. Yes, sir.

Chairman WARNER. Do you have some cases like that?

General MOSELEY. Yes, sir, we do.

Chairman WARNER. I think people would be interested. How does a person, who maybe served previously and got a little age on them get back into the Air Force? What options are there?

General MOSELEY. Sir, we have lots of folks that are under service contracts, or under a variety of other things, to do things that are not necessarily uniformed members. That's where a lot of those people will volunteer to go. We have lots of folks that are running Army and Air Force post exchanges at places like Balad and Bagram. A lot of those people are volunteers, exactly like you're talking about, that raise their hand and say, "I want to contribute, too."

Chairman WARNER. They were former uniformed personnel?

General MOSELEY. A lot were, yes, sir. Or spouses.

Chairman WARNER. Or spouses that retired and decided that they want to go back and shoulder the responsibilities and assume the risks of this generation. Is that correct?

General MOSELEY. It makes you proud, sir.

Secretary WYNNE. The whole air-traffic control in Bagram is ex-military, and they have been there for 5 years.

General MOSELEY. Yes, sir.

Chairman WARNER. You're recycling them, I mean, with tours of duty? You have a cadre that go in and out of Bagram with some frequency?

General MOSELEY. Sir, I don't know if it's a cadre, but it is a body of people that raise their hand and want to do that. We're not short of that sort of volunteerism.

Chairman WARNER. I've had my chief here note that, because we're going to be in that proximity, and I want to make sure to go up in those towers when I'm over there.

Secretary WYNNE. They're fabulous people.

General MOSELEY. Selfless.

Chairman WARNER. I'd like to ask Mr. Abell, you know, this question of the funding to the full level of the Active and Reserve, we've been addressing that in the context of the Army. Do we have a similar problem here? We do not have that problem here.

Mr. ABELL. No, sir.

Chairman WARNER. We'd want to make sure to protect the cash that enables you to achieve your statutory limits in the service.

General MOSELEY. Mr. Chairman, could I ask one more plug—

Chairman WARNER. Yes, of course.

General MOSELEY.—for the Reserve component? One of the strengths in our aviation units, which is the core or soul of an Air Force, is the experience levels that are in the Guard and Reserve. Those squadrons have experience levels that are far beyond an Active squadron, because we bring in second lieutenants and first lieutenants. For the most part, a Guard unit may get a second lieutenant every once in a while. But they are extremely experienced and that's the strength of those units.

Chairman WARNER. I'm so glad that you mentioned that, because I'd like to bring to your attention a little bit about down in Virginia.

The Air Force has proposed a plan to permanently base F–22s at two additional locations and reduce the number of aircraft in each squadron from 24 to 18. Has the Air Force made a decision to implement this plan? If so, why? Because, in Virginia we're so proud of having received an F–22 outfit and designation, and the military construction of the taxpayers went ahead and built the infrastructure to sustain your earlier projections. Now, with the dropping projections, I'm just concerned that we're not going to fully utilize that infrastructure to justify it from the taxpayers' standpoint.

General MOSELEY. Sir, let me address where we are with that. We're looking at options, because with 183 airplanes, we can get 7 squadrons. Out of the tactical air dominance study, and out of some of the other studies, it takes you above 7 squadrons, but 7 squadrons is what we can field with the 183 that came out of the QDR. That's 7 squadrons of 18.

Now, why seven squadrons, or why multiple squadrons in multiple locations? Mr. Chairman, I'll tell you, it's very important for us to have access to ranges to be able to fly these airplanes, and access to the right ranges to be able to partner with the Army. For instance, at Holloman, which we've announced as a potential, or an optional bed-down location, the Army's moving multiple maneuver brigades into Fort Bliss. That allows us to partner with them on

the White Sands Missile Range, and on the McGregor Ranges, to be able to drop bombs and work with those maneuver elements because they're changing the focus of Fort Bliss not from the Air Defense School, but to maneuver brigades. That's important, for us to have that large amount of airspace. At Holloman, we have two ranges, Red Rio and Oscura, that we can bomb on with that airplane.

Alaska is important, because it gives us access to the Pacific. It also gives us access to those huge ranges that are now the Red Flag ranges in Alaska. The ranges around Eielson, which are up by Fairbanks, are actually bigger than the ones at Nellis, in Nevada.

Also, to partner with the Guard, the test case has been our Virginia association with the unit out of Richmond and I'm very happy about that.

Chairman WARNER. It's co-located with our Air Guard.

General MOSELEY. Yes, sir, or the Air Guard's co-located with the 1st Wing at Langley, because that's where the airplanes are. They've not completely moved out of Richmond yet, and there are all sorts of opportunities with the city, and that's a Virginia issue. But they're happy, and we're happy they're happy, and we can partner better with them at Langley.

So, Mr. Chairman, I'll tell you, our desire is to be able to get access to ranges. The east coast ranges off of Langley are great air-to-air ranges, but they're less great air-to-ground ranges. The ranges in Alaska are big, and the ranges in the Southwest are big, and we need access to that so we can fly and train.

Sir, two other parts of this that we're working our way through. Because we now have 183 airplanes instead of a bigger number, we will keep the F–15Cs around, and we will keep a proposal to keep a squadron of F–15Cs at Langley, and make sure we have F–15Cs in Alaska, and we'll keep a number of these, of the newest F–15Cs around. We're looking at, what do we have to do to mod them, if any, to keep them capable for theater missions, as well as Operation Noble Eagle missions?

Sir, the other thing, which I believe is equally important, is multiple squadrons.

Chairman WARNER. Mention the mission of Operation Noble Eagle. I think it's important to those following this record.

General MOSELEY. Yes, sir. Remember the first weekend that we were able to declare initial operational capability down at Langley, we had the F–22 flying Operation Noble Eagle missions. I think another one that I think you will be fully supportive of is the inauguration of the Governor of Virginia, down at Williamsburg. The flyby was flown with a mix of Virginia Guard and 1st Wing guys in F–22s.

Chairman WARNER. I was there that day, but—unfortunately, the rain was so hard, and the clouds were so thick, we could just hear the roar of the engine. But, anyway——

General MOSELEY. It's a stealth airplane, so it's hard to see it anyway. [Laughter.]

But, sir, the other part of it——

Chairman WARNER. Most of us on the ground were trying to figure out how we were going to stay for another 2 hours of speeches,

all soaking wet. But, anyway it was a grand day for everybody. We enjoyed it.

General MOSELEY. The other part of multiple squadrons and multiple operating locations is the depth of leadership. I mentioned to you the other day, when we had a chance to chat, that we have about 400 aircraft deployed into CENTCOM's area of responsibility. So, we have three-plus wings of hardware deployed, but we have five wing's worth of leadership deployed, because you need wing commanders, group commanders, command sergeant majors, you need first sergeants, you need all of that. So, multiple squadrons in multiple locations give us depth so that we can deploy the airplane and fight with it. So, sir, that's what we are attempting to get our arms around.

Chairman WARNER. All right, and I thank you very much.

General MOSELEY. Yes, sir.

Chairman WARNER. It's helpful to get your perspective. I really strongly support the decisions of the Secretaries and Chiefs of Staff of our military, because they're trying to do what's right with a national perspective. As proud as I am to represent the great State of Virginia, which has enormous spectrum of bases and people, I have to continuously remind my constituents, I have an overall obligation to the entirety of our force structure, wherever they are in the United States, and indeed, in the world. We had to go through somewhat of a discouraging development on carriers, but it was imperative that the Chief of Naval Operations be given the flexibility, as you say, to use his assets. I assure you, Mr. Secretary, I will look very carefully at the statutory requirements about the retention of aircraft, which, in your professional and managerial judgment, should be lifted. I thank you for making that request.

Lastly, the famous QDR. As required by law, every 4 years the Secretary of Defense will conduct a comprehensive examination of our National Defense Strategy and Defense Program. Can you provide us with your assessment of both the process and the results of that? Because I'm anxious to determine how soon we'll need another one of these QDRs.

Secretary WYNNE. Sir, from my perspective—and I would like to offer this as my perspective—this QDR was naturally colored by the engagement that we're in. This is a long war. We recognize that strategies are supposed to look out 20–25 years. I think it is difficult to raise your eyes when you're in an engagement where soldiers are dying, and you're reaching deep into your technology toolkit. I think the QDR did a marvelous job of trying to balance, in the force spectra that they did—how do you take your resources and allocate them across that force spectra. They know that there's still a deterrent factor to the United States Air Force and to the United States military, in general. They know that they can get more synergy out of a joint force than they can out of a single force. They are pushing us in that direction, which I think is the right direction to go to. I'm doing it, if you will, with the Total Force Integration. There is no reason that I should shrink from doing it with my colleagues in the Navy and in the Army. In fact, what we're seeing is, with the allocation of the sniper pod and the viper pod and some of the TARS that you're flying, all of a sudden I get to see, and I get to have the ground commander see, with the re-

motely operated video enhanced receiver system, exactly what we're doing. This kind of synergism is brought about by the engagement and the inventiveness of the soldiers and airmen that are on the ground.

So, this QDR took a good, long perspective. I think one thing that I really appreciated is, it finally recognized, if you will, over the grand spectrum of things, some pressures in the bio area, and that we need to look at this weapons of mass destruction (WMD) issue, and not just think that someone else is doing it. The fact of Katrina and Rita, as it came upon us, was duplicative, if you will, of multiple WMD attacks. I remember somebody referring to that it was the entirety of England and Ireland and Scotland all moving to Europe at the same time. That's how large the land mass was, and the migration required in this country of ours.

So, it told us a lot of about making sure that we do not ignore those kinds of things and I think it really emphasized some of the aspects of the integration of the National Guard. The integration of that and some of the lessons learned worked their way into the QDR.

So, I'm quite proud of it. I'm quite proud of the result that came out, and I will give you my endorsement.

Chairman WARNER. Thank you very much.

Chief, from the perspective of the uniformed side?

General MOSELEY. Sir, bottom line, upfront, I endorse it. We spent a lot of time wrestling and discussing and debating. There was a little shouting or throwing of objects, but at the end of the day, I would offer to you that this is a product of jointness, and it's a product of looking at strategic partners. Some of the things that I believe you see that are evident is a much closer partnership between myself and the Chief of Naval Operations, and projection with naval and air assets on a global scale, our ability to support land activities, but also our ability to conduct unique air and space activities partnered with the Navy, or unique maritime activities partnered with the Air Force. You see an increase in special operations business. You see an increase in unmanned vehicles, which is a direct outcome. You also see an emphasis on long-range strike, with the desire to move to an airplane or a capability by 2018. You also see reinforcements of tactical air and fifth-generation capabilities that require the technologies to maintain these edges out there in an uncertain world, which brings us back to the F–22 and the F–35 series that we partner with the Department of the Navy on, and our very important partners in the international market.

Chairman WARNER. Thank you very much.

Gentlemen, we had an extraordinarily successful hearing, not the least of which is to have the introduction of these four distinguished airmen. Thank you, airmen, for coming here today, and for your service.

The hearing is now adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

ACQUISITION/AWARD AND INCENTIVE FEES

1. Senator MCCAIN. Secretary Wynne, according to the Government Accountability Office (GAO) the cost of the F–22's development has increased by over $10 billion

since it began, the program has been delayed by over 2 years, and the cost of each aircraft has increased. At the same time the Department of Defense (DOD) has paid the contractor over 90 percent of the available award fees or almost $850 million. Those award fee numbers would lead someone to believe that this is a very successful program. How do we hold contractors accountable when we give them incentive fees for non-performance or award fees for just doing their job, regardless of the quality of the work they produce?

Secretary WYNNE. While award fee arrangements should be structured to motivate excellent contract performance, award fees must be commensurate with contractor performance over a range from satisfactory to excellent performance. Clearly, satisfactory performance should earn considerably less than excellent performance, otherwise the motivation to achieve excellence is negated. However, though base fees are typically limited to no more than 3 percent of target cost Defense Federal Acquisition Regulations ((DFARs) 216.405–2), on future contracts and to the extent current contracts can be adjusted, I will expect award fee recommendations to reward only realized superior performance leading to successful end-item delivery or performance. Performance that is less than satisfactory is not entitled to any award fee. The Office of the Secretary of Defense (OSD) recently issued a policy memo dated March 29, 2006, reiterating the fact that award fees need to be directly linked to achieving desired program outcomes.

With respect to cost, the price of the F–22 has decreased from Lot 2 to Lot 3 to Lot 4 to Lot 5 by 16 percent, 11 percent, and 13 percent respectively.

2. Senator MCCAIN. Secretary Wynne, what changes do you have in store given the GAO findings?

Secretary WYNNE. Prior to the issuance of the GAO report the Secretary of the Air Force, Acquisition (SAF/AQ) chartered a transformation initiative group (TIG) under the auspices of the Air Force Acquisition Transformation Action Council to research existing acquisition programs and provide a comparative analysis of performance reflected in award fee, contractor performance assessment report (CPAR), and the cost, schedule, performance reports for each program. The TIG was to determine how well the three separate reports tell the same story and determine where changes to Air Force policy and training are needed. Due to the efforts, which were recently completed, the Air Force is developing a "Back-to-Basics" campaign, with one of the tenets to re-emphasize the Federal Acquisition Regulations (FAR) preference for objective incentive arrangements and to address the Air Force's cultural aspects of using award fees. I issued (April 4, 2006) a contract incentive policy memo emphasizing a cultural change through five criteria:

1. Incentives must not emphasize cost, schedule, and technical performance as they relate to program outcomes and successful end-item delivery or performance.

2. When implementing incentive type contracts, we should initially focus on incentives based wholly on objectively verifiable criteria.

3. Award fee contracts, when used, must be structured to motivate superior contractor performance and then award earned fee only for realized successful performance.

4. Award fee contracts should be structured to include a base fee as well as a combination of objective (performance related) and, as appropriate, subjective criteria.

5. On future contracts and to the extent current contracts can be adjusted, I will expect award fee recommendations to reward only realized superior performance leading to successful end item delivery or performance. The proper combination of these criteria will work to ensure contractor emphasis on program success and to provide the program manager the flexibility required to incentivize performance.

3. Senator MCCAIN. Secretary Wynne, the same GAO study highlighted the serious problem of program rebaselining—in the case of the F–22, 14 times. This rebaselining obscures the true cost of the program and results in a program avoiding a Nunn-McCurdy violation. In the 2006 Defense Authorization Law, Congress instructed the Pentagon to report on every program that costs at least 50 percent more than initial projections. The provision was designed to tie programs to their original cost estimates. For example, the C–130J originally cost $33 million a copy but it now costs over $66 million a copy. How do you plan to implement this new amendment with regard to Nunn-McCurdy violations?

Secretary WYNNE. Many times the program is rebaselined due to funding constraints, not performance. This occurred a lot in the 20-year F–22 program, this schedule stretch out then drives cost. This is, however, not always the case, and the

C–13J is a good example. Actual implementation over the long-term is straightforward, we will expand on existing processes. For Major Defense Acquisition Programs (MDAPs), we currently compare the program manager's current estimate each quarter, and in conjunction with annual selected acquisition reports (SARs) to the acquisition program baseline (APB) to determine if the program has breached the Nunn-McCurdy unit cost thresholds. We will add a comparison against the "original baseline estimate" to this analysis. We will be analyzing MDAPs each quarter to determine if there is significant or critical cost growth against both the APB and the "original baseline estimate" using essentially the same procedures we have used in the past to evaluate unit cost against the APB.

In the near-term, we have determined the status of programs against their "original estimate" based on the fiscal year 2007 President's budget submission. The fiscal year 2007 President's budget was essentially complete on January 6, 2006, when the changes to Nunn-McCurdy were enacted. Programs exceeding the "original baseline estimate" by more than 50 percent will reset their "original baseline estimate" to the cost baseline in their current APB, and the Secretary of Defense will provide a report to Congress on these programs per changes in the National Defense Authorization Act (NDAA) for Fiscal Year 2006. Programs with growth between 30 percent and 50 percent will include an expanded section 12 in their annual SAR.

4. Senator MCCAIN. Secretary Wynne, what plans do you have in place to ensure programs are held to their original baseline figures instead of allowing the current practice of rebaselining?

Secretary WYNNE. We intend to put more emphasis into the execution of our programs so it is only rarely necessary to rebaseline a program, but rebaselining is occasionally needed to effectively manage and oversee our efforts. In our "Back-to-Basics" initiative we are reemphasizing basic acquisition management principles as we stand up new programs, and rebaseline old ones, to establish viable parameters for cost, schedule, and technical performance, further minimizing the need to rebaseline in the future. On those rare occasions where it is necessary, any rebaselining will be done within the rules, as has always been the case. We have never taken the need to rebaseline lightly, but recognize the need for improvement in this area.

5. Senator MCCAIN. Secretary Wynne, at one time the Air Force was going to purchase 750 F–22s. Now, at $320 million a copy for procurement and development costs, it can afford only 180. Once the F–22 was an air-to-air fighter then it was a multi-role aircraft and now the first spiral of the production aircraft is essentially an air-to-air fighter. The Air Force loses credibility with contractors when requirements and numbers of units to be purchased change and subsequently we then have to pay a higher price for equipment. How do you plan to improve this requirements process?

Secretary WYNNE. The Air Force requirements process delivers to the combatant commanders the capabilities needed to protect America's interests today and in the future. The initial F–22 requirement of 750 aircraft was based on the force structure at that time. The Defense Planning Guidance directed study in 2002 determined that 381 F–22s were the minimum number of F–22s needed to support the National Defense Strategy with acceptable risk. The fiscal year 2007 President's budget procurement of 183 aircraft frees fiscal year 2007 funding for other critical Department priorities, extends aircraft production 1 year, and provides decision opportunity for more aircraft in future years. We must execute our responsibilities in the most efficient way, thereby optimizing support to the warfighter while meeting taxpayer expectations. Rising costs, like those for health care and fuel, oblige reducing our infrastructure and effectively managing our fleet. Costs continue to grow to maintain equipment we are legislatively restricted from retiring. We do not anticipate challenges getting any easier and we are conducting actions to balance Air Force allocation of resources, including:

1) re-examining acquisition programs with respect to their impact on furthering the Air Force mission and national defense;
2) husbanding Air Force personnel resources with our total force; and
3) analyzing every aspect of operations and maintenance costs.

The Air Force is focused on excellence in warfighting over the long-term. We recognize resources will be constrained for the foreseeable future and are rebalancing the Air Force's priorities and our long-term commitment to recapitalize, conduct smart operations, and size the force structure to meet our responsibilities.

6. Senator MCCAIN. Secretary Wynne, per the DOD Award Fee Guide, ". . . an award fee is an amount of money which is added to a contract and which a con-

tractor may earn in whole or in part during performance and that is sufficient to provide motivation for excellence in such areas as quality, timeliness, technical ingenuity, and cost-effective management." A contractor starts with 0 percent of an incentive fee and works for the evaluated fee for each evaluation period. The contractor does not start with 100 percent and get portions deducted along the way. A fee determining officer (FDO) ensures the amount and percentage of an incentive fee earned accurately reflects the contractor's performance. The incentive fee guide clearly delineates the roles and responsibilities of the FDO and defines how an incentive fee plan can be developed to map out the process of how a contractor should be evaluated.

The GAO has shown through their recent study that from their sample of 597 contracts the median percentage of available incentive fees paid was 90 percent. This study clearly demonstrates that not only is the incentive fee guide not being followed but in some cases it is being blatantly disregarded. Why are our FDOs not using their training and the published guidance when determining award fees and what do you plan to do to rectify this situation?

Secretary WYNNE. On future contracts and to the extent current contracts can be adjusted, I will expect award fee recommendations to reward only realized superior performance leading to successful end-item delivery or performance.

Award-fee arrangements are appropriate when, for the most part key elements of performance cannot be wholly objectively/quantitatively measured and areas of importance may shift over the course of the contract. FDOs review the performance of the contractor and determine independently the amount of award fee the contractor should receive. The award fee evaluation team includes the FDO, an award fee review board, and performance monitors—the FDO makes the final determination regarding the award fee earned during the evaluation period and ensures that award fee process integrity is maintained. The amount of award fee paid on any particular contract is dependent upon the award fee criteria established in the award fee plan for that contract and the judgment of the FDO with regard to how the contractor performed against the stated award fee criteria.

In general, the FDOs are using their training and following their award fee guides. However, the guides may be placing too much emphasis on subjectivity, which can make performance measurement less than optimal. New OSD and Air Force guidance has been issued to provide support of the GAO report. This guidance should include the need for award fee plans containing objective measurable criteria when possible, which when combined with the subjective judgment of the FDO should improve the correlation between contractor performance and award fee earned.

C–130J

7. Senator MCCAIN. General Moseley, in April 2005 your predecessor, General Jumper, promised that the C–130J contract would be converted from a FAR part 12 commercial contract to a FAR part 15 military contract thus providing the proper oversight required for a program of this magnitude. Two key pieces of legislation were passed concerning the procurement of the C–130J:

SEC. 135. PROCUREMENT OF C–130J/KC–130J AIRCRAFT AFTER FISCAL YEAR 2005.

> Any C–130J/KC–130J aircraft procured after fiscal year 2005 (including C–130J/KC–130J aircraft procured through a multiyear contract continuing in force from a fiscal year before fiscal year 2006) shall be procured through a contract under part 15 of the FAR, relating to acquisition of items by negotiated contract (48 C.F.R. 15.000 et seq.), rather than through a contract under part 12 of the FAR, relating to acquisition of commercial items (48 C.F.R. 12.000 et seq.).

SEC. 803. REQUIREMENT FOR DETERMINATION BY SECRETARY OF DEFENSE AND NOTIFICATION TO CONGRESS BEFORE PROCUREMENT OF MAJOR WEAPON SYSTEMS AS COMMERCIAL ITEMS.

In fact, the contract is still not converted. Congress was absolutely clear in their intent to convert the contract. How could this have happened?

General MOSELEY. The Air Force executed an undefinitized contractual action (DCA) with Lockheed Martin on February 10, 2006 to convert the multiyear procurement contract for the C–130J and KC–130J aircraft in program years 2006 through 2008. The DCA incorporates the standard terms and conditions applicable to a contract negotiated under FAR Part 15. Among these are clauses that subject the contractor to the requirements of the Truth in Negotiations Act. The Air Force

expects that the negotiation of final, revised prices for program years 2006 through 2008 under the multiyear contract will be complete by October 2006.

PREDATOR UNMANNED AERIAL VEHICLES

8. Senator MCCAIN. General Moseley, in November 2004 the Secretary of the Air Force (SECAF), the Chief of Staff of the Air Force (CSAF), and you sought out both Texas and Arizona because you wanted to put Predator unmanned aerial vehicle (UAV) units into these States. Immediately thereafter, the SECAF and CSAF tasked the Arizona Air National Guard with standing up a Predator squadron which would include the proper plus-up in manning as well as a ground control station and other essential equipment to execute its mission. Given the flying conditions, the quality of life, and the outstanding recruiting record of the Arizona Air National Guard, it made sense to stand up a unit in Arizona. In the year that followed, two troubling events took place:

1. October 2005: National Guard Bureau delays the initial operational capability (IOC) by 6 months; and
2. December 2005: Lieutenant General Blum tells Governor Nepolitano that the AZ Predator unit will be "delayed indefinitely."

Lieutenant General Blum has stated on several occasions that he is willing to move force structure from States that cannot recruit to support their assigned strength, to States that can. Arizona has one of the best recruiting records in the country. Will Arizona be given the proper manning, a ground control station, and other essential equipment in order to properly stand up the Predator unit by June 2006 as was promised in November 2004?

General MOSELEY. Our Total Force Integration Office has been working closely with the National Guard Bureau and your adjutant general to solve manpower and programming issues. This will allow us to move forward on positioning the Predator mission in Arizona. We are expediting the process and have agreed upon an approximate IOC date of second quarter, fiscal year 2007. Specific time lines are being determined for the flow of equipment, training, and facilities so an exact lay-down plan can be provided. We continue to team with the Arizona Air National Guard to develop their unit manning document and identify the manpower positions needed to achieve IOC. Due to initial delays, our ability to meet the original IOC dates has been hampered, but we are confident the plans are now back on track to meet an IOC goal of second quarter, fiscal year 2007.

ANALYSIS OF ALTERNATIVES GUIDANCE FOR KC–135 RECAPITALIZATION

9. Senator MCCAIN. Secretary Wynne and General Moseley, on January 26, 2006 the OSD and the RAND Corporation presented the draft Analysis of Alternatives (AoA) for KC–135 recapitalization in a staff briefing to the Senate Armed Services Committee. Generally, the report seems sound. However, the report appears flawed inasmuch as it does not consider three options that, according to RAND, were eliminated because of Air Force "guidance" which applied an arbitrary 20 percent rule to the tanker recapitalization effort. The instruction was not in either the February 24 or May 25, 2004 guidance you directed the SECAF to follow when you held the position of Acting Under Secretary of Defense for Acquisition, Technology, and Logistics.

This arbitrary restriction harms other cost-effective and less capital intensive solutions which have been recommended as possible alternatives by other expert organizations such as GAO, Congressional Research Service, Defense Science Board, National Defense University, etc. Specifically, the rule prescribed that 20 percent of the aerial refueling tanker fleet would have to be recapitalized out of 545 tankers—approximately 110 tankers. The three areas that were dismissed as suitable efforts for recapitalization were:

1. Re-engining KC–135E tanker aircraft—dismissed because the Air Force says that there are only 73 KC–135Es that could be re-engined (less than 110 tanker aircraft);
2. Purchasing and converting used commercial aircraft and converting them to tankers—dismissed because RAND says there are only 75–100 used commercial aircraft that could be considered to be converted to tankers (less than 110 tanker aircraft); and
3. Commercial air-refueling delivery. This flaw is notable where the Navy has, for some time, developed a commercial tanker capability. Such an option might be particularly suitable in the context of fighter Civil Air Patrols

over major U.S. and foreign metropolitan cities and other worldwide air refueling tanker support—RAND noted that there are only three "Omega Air" tankers growing to 25 in 3 years (less than 110 tanker aircraft).

Secretary Wynne, did you give additional guidance to exclude these three options in the so-called RAND 20 percent rule?

General Moseley, as the former chairman of the Air Force Steering Group for Project Air Force which provides resources and assigns projects to RAND, did you give additional guidance to exclude these three options in the so-called RAND 20 percent rule?

Secretary WYNNE and General MOSELEY. No guidance was given to RAND to exclude these three options.

In answering this question for the record, RAND states, "no such 20 percent rule was applied, either directly or indirectly, in the AoA. None of the three options in the list were dismissed. Each of these options was evaluated on its merits." RAND also states:

1. "Re-engining 73 KC–135E tanker aircraft—This option was analyzed for cost and effectiveness. The result was that it would only have present value cost savings if the re-engined aircraft were operated beyond the late 2030s. If the aircraft were retired before then, there would be a net present-value loss due to re-engining because the sustainment cost savings would not amortize the capital cost. Only a small effectiveness increase was associated with this option."

2. "Purchasing and converting used commercial aircraft and converting them to tankers—The cost-effectiveness of this option was analyzed, and the result was that an aerial refueling fleet that included converted used aircraft was less cost-effective than one that only included new aircraft. However, it was noted that the cost-effectiveness penalty was not great enough to exclude this option from any future competition. It was further noted that careful and detailed assessment of the technical condition of the used aircraft candidates would be critical in this case."

3. "Commercial air-refueling delivery—The cost-effectiveness of this option for meeting the requirements on which the AoA was based was analyzed, and it was found that this option was less cost-effective than organic air-refueling delivery, and resulted in some increased operational risk. All of the requirements in the AoA, including support of homeland defense patrols, were wartime requirements, which required advanced electronics and defensive systems. The Omega commercial tanker now operating is not equipped to meet these requirements. The Omega tanker is additive to the KC–135 fleet, not a substitute for it. The analysis of this option was done in the AoA for a commercial contribution of 100 tankers, which was representative of the arrangements being proposed by private industry in 2004. However, the result is not dependent on the number of tankers. Since completion of the AoA, RAND has done additional analysis on this option at a level of 20 tankers, and at a reduced capability level per tanker. The results stand in that case as well."

10. Senator MCCAIN. Secretary Wynne, would you please look into this matter and consider these three less capital intensive alternatives as additional ways to recapitalize the tanker fleet as your previous guidance directed? Please provide the committee with your conclusions.

Secretary WYNNE. I have directed the Air Force to include these three alternatives, referenced in your previous question, in the request for information to industry that will be released shortly after the Acquisition Decision Memorandum is issued by Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(AT&L)).

JOINT STRIKE FIGHTER ALTERNATE ENGINE PROGRAM

11. Senator MCCAIN. Secretary Wynne, on February 16, 2006, I wrote Secretary Rumsfeld regarding the Joint Strike Fighter (JSF) Alternate Engine Program. In my letter to him I requested that "[he] please produce a complete copy of the analysis supporting the Department of Defense's decision to terminate the F–136 JSF alternate engine program in the Department's fiscal year 2007 budget request."

On February 27, 2006, Senators Warner, Levin, and I received a response from Secretary England which I regret was unresponsive. In Secretary England's response he attached briefing slides titled "JSF Alternate Engine Decision". These slides provide superficial background and historic information, but fall short of the

complete copy of the analysis that was requested in my letter. Would you please inform the Department that we are dissatisfied with the response that was sent and we reiterate our original request that the information be produced as to the complete analysis supporting the decision to terminate the F–136 alternate engine program?

Secretary WYNNE. To our knowledge, Secretary England's office has provided you all of the information available regarding the decision to cancel the F136 alternative engine program.

QUESTION SUBMITTED BY SENATOR JAMES M. INHOFE

COMBAT FLIGHT INSPECTION AIRCRAFT

12. Senator INHOFE. Secretary Wynne and General Moseley, we have received the Air Force's 2007 unfunded priority list (UPL) and once again see the Combat Flight Inspection (CFIN) aircraft, which is used to calibrate navigational aids for safe night or adverse weather instrumented flight, is listed as a budget shortfall. The rapidly aging C–29 Hawkers suffer from operational shortfalls, which limit the Air Force's ability to provide rapid and flexible response to critical mission taskings, including support of vital military operations in Iraq and Afghanistan. I am very concerned that this situation may be creating undue risks in safe flight operations. Therefore, notwithstanding any congressional action on the UPL, what is the Air Force's plan to meet its commitment to the Federal Aviation Administration (FAA) regarding the acquisition of the replacement aircraft for the C–29 Hawker to support these critical worldwide mobility missions?

Secretary WYNNE and General MOSELEY. The Air Force agrees the C–29 fleet is no longer cost effective or operationally efficient to provide combat flight inspection, particularly to support global war on terrorism operations. As part of the July 2001 Air Force/FAA memorandum of agreement, both organizations committed to replacing six aging C–29 Hawkers with six Challenger 600-series aircraft during the transition period between 2002 and 2010. More specifically, the Air Force agreed to purchase one Challenger aircraft. In addition to placing the CFIN aircraft on the Air Force's fiscal year 2007 UPL, the Air Force Flight Standards Agency is planning to submit the CFIN requirement for consideration in the fiscal year 2008 Air Force budget process.

QUESTIONS SUBMITTED BY SENATOR JOHN CORNYN

INFORMATION ASSURANCE

13. Senator CORNYN. Secretary Wynne and General Moseley, protection of military networks, information, and communications is critical to our safety and operations. You recently updated the Air Force mission to include cyberspace as an operational environment. What are the Air Force's primary technical, organizational, and policy challenges in the area of cybersecurity?

Secretary WYNNE and General MOSELEY. Securing cyberspace means successfully defending and operating our part of the Global Information Grid. Most of our network defense today is reactive: we find and eventually block intruders after they're already on our network. We are trying to get more proactive by identifying and tracking intruders before they get into our networks. The long pole in the tent is attribution: figuring out who the culprit is.

Both the technical and policy challenges revolve around attribution because of the anonymity, flexibility, and creativity that cyberspace affords the intruder. Technology is dynamic—new holes in our networks can be found, shared, and exploited quickly by intruders who are able to move fast and cover their tracks. U.S. laws and policies that properly protect Americans' right to privacy also limit and slow our ability to pursue, identify, monitor, and block the culprits. Organizational challenges relate to unity of control over the operation and configuration of our network. Both the DOD and the Air Force have vastly improved unity of command over our portion of global network, and those efforts continue.

14. Senator CORNYN. Secretary Wynne and General Moseley, have you completed an inventory of critical Air Force information systems that require protection?

Secretary WYNNE and General MOSELEY. Yes, and this information was included in last year's Federal Information Security Management Act of 2002 (FISMA) report to Congress and will be included in this year's report. The Air Force conducts annual inventories of critical information systems. The Air Force reported 50 mission

critical information systems in the fiscal year 2005 FISMA report with 44 fully accredited (88 percent). Currently the Air Force has 60 mission critical systems in the inventory with 54 systems fully accredited (90 percent). The remaining six mission critical systems have an interim approval to operate and a documented plan of action and milestones to obtain full accreditation.

15. Senator CORNYN. Secretary Wynne and General Moseley, on what strategic documents do you rely for guidance on securing the Air Force's information systems and networks?

Secretary WYNNE and General MOSELEY. There are various strategic documents that provide us guidance on protecting our information systems and networks. These documents range from Presidential Executive Orders, DOD and joint guidance, to Air Force level guidance. Examples of these are:

- Public law 107–347 (i.e., the E-government act that contains the Federal Information Security Management Act)
- U.S.C. titles 10 ("Man, Train, and Equip"), 18 (Crimes and Criminal Procedure), and 50 (National Security and accountability for intelligence activities)
- Executive Order 12333 (Intelligence Activities (IA))
- Homeland Security Presidential Directive-7 (HSPD–7), Subject: Critical Infrastructure Identification, Prioritization, and Protection, December 17, 2003
- DOD 8500 policy series (i.e., DOD IA policies which include IA controls) The National Strategy to Secure Cyberspace
- An implementing component of The National Strategy for Homeland Security
- DOD and Air Force Intelligence Oversight policy
- Joint Publication 3–13, Information Operations
- Global Information Grid (GIG) Information Assurance Architecture v1.0 (through 2008)
- Air Force Doctrine Document 2–5, Information Operations

TEST AND EVALUATION

16. Senator CORNYN. Secretary Wynne and General Moseley, the recent Defense Acquisition Performance Assessment (DAPA) recommends creation of an "operationally acceptable" evaluation testing category for systems whose performance is not fully adequate to meet criteria established by the Director of Operational Test and Evaluation (DOT&E) but are determined to meet an operationally useful capability by combatant commanders. What are your thoughts on this recommendation?

Secretary WYNNE and General MOSELEY. The Air Force agrees with the creation of an "operationally acceptable" evaluation testing category. Programs can benefit from a rating system that allows for other than a pass/fail rating.

17. Senator CORNYN. Secretary Wynne and General Moseley, in an era of rapid fielding initiatives and evolutionary acquisition, what are the appropriate roles for developmental testing?

Secretary WYNNE and General MOSELEY. Developmental Test and Evaluation (DT&E) will play the same roles as in the past, but we envision developmental testers collaborating much closer and more seamlessly with our contractor testers, users, and operational testers. We must give our developmental testers the right infrastructure and instrumentation, while demanding that all testing be structured as an efficient continuum. All test data will be shared among program stakeholders to eliminate duplication of effort. Last, we need to retain and train our testers to be the best in the Nation. We have made and continue to make significant changes in Air Force test and evaluation policy to achieve these goals.

18. Senator CORNYN. Secretary Wynne and General Moseley, in an era of rapid fielding initiatives and evolutionary acquisition, what are the appropriate roles for operational testing?

Secretary WYNNE and General MOSELEY. Operational Test and Evaluation (OT&E) will play the same roles as in the past, but will be more dynamically involved at the earliest, initial stages of system development. Working through our integrated test teams, operational testers will stay involved by providing operationally relevant test data and feedback throughout the program to help ensure the warfighters' capabilities-based requirements are addressed. They will collaborate closely with contractor and developmental testers, and have access to prior test data

to help eliminate duplicative testing. However, operational testers must still independently evaluate system operational effectiveness and suitability as Title 10 requires.

19. Senator CORNYN. Secretary Wynne and General Moseley, what standards for technical maturity should be used for the standard test and evaluation process?

Secretary WYNNE and General MOSELEY. The Air Force has a number of tools available for assessing technical maturity at key points in system development, one of which is the National Aeronautics and Space Administration-developed technology readiness levels (TRLs). TRLs are measured on a scale of one to nine, with level 7 being the demonstration of a technology in an operational environment. This level of technological maturity affords a sufficiently low risk for starting a product development program. As the system matures, the Air Force has another process called Certification of Readiness for Dedicated OT&E. This process requires production-representative articles of sufficient maturity and with a stable configuration to be available before operational testing may start. These tools cover the early, middle, and later phases of system development.

20. Senator CORNYN. Secretary Wynne and General Moseley, what standards for technical maturity should be used for the accelerated test and evaluation process?

Secretary WYNNE and General MOSELEY. We believe the same tools as previously discussed will be used in any future (accelerated) test and evaluation process. Whatever tools we use, they must have two basic characteristics: 1) they must give us clear indications at key decision points of a technology's readiness to enter each product development phase; and 2) they must remain focused on the most current, realistic operational environment in which that system must eventually operate. Our bottom line—the final test—must always ensure each new system is combat ready and capable of performing the missions for which it was designed.

TECHNICAL EVALUATIONS OF PRE-ACQUISITION PROGRAMS

21. Senator CORNYN. Secretary Wynne and General Moseley, we are aware of the new Air Force effort to provide a distinct and separate technical voice at the table during service acquisition executive and milestone reviews. Could you comment on the impact of this initiative so far?

Secretary WYNNE and General MOSELEY. We are early in the process of institutionalizing this initiative, but we believe it is having a positive impact. With our technical staff looking at the programs at Air Force Acquisition Strategy Panels and Air Force Review Boards (e.g., Air Force milestone reviews), program systems engineering and technical approaches are getting a more stringent evaluation.

22. Senator CORNYN. Secretary Wynne and General Moseley, have milestone review decisions been altered due to technical risk advice provided earlier in the process through this initiative?

Secretary WYNNE and General MOSELEY. The Air Force Acquisition Strategy Panel and Air Force Review Board processes were revised in May and August 2005, respectively, to include the Deputy Assistant Secretary of the Air Force for Science, Technology and Engineering as the technical voice. Of the reviews to date, this technical voice has made an impact to the acquisition strategy for the Small Diameter Bomb Increment II. However, we expect that a major impact of this initiative will be in how a program is managed and reviewed at the program executive officer level prior to an Air Force acquisition review or decision.

23. Senator CORNYN. Secretary Wynne and General Moseley, what efforts is the Air Force pursuing to provide sufficient personnel and resources for pre-acquisition systems engineering and an increased technical role in acquisition strategies?

Secretary WYNNE and General MOSELEY. We are refocusing our internal workforce to better address pre-acquisition systems engineering and include a technical voice in program milestone and acquisition strategy reviews. To obtain the personnel needed for milestone and acquisition strategy reviews, the Deputy Assistant Secretary of the Air Force for Science, Technology, and Engineering (SAF/AQR) has reorganized duties and shifted personnel within the organization to set up a chief engineer group. Additionally, SAF/AQR augments this group in several ways. SAF/AQR Science and Technology Program Element Monitors (PEMs) are utilized to review a major defense acquisition program's technology readiness. These PEMs provide valuable experience in these reviews since they already support technology readiness assessments for programs at milestones B and C. Three career-broadening

positions have been established to bring in additional product line engineering expertise from Air Force product and logistics centers. In addition, SAF/AQR has the ability to reach back and tap into the technical expertise of Air Force scientists and engineers located in both Air Force Space Command and Air Force Materiel Command, to include the Air Force Research Laboratory.

Finally, we are looking at options for initiating a pilot program to improve the pre-acquisition systems engineering process. This pilot program would utilize existing personnel and would establish a set of standard systems engineering process steps that could be tailored for application across the Air Force. The pilot program would document the systems engineering processes used during concept development to generate concepts for the AoA and the systems engineer processes used to mature the selected concept from the AoA and mature it to a milestone A decision.

C–130 AVIONICS MODERNIZATION

24. Senator CORNYN. Secretary Wynne and General Moseley, what is the Air Force's plan for the Avionics Modernization Program (AMP) for the C–130 fleet?

Secretary WYNNE and General MOSELEY. The Air Force program of record modifies 434 C/AC/EC/HC/LC/MC–130s with AMP in order to meet the communication navigation surveillance/air traffic management (CNS/ATM) and Air Force navigation safety requirements. The first AMP-modified C–130H is currently in ground test with first flight planned for August 30, 2006. Installation of the first production kits is scheduled to begin in fiscal year 2008 and continue until fiscal year 2017. An updated service cost estimate is scheduled to be completed by August 2006. This plan, of course, will be reassessed when the updated costs and schedules are completed, and resources available considered.

25. Senator CORNYN. Secretary Wynne and General Moseley, what is the estimated cost per aircraft?

Secretary WYNNE and General MOSELEY. Because of the wide variance in complexity across the C–130 fleet (i.e., C–130H versus an AC–130U Gunship), there is a range of estimated costs: $8–12 million per aircraft depending upon its model. This cost is preliminary since the Air Force now plans to compete kit production and installations following the low rate initial production (LRIP) run. Also, these costs are being evaluated as part of the C–130 AMP service cost estimate to be completed in the fall of 2006.

26. Senator CORNYN. Secretary Wynne and General Moseley, how many C–130Es will undergo the modernization program?

Secretary WYNNE and General MOSELEY. No Combat Delivery C–130Es are programmed to receive the AMP modifications.

27. Senator CORNYN. Secretary Wynne and General Moseley, what is the timetable for this work to be done?

Secretary WYNNE and General MOSELEY. First flight is planned for August 30, 2006, first production kits are programmed to be procured in fiscal year 2008 with the last installation in fiscal year 2017.

28. Senator CORNYN. Secretary Wynne and General Moseley, how many C–130H1s will undergo the modernization program?

Secretary WYNNE and General MOSELEY. The current plan has 47 C–130H1s programmed to be modified under the AMP. This program is undergoing a cost review scheduled to be completed in August 2006.

29. Senator CORNYN. Secretary Wynne and General Moseley, what is the timetable for this work to be done?

Secretary WYNNE and General MOSELEY. First installation on the C–130H1 is programmed to be in fiscal year 2015.

C–130 WING BOX REPAIR

30. Senator CORNYN. Secretary Wynne and General Moseley, what is the Air Force's plan for repairing the wing boxes of the C–130 fleet?

Secretary WYNNE and General MOSELEY. The fiscal year 2007 President's budget provides sufficient funding to meet our immediate center wing box (CWB) replacement needs while positioning us to meet our out-year needs prior to aircraft being

placed on operational restriction. Additional CWBs will be purchased as needed to ensure the fleet remains healthy.

In addition, we are implementing an inspect and repair program for the C–130H1. This program enables us to repair restricted aircraft and operate them at full operational capacity until they reach the grounding point of 45,000 equivalent base hours. This short-term fix provides the time needed to replace the CWBs on these aircraft before they are grounded. Ultimately, 47 C–130H1 CWBs are programmed to be replaced.

31. Senator CORNYN. Secretary Wynne and General Moseley, what is the estimated repair cost per aircraft?

Secretary WYNNE and General MOSELEY. The estimated cost to procure and install a new CWB is $9 million per aircraft. The estimated cost to inspect and repair an original CWB is $800,000.

32. Senator CORNYN. Secretary Wynne and General Moseley, how many C–130Es will undergo wing box repairs?

Secretary WYNNE and General MOSELEY. We are not planning to replace the CWBs of any C–130Es at this time.

33. Senator CORNYN. Secretary Wynne and General Moseley, what is the timetable for these repairs?

Secretary WYNNE and General MOSELEY. There is no timetable since we are not planning to replace the CWBs on the C–130Es.

34. Senator CORNYN. Secretary Wynne and General Moseley, how many H1s will undergo wing box repairs?

Secretary WYNNE and General MOSELEY. We currently plan to replace 47 CWBs for the C–130H1s.

35. Senator CORNYN. Secretary Wynne and General Moseley, what is the timetable for these repairs?

Secretary WYNNE and General MOSELEY. We will begin our procurement of the C130H1 CWB kits this year. The table below provides, based on the current plan, a year-by-year breakout of the C–130H1 procurements and installations:

C–130H1	Fiscal Year								Total
	2006	2007	2008	2009	2010	2011	2012	2013	
Buy	1	12	14	4	9	7	.....	.....	47
Install	.....	.....	1	9	10	11	9	7	47

36. Senator CORNYN. Secretary Wynne and General Moseley, how many H2s will undergo wing box repairs?

Secretary WYNNE and General MOSELEY. Initially, we plan to procure 26 CWBs for the C–130H2s during fiscal years 2011–2020. We plan to continue the CWB replacement program beyond fiscal year 2020 at a pace to ensure fleet aircraft are not placed on restricted operations.

37. Senator CORNYN. Secretary Wynne and General Moseley, what is the timetable for these repairs?

Secretary WYNNE and General MOSELEY. We plan to begin installation of the C130H2 CWBs in fiscal year 2014. The table below, based on our current plan, provides a year-by-year breakout of the C–130H2 procurements and installations through fiscal year 2020:

C–130H2	Fiscal Year									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Buy	1	1	1	1	2	2	2	4	6	6
Install	.....	.....	.....	2	1	1	2	2	2	4

38. Senator CORNYN. Secretary Wynne and General Moseley, how many H3s will undergo wing box repairs?

Secretary WYNNE and General MOSELEY. The first phase of this replacement will be from fiscal year 2011–2017. During that time, we plan to procure and install 14 C–130H3 CWBs. We plan to continue the CWB replacement program at a pace to ensure fleet aircraft are not placed on restricted operations.

39. Senator CORNYN. Secretary Wynne and General Moseley, what is the timetable for these repairs?

Secretary WYNNE and General MOSELEY. The table below, based on the current plan, provides a year-by-year breakout of the C–130H3 procurements and installations through fiscal year 2017:

C–130H2	Fiscal Year						
	2011	2012	2013	2014	2015	2016	2017
Buy	1	2	4	4	3	.....	.....
Install	.....	.....	.....	3	4	4	3

C–130 RETIREMENT

40. Senator CORNYN. Secretary Wynne and General Moseley, what is the Air Force plan for retiring C–130s?

Secretary WYNNE/General MOSELEY. The Quadrennial Defense Review (QDR), as informed by the Mobility Capabilities Study (MCS), determined that 395 C–130 equivalent aircraft are sufficient to meet intratheater warfighting needs with a moderate risk level.

As of March 30, 2006, there are 497 combat delivery C–130s in the total Air Force inventory, including 170 C–130E models. Of the 170 C–130Es in the fleet, 29 are currently grounded—21 for CWB cracking issues, and 8 for other reasons. In addition to the 29 grounded C–130Es, 31 more are flown under significant flight restrictions. By the end of fiscal year 2011, 62 C–130Es will be grounded, with an additional 57 aircraft operated under flight restrictions, for a total of 119 aircraft impacted, representing 70 percent of the C–130E fleet.

The C–130 force structure beddown plan includes retirement of all 170 C–130E aircraft. The Air Force plans to retire 141 C–130Es by fiscal year 2011, with the remaining 29 by fiscal year 2014.

The Air Force will meet the 395 C–130 equivalent requirement through a combination of modernized C–130Hs, C–130Js, Joint Cargo Aircraft (JCA), and C–17s operated in an intratheater role.

41. Senator CORNYN. Secretary Wynne and General Moseley, how many C–130Es are to be retired and what is the timetable for retiring C–130Es?

Secretary WYNNE and General MOSELEY. 141 C–130Es will be retired by fiscal year 2011. All 170 C–130Es will be retired by fiscal year 2014. The NDAA for Fiscal Year 2006 prohibited the Air Force from retiring any C–130Es in fiscal year 2006. Therefore, we will retire 51 in fiscal year 2007 (which includes 27 originally programmed to retire in fiscal year 2006, plus 24 programmed to retire in fiscal year 2007). The Air Force will then retire 24 in fiscal year 2008, 24 in fiscal year 2009, 28 in fiscal year 2010, and 14 in fiscal year 2011 (for a total of 141 retired in the Future Years Defense Plan (FYDP)). The remaining 29 aircraft will be retired from fiscal years 2012–2014.

42. Senator CORNYN. Secretary Wynne and General Moseley, how many C–130H1s are to be retired and what is the timetable for retiring these C–130H1s?

Secretary WYNNE and General MOSELEY. The Air Force has no current plans to retire C–130H1s.

43. Senator CORNYN. Secretary Wynne and General Moseley, how many C–130H2s are to be retired and what is the timetable for retiring these C–130H2s?

Secretary WYNNE and General MOSELEY. The Air Force has no current plans to retire C–130H2s.

44. Senator CORNYN. Secretary Wynne and General Moseley, how many C–130H3s are to be retired and what is the timetable for retiring the C–130H3s?

Secretary WYNNE and General MOSELEY. The Air Force has no current plans to retire C–130H3s.

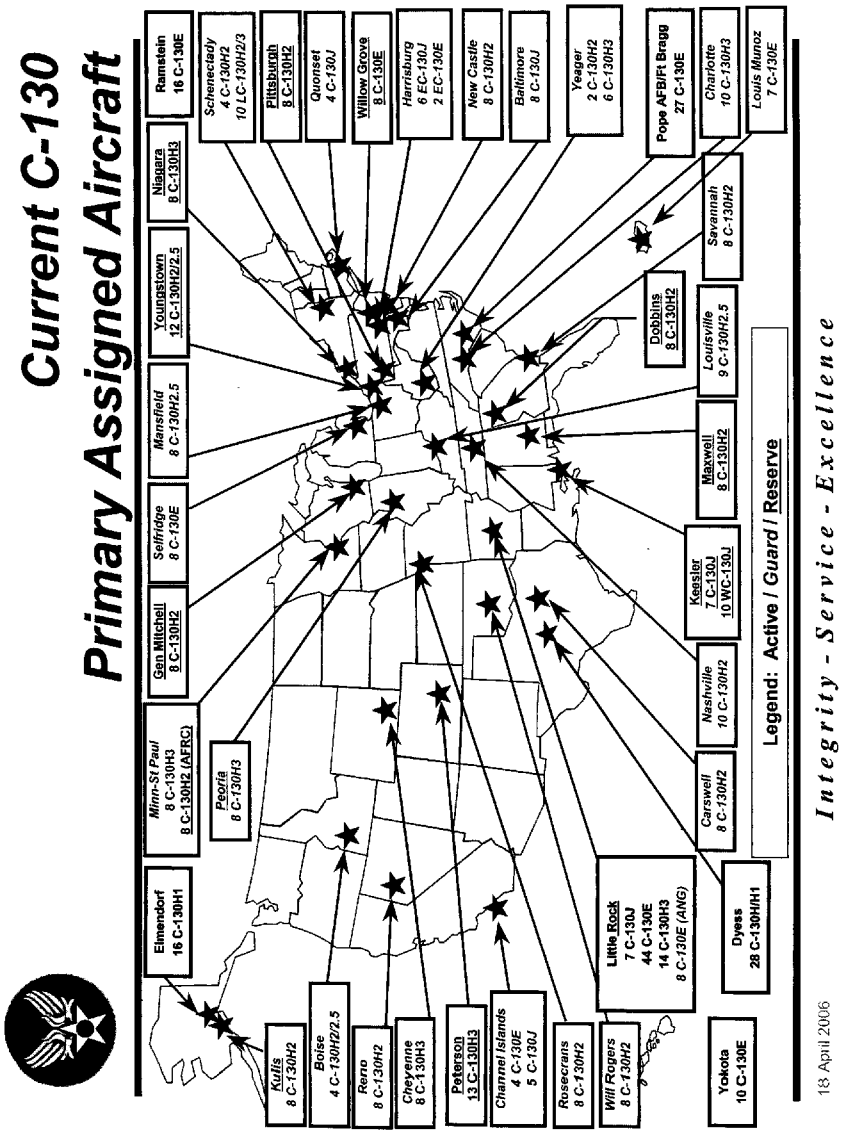
C–130 BASING

45. Senator CORNYN. Secretary Wynne and General Moseley, what is the present allocation of C–130s among the Active-Duty, Air National Guard, and Air Force Reserve?

Secretary WYNNE and General MOSELEY. Of the 454 primary assigned aircraft (PAA) combat delivery C–130s in the inventory, 165 (36.3 percent) are in the Active Duty, 190 (41.8 percent) are in the Air National Guard, and 99 (21.8 percent—including 10 WC–130Js) are in the Air Force Reserve.

46. Senator CORNYN. Secretary Wynne and General Moseley, please provide the current list of C–130 bases and the number and model of C–130 aircraft at each base.

Secretary WYNNE and General MOSELEY. See attached map detailing current C–130 bases and the number and model of C–130 aircraft at each base.



47. Senator CORNYN. Secretary Wynne and General Moseley, what is the Air Force plan for maintaining C–130s in the Active-Duty Force?

Secretary WYNNE and General MOSELEY. The Air Force regularly evaluates the force structure mix between our Active-Duty, Air National Guard, and Air Force Reserve components. Our current force structure program maintains approximately 36.3 percent of the PAA C–130 combat delivery fleet in the Active-Duty Air Force. We will continue to evaluate our future force mix in the fiscal year 2008 and future budgets.

48. Senator CORNYN. Secretary Wynne and General Moseley, what is the Air Force basing plan for Active Duty C–130s in the next 5 years?

Secretary WYNNE and General MOSELEY. Air Mobility Command (AMC), as C–130 lead command, has the primary responsibility for recommending long-term C–130 force structure adjustments and plans. AMC is developing a long-term Mobility Roadmap now that will be presented to the Air Staff and C–130 user commands for review and comment in the near future. Additionally, the DOD continues to assess requirements for intratheater airlift aircraft, to include the C–130 fleet, the JCA, C–17s operated in an intratheater role, as well as other future options to provide intratheater airlift capability. Analyses such as the MCS and Intratheater Lift Capabilities Study will help guide the Air Force and DOD as we continue to plan and program intratheater airlift capability to best meet warfighter requirements.

49. Senator CORNYN. Secretary Wynne and General Moseley, what is the Air Force basing plan for Active Duty C–130s in the next 10 years?

Secretary WYNNE and General MOSELEY. AMC, as C–130 lead command, has the primary responsibility for recommending long-term C–130 force structure adjustments and plans. AMC is developing a long-term mobility roadmap now that will be presented to the Air Staff and C–130 user commands for review and comment in the near future. Additionally, the DOD continues to assess requirements for intratheater airlift aircraft, to include the C–130 fleet, the JCA, C–17s operated in an intratheater role, as well as other future options to provide intratheater airlift capability. Analyses such as the MCS and Intratheater Lift Capabilities Study will help guide the Air Force and DOD as we continue to plan and program intratheater airlift capability to best meet warfighter requirements.

PURCHASE OF C–130J STRETCH MODEL

50. Senator CORNYN. Secretary Wynne and General Moseley, what is the Air Force plan for continued acquisition of the C–130J stretch model beyond the existing contract?

Secretary WYNNE and General MOSELEY. The Air Force currently does not have any plans to procure C–130Js after the existing C–130J multiyear procurement ends in fiscal year 2008 and as a result the Air Force will have 79 C–130Js in the inventory. It should be noted, however, that the Air Force, U.S. Marine Corps, and U.S. Southern Command (SOCOM) are all currently considering requirements that could be competed in the future for aircraft in this type of aircraft class.

51. Senator CORNYN. Secretary Wynne and General Moseley, if the Air Force plans to purchase additional C–130J stretch aircraft, will these aircraft be placed in the Active-Duty Force, the Guard, or the Air Force Reserve?

Secretary WYNNE and General MOSELEY. The current Air Force C–130J procurement program of record ends in fiscal year 2008 with 79 total C–130J aircraft.

LIGHT CARGO AIRCRAFT

52. Senator CORNYN. Secretary Wynne and General Moseley, what is the Air Force's plan concerning the acquisition of a Light Cargo Aircraft (LCA)?

Secretary WYNNE and General MOSELEY. The Air Force has teamed with the Army to form a joint program for the procurement of the Air Force's LCA and Army's Future Cargo Aircraft (FCA). The request for proposals has been released and contract award is planned for late calendar year 2006. The aircraft selected will be known as the JCA and will be the same aircraft for the LCA and FCA.

53. Senator CORNYN. Secretary Wynne and General Moseley, how many LCAs are needed?

Secretary WYNNE. I coordinated on the Acquisition Strategy Report February 24; it was signed by Ken Krieg on March 17, 2006. This report contained the initial joint buy profile for the JCA at 145. This initial purchase will be shared jointly between the Air Force and Army. Ongoing Air Force analysis will further refine the intratheater airlift requirements and build a mobility mix to support emerging joint warfighting needs.

General MOSELEY. We have determined the initial joint requirement (Army and Air Force) for the JCA is 145 airplanes, based on analysis conducted by the Army. This initial number will be purchased jointly between the Army and Air Force. Additionally, the Air Force has contracted with RAND Corporation, through Project Air Force, to conduct additional analysis required by Joint Capabilities Integration and Development System to support broader joint sustainment and maneuver requirements for all the Services. Results from this analysis and a Joint AoA along with

the results of the Program Decision Memorandum III will refine the intratheater requirement and fleet mix for the Air Force.

54. Senator CORNYN. Secretary Wynne and General Moseley, what is the Air Force's timetable for procuring these LCAs?

Secretary WYNNE and General MOSELEY. The Air Force plans to begin procurement in fiscal year 2010.

55. Senator CORNYN. Secretary Wynne and General Moseley, is the Air Force planning to use LCAs as replacements for C–130s?

Secretary WYNNE and General MOSELEY. The Air Force intratheater fleet will be a mix of C–130, C–17 and JCA, formerly the LCA, to meet the needs and requirements of the warfighters. We continue to weigh the MCS airlift options as identified in the QDR.

APG–68(V)10 UPGRADE

56. Senator CORNYN. Secretary Wynne and General Moseley, please explain the Air Force's rationale for terminating the APG–68(V)10 upgrade to the United States Air Force (USAF) F–16 fire control radar. This program fulfills the number one Air Force acknowledged capability gap of all-weather precision targeting that no other aircraft will address before the planned fielding of the JSF in 2014. This $69 million development program for the (V)10 is more than 50 percent complete, on schedule, under cost, and exceeding all performance requirements. Today's F–16 is expected to be in service until beyond 2025 to support our men and women in combat operations. The (V)10 upgrade will provide an extremely cost-effective, major capability leap for the next 2 decades, without having to make the unnecessary larger development and procurement investment in an active electronically scanned array (AESA).

Secretary WYNNE and General MOSELEY. We appreciate your concern regarding the termination of the F–16 APG–68(V)10 Radar Modernization Program. The Air Force considered current F–16 capabilities, plans for F–16 fleet retirement by 2025, and fiscal budget realities when developing the fiscal year 2007 budget. Based on these factors, we decided against continuing the research and development for the APG–68(V)10 program. In addition, we determined an AESA radar upgrade is also not economically feasible for the F–16. Termination of the (V)10 program saved $57.2 million in research, development, test, and evaluation (RDT&E) and $188.5 million (procurement for 108 Block 50/52 modifications) within the FYDP. To complete development and modify all Block 50/52 aircraft (an additional 143 aircraft), plus modify 403 Block 40/42 aircraft, would require restoring FYDP funding plus an additional $819 million (procurement). Even with the loss of this program, the Air Force maintains capability of fulfilling combatant commander (COCOM) all-weather targeting requirements.

QUESTIONS SUBMITTED BY SENATOR JOSEPH I. LIEBERMAN

C–17

57. Senator LIEBERMAN. Secretary Wynne, it is my understanding that the C–17 has been and still is considered the airlift of choice by the combatant commanders. However, the proposed fiscal year 2007 budget has attempted to terminate production of the C–17 at the end of this year, opting for a total buy of 180 planes instead of the anticipated 222. I understand there are budget restraints, but this decision appears to run against the expressed airlift needs of combatant commanders. If you can, please describe the importance airlift operations have played in ongoing operations domestically and abroad. Also, can you please outline the current state of the airlift fleet?

Secretary WYNNE. Airlift Operations: Mobility airlift—and specifically C–17 airlift—has been crucial in the war on terror. From the beginning, the airlifter led the way in the projection of United States power, whether it was dropping humanitarian supplies on night one of the Afghanistan campaign, or the initial positioning of warfighters and their supplies into the Iraq theater, or the continuing resupply efforts—our Nation's airlifters provide the global reach air bridge necessary. Since September 11, utilizing the heavy airlift capability of the C–5 and C–17, as well as the C–130, the Air Force has moved over 1.287 million tons of critical warfighter cargo and moved more than 939,487 passengers.

This power projection also plays a key role in taking care of needs within our own borders. This was best exemplified during the Hurricanes Katrina and Rita evacu-

ations. With the help of our Nation's airlift fleet, thousands of displaced refugees were moved from the New Orleans and Gulf coast area to locations where their needs could best be met. It also gave the first responders the equipment they needed. Commercial airlift could not accomplish this mission, due to the infrastructure damage incurred at the region's affected airfields. Only the C–17 and C–130, with their short and unimproved field landing capabilities, were able to help the victims in most areas.

Current Status of the Airlift Fleet: Total C–5, C–17, and C–130 aircraft availability showed a slight improvement the last three quarters increasing from 59.2 percent in fiscal year 2005/3 to 60.4 percent in fiscal year 2006/1. All three airframes show positive mission capable, total non-mission capable maintenance, and total non-mission capable supply trends over the same period.

58. Senator LIEBERMAN. General Moseley, the MCS, which is frequently quoted at setting the procurement level of C–17s at 180, was completed prior to the QDR and the Army's articulation of its current deployment needs. As I understand it, the rationale behind Army modularization, specifically the increase in the number of brigades, is a supposed expansion in operational ground capabilities. How can we expand our ground capabilities if we do not continue to procure the only strategic airlifter that can deliver troops, materials, and ammunition to the operational frontline?

General MOSELEY. The MCS and the QDR occurred in overlapping timeframes and there was significant sharing of information between the two studies. The fiscal years 2006–2011 Strategic Planning Guidance (SPG) directed the OSD and Joint Chiefs of Staff (JCS) staffs to complete the MCS study and report results for use in the fiscal year 2008 program objective memorandum (POM) and the QDR.

The MCS used the programmed 2012 force structures along with the projected, service-approved concepts of operations (CONOPs) that would be employed with these future forces. This data, along with other detailed modeling information on the scenarios, threat conditions, and timing contained in the Multi Service Force Deployment document was used to conduct the analysis.

The MCS task was to determine if the 2012 mobility capabilities would support the defense strategy. After a very thorough analysis of various scenarios and warfighting demands, the study results indicated the projected capabilities meet the strategy with acceptable risk.

The study also found that continued investment in the mobility system, in line with current priorities, is sufficient to maintain these capabilities into the future. The MCS provides a solid foundation for future studies and eases the data gathering burden, scenario development, and time required for study completion. It provides us with an analytically sound range of required mobility capabilities to use as we manage our force structure to meet the needs of the COCOMs.

59. Senator LIEBERMAN. General Moseley, what have the COCOMs said about the decision to halt C–17 production at 180 instead of the projected buy of 222?

General MOSELEY. The fiscal year 2007 President's budget and Air Force program of record is 180 C–17s. The QDR, informed by the MCS, confirmed the current intertheater airlift program, comprised of 180 C–17s and 112 modernized C–5s, would support DOD warfighting demands with acceptable risk. All of the COCOMs concurred with the MCS.[1] General Schwartz, Commander, United States Transportation Command, reiterated this position on March 2, 2006, before the House Armed Services Committee.[2] He also subsequently stated we are using up C–17s at a faster rate than expected.[3] As a result of faster than planned use rates, the Air Force has subsequently added seven C–17s as its number one unfunded priority in fiscal year 2007.

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[1] Confirmed through Joint Staff J–4 Mobility Division, Lt. Col. Brian O'Connor.

[2] Statement of General Norton A. Schwartz, USAF Commander, United States Transportation Command Before the House Armed Services Committee On the State of the Command 2 March 2006. Exact quote reads, "USTRANSCOM supports JCS and OSD efforts and agrees with the MCS assessment that the overall lift capability is about right, however, additional analysis must focus on the correct mix of C–17, C–5, and C–130 assets and aerial refueling and sealift recapitalization." Prepared remarks available for download at http://www.house.gov/hasc/schedules/3–2–06USTRANSCOMStatement.pdf

[3] General Schwartz's response to a question from Representative Saxton during Q&A. Transcript provided by USTC J5/4–AM (Major Glen Lehman) via e-mail.

AIR FORCE MANUFACTURING TECHNOLOGY PROGRAM

60. Senator LIEBERMAN. Secretary Wynne, what role does the Air Force Manufacturing Technology (ManTech) program play in supporting the industrial base on which the Air Force will depend for the production of its future systems?

Secretary WYNNE. The ManTech program was established by U.S.C., title 10, for the ". . . development and application of advanced manufacturing technologies and processes for use to meet manufacturing requirements that are essential to the national defense . . ." and to ". . . reduce the acquisition and supportability costs of defense weapon systems and reduce manufacturing and repair cycle times across the life cycles. . ." In this role, ManTech advances industrial base capabilities for both current and future weapon systems. The program typically focuses on manufacturing-related needs that are pervasive across multiple weapon systems that might otherwise go unaddressed. Another powerful aspect of the ManTech role is that the program has the ability to invest in promising technologies that are otherwise considered beyond the normal risk of industry and systems program offices.

61. Senator LIEBERMAN. Secretary Wynne, how does the ManTech program widely disseminate the manufacturing processes and technologies it develops throughout Air Force programs and the industrial base?

Secretary WYNNE. The ManTech program uses multiple avenues to disseminate its processes and technologies throughout Air Force programs and the industrial base. First, the ManTech investment strategy of bringing multiple "customers" together in joint ventures enables wide dissemination of manufacturing technologies. ManTech typically focuses on manufacturing-related needs that are pervasive across multiple weapon systems—not only are various Government offices involved, but their industry counterparts are as well. Such investments are often beneficial to multiple Services and defense agencies and this is coordinated through a standing joint leadership body called the Joint Defense ManTech Panel (JDMTP). Second, ManTech has an active and deliberate "success story" program that develops and publishes technology accomplishments through various media on a continual basis. Also, like other research and development activities, ManTech submits final reports to the Defense Technical Information Center, which are available to Government and industry. Finally, every year the JDMTP holds a well-attended Defense Manufacturing Conference to facilitate exchange of information on new and emerging manufacturing processes and technologies.

62. Senator LIEBERMAN. Secretary Wynne, what incentives are in place for defense contractors to adopt these new technologies and processes?

Secretary WYNNE. The primary incentive for defense contractors to adopt the technologies and processes developed within the Air Force ManTech program is the potential for improved capabilities and efficiencies, which in turn should position a company to better compete and win future business. Of further incentive, is the fact that while the ManTech program encourages industry cost-sharing in its Government investments in military critical industries, it does not require it.

JOINT STRIKE FIGHTER ENGINES

63. Senator LIEBERMAN. General Moseley, you testified in response to Chairman Warner that the alternate engine (F136) would provide additional thrust and that it would be better suited for the vertical thrust mission. Given that the engines are interchangeable and that the lift fan gear box capacity is limited, please explain how this can be accomplished.

General MOSELEY. It is possible that the F136 engine could generate more thrust. However, the Short Takeoff and Vertical Landing (STOVL) variant could not benefit from more thrust even if the F136 could provide it. Limiting factors for STOVL operation are the lift components, specifically lift fan torque and speed limits and exhaust system (three bearing swivel case and nozzle) loads. Because the lift fan thrust must equal the engine thrust to maintain aircraft balance during vertical lift, the lift fan's ability to make thrust is the limiter. Additionally, the exhaust system's load capability is limited to specification performance to save weight.

64. Senator LIEBERMAN. General Moseley, you testified that the Air Force and the Navy have a history of fleet stand-downs with the F100 engines, as well as with other General Electric engines on occasion. Please provide the details of these fleet stand-downs, including when the stand-downs occurred and for how long.

General MOSELEY. The Air Force has experienced two system wide fleet stand-downs due to engine issues. The first instance of Air Force fleet-wide grounding ac-

tion was the December 1990 grounding of the B–1B fleet due to blade retaining ring failure resulting in first stage fan blade liberation on the F101 G.E. engine (there were two failure events, one severe enough that the engine departed the aircraft). The fleet remained grounded from late December 1990 through early February 1991 until compliance with a 90-day safety time compliance technical order (TCTO) to install the new blade retainers that was completed by April 1991. The second instance was a F–16 stand down in March 1999 due to engine augmentor liberation, for aircraft using the P&W 100–220/220E (730 airframes, 101 spares).

QUESTIONS SUBMITTED BY SENATOR JACK REED

NUCLEAR AIR LAUNCHED CRUISE MISSILES

65. Senator REED. Secretary Wynne and General Moseley, the Air Force maintains two types of nuclear cruise missiles, which both use the same type of nuclear warhead, the W–80. Over the years there have been numerous discussions about the need for these air launched cruise missiles, and on several occasions there have been proposals to retire these systems. The W–80 warhead is in need of a life extension. Planning is currently underway to begin this life extension program at the Department of Energy (DOE). Plans call for spending $98 million in 2006, $102 million in 2007, $100 million in 2008, $154 million in 2009, and $118 million in 2010. From now until 2010 this money is used to plan and design the life extension program because the first life extended W–80 is not produced until 2010. Between now and then the DOE will spend over $550 million. If there is any doubt about the need for these cruise missiles we need to make the decision to retire them now, before half a billion dollars are spent just to get ready to begin the life extension. Is there a compelling need for these systems?

Secretary WYNNE and General MOSELEY. The Commander of U.S. Strategic Command (USSTRATCOM) determines current requirements for cruise missile forces. As the COCOM responsible for executing the Nation's military strategy regarding nuclear weapons, he sets current and future requirements. The continuing requirement for nuclear cruise missiles compels the Air Force to provide properly trained and equipped forces to the COCOM. To support the current cruise missile requirement, the W80 warhead requires a life extension program in order to be viable through the timeframe required by USSTRATCOM.

DOD is in the final phase of a comprehensive study that will establish cruise missile requirements for the post-2007 timeframe. Results of this study may necessitate changes to the existing programs of both the Air Force and the DOE.

NATIONAL DEFENSE EDUCATION PROGRAM

66. Senator REED. Secretary Wynne, how has the Air Force participated in the newly authorized Science, Math, and Research for Transformation (SMART) program?

Secretary WYNNE. The Air Force Office of Scientific Research was the executive agent for the SMART Defense Scholarship Pilot Program in fiscal year 2005. As part of this pilot program, the Air Force selected 11 of the 30 initial SMART scholars—5 of whom are scheduled to graduate in 2006 and will then be placed in Air Force civilian positions. The remaining six SMART scholars not scheduled to graduate this year will be interns at the Air Force Research Laboratory this summer and will be placed in civilian Air Force positions upon graduation.

With the start of the permanent SMART program in fiscal year 2006, the Navy Postgraduate School took over as the executive agent for the program. The Air Force, however, is still an active participant in the selection of SMART scholars and comprised 40 percent of the DOD reviewers on the SMART selection panel that met recently.

67. Senator REED. Secretary Wynne, what issues do you see in the current setup and execution of the program?

Secretary WYNNE. As with any new program, there will be challenges. The main challenge the Air Force faces with the SMART program is matching each scholar with an appropriate employment opportunity to create a win-win situation. The Air Force is proud of our SMART scholars and we want them to succeed in their Air Force civilian careers.

68. Senator REED. Secretary Wynne, what other initiatives is the Air Force undertaking to attract and retain scientists and engineers?

Secretary WYNNE. The Air Force participates in many exciting DOD programs to increase the number of scientists and engineers within the Air Force. These programs cover the education spectrum from high school to post-doctorate levels. We reach out to high school students through the Junior Science and Humanities Symposium (JSHS), which awards college funding for future researchers. In fact, this year's JSHS is being sponsored by the Air Force in Albuquerque, New Mexico. The Awards to Stimulate and Support Undergraduate Research Experiences provides funding to research universities so that they can reach out to students at non-research universities to provide these undergraduates research opportunities not otherwise available to them. In addition, the DOD National Defense Science and Engineering Graduate (NDSEG) Fellowship Program is another program aimed at increasing the number of scientists and engineers with doctorate degrees. The NDSEG Fellowship Program does this by providing talented graduate students with portable fellowships that allow the recipient to pursue their graduate studies at whichever U.S. institution they choose to attend. Finally, the Air Force's Young Investigator Program is an exciting new program designed to encourage recently graduated doctorate-level scientists and engineers by awarding them with grants to support their Air Force-relevant innovative research efforts. The Air Force is committed to the development, mentorship, and hiring of talented scientists and engineers.

AIR FORCE TECHNICAL WORKFORCE NEEDS

69. Senator REED. Secretary Wynne, has the Air Force done a survey or analysis to determine its current and future technical workforce needs?

Secretary WYNNE. We are a capabilities-based force. We continually assess our workforce needs based on capabilities defined by the COCOMs, today and in the future. Commanders, functional authorities, and career field managers design their technical workforces to meet these capabilities. Generating and projecting aerospace power in the 21st century requires a technological force with a myriad of different skills. We use modeling and analysis to assess our Air Force workforce sustainment and training requirements based on changes in the global threat environment, national security strategy, workforce trends, and budgetary constraints. Each of our career field managers develops workforce forecasts based on their thorough understanding of evolving technology, changes in Air Force roles, and influences from outside sources. We consolidate and balance those forecasts to produce our overall workforce requirements, and build our accession, retention, development, and workforce management strategies to meet those requirements.

70. Senator REED. Secretary Wynne, what were the general conclusions of that analysis?

Secretary WYNNE. Technology is ever changing and because our airmen operate within a closed but dynamic personnel system, we must proactively recruit, train, and retain people with the necessary mix of skills. Our recruiting efforts and incentives allow us to attract technically savvy people, who we can develop to respond to the ever-changing environment. Based on these changes, we develop education and training opportunities to grow the right people with the right training/education at the right time. Once we invest resources to develop our workforce, we make deliberate and targeted resource decisions to retain these skilled professionals.

71. Senator REED. Secretary Wynne, which particular technical disciplines concern you most when it comes to finding highly qualified talent to fill Air Force positions?

Secretary WYNNE. The Air Force enjoys the highest quality recruits in the DOD for both technical and non-technical disciplines. We are competing favorably with the private sector to access and train top-notch officer and enlisted as well as civilian airmen across a myriad of functional areas for the employment of air and space power. Our biggest challenges are recruiting fully-qualified professionals in nursing, dentistry, and specialized medical fields. With increased emphasis on culturally-competent airmen, we are also working hard to increase the number of foreign language qualified recruits.

QUESTIONS SUBMITTED BY SENATOR BILL NELSON

SANTA ROSA ISLAND REPAIR

72. Senator BILL NELSON. Secretary Wynne, I understand that DOD approved but that the Office of Management and Budget subsequently disapproved funds in the

current Fiscal Year 2006 Supplemental Appropriations Request related to storm damage at Eglin Air Force Base that would repair and strengthen Santa Rosa Island (SRI). Without this repair, the island may not survive another storm. What is the dollar value of the necessary repairs?

Secretary WYNNE. The total amount to fully fund the repairs at SRI is $169.8 million (this number includes military construction, RDT&E, and operation and maintenance (O&M) funded requirements). These funds will repair roadways and facilities damaged during the recent hurricane season.

73. Senator BILL NELSON. Secretary Wynne, what are the operational consequences or mission risks if this work is not done?

Secretary WYNNE. SRI is the only DOD range with unobstructed continuous land-to-sea access. It allows for testing and training from sea level to high altitude. It is also currently the only operating DOD range with unrestricted testing/training for large safety footprint weapons. Last year, test and evaluation (T&E) facilities on this island were essential to completing 24 quick reaction tests for munitions in support of Operations Iraqi Freedom and Enduring Freedom.

Losing SRI would require reliance on other heavily tasked and less capable test facilities, or a significant investment in land purchase, airspace access, and infrastructure to duplicate the SRI T&E capabilities. The exact mission impacts are not quantifiable, but history has shown that reduced testing results in fielding of weapons with poorer operational performance.

MILITARY/ENVIRONMENT RELATIONSHIP

74. Senator BILL NELSON. Secretary Wynne, the OSD and the Army, Navy, and Marine Corps have initiated a number of projects throughout the country to protect against encroachment under the authority provided by Congress in section 2811 of the National Defense Authorization Act for Fiscal Year 2003 (now section 2684a of title 10, U.S.C.). This program is commonly referred to as the Range and Environmental Protection Initiative (REPI). Last year, the Air Force promulgated guidance and procedures to major commands and installations with regard to initiating requests for such projects. As far as I can find out, not a single project was forwarded by the Air Force to DOD for approval. Why not?

Secretary WYNNE. The Air Force uses a systematic approach to encroachment. As requested by DOD, the Air Force canvassed for potential REPI projects and provided guidance to the major commands and installations. We reviewed the candidate submissions and advised major commands and installations to first ensure they followed the Air Force's systematic approach to encroachment prevention. This means working with the local communities so that mission-compatible land use controls are adopted. This primary approach ensures the Air Force does not take on the necessary O&M costs associated with owning properties that should instead continue to contribute to the local tax base and be utilized by the community in ways that do not conflict with base operations.

75. Senator BILL NELSON. Secretary Wynne, what is the Air Force's view of this program and its potential to protect installations from incompatible encroachment?

Secretary WYNNE. The Air Force considers the authority in 10 U.S.C. 2684a, as amended, as one tool of many available to us for use in addressing encroachment concerns. The Air Force prioritizes these tools when it comes to encroachment strategies. Our first priority is to fully pursue no-cost strategies such as the Air Installation Compatible Use Zones (AICUZ) Program. The Air Force has 30 years' experience working with neighboring communities and counties in collaborative planning efforts under AICUZ, supplemented as needed with joint land use studies, interagency/intergovernmental coordination and outreach with local and State governments, and State and Federal agencies. In those situations where land use planning solutions are inadequate, or inappropriate, we have, thanks to Congress, a number of authorities available for our use to include 2684a. The Air Force is currently evaluating how to best use the partnering opportunities provided by 10 U.S.C. 2684a in a comprehensive encroachment strategy.

76. Senator BILL NELSON. Secretary Wynne, the Northwest Florida Greenway project is an Eglin Air Force Base, State, and local project to rationalize and set aside large tracts of land in West Florida to ensure compatible use and prevent encroachment. According to DOD's 2006 Sustainable Ranges Report, the Greenway is an "important regional success story" to "maintain an important flight path for five U.S. Air Force and Navy installations in that area that support important service

and joint testing and training missions." The project was praised as a national model by Secretary Rumsfeld in remarks he gave in August 2005 at the White House Conference on Cooperative Conservation. Moreover, the Northwest Florida Greenway project is an element of the most recent Joint Gulf Range Complex Strategic Plan, approved by senior officials of all four Services that use the range, including the Air Force. What is the view of the Air Force with regard to the Northwest Florida Greenway project? If the Air Force supports the project, what specific steps does the Air Force intend to take to further its implementation?

Secretary WYNNE. The Northwest Florida Greenway project is certainly a successful cooperative effort to preserve operational capability for the military and achieve benefits for threatened and endangered species. In fiscal year 2004, the Air Force worked through OSD to provide $1 million to the Phase I Nokuse Plantation conservation easement; helping prevent development under restricted airspace and protecting black bear habitat. The Air Force uses a systematic approach to encroachment and will continue to emphasize working with local communities so that mission-compatible land use controls are adopted. Where this approach does not achieve desired objectives, the Air Force will continue to review encroachment prevention projects, including those proposed for the Northwest Florida Greenway. We will invest where possible in those projects demonstrating the best operational and environmental return.

77. Senator BILL NELSON. Secretary Wynne, last year, Congress amended section 2684a of title 10, U.S.C., to expand the scope of possible projects under that authority from areas "in the vicinity of a military installation" to areas "in the vicinity of, or ecologically related to, a military installation or military airspace." The reason for that change was the recognition by Congress that the expanded scope of the authority was necessary in order to effectively assure sustainable operations over the long-term, and to remove any questions concerning the validity of projects like the Northwest Florida Greenway that are designed to protect habitat and prevent incompatible development both with regard to the "near vicinity" of installations and with regard to critical military airspace beyond that "near vicinity". Will this change in the scope of the authority affect the Air Force policy on the use of the authority to assure sustainability of Air Force test and training operations?

Secretary WYNNE. Pending development of any additional DOD policies related to section 2684a, the Air Force does not anticipate the referenced amendments to section 2684a—which address areas "in the vicinity of or ecologically related to"—to drive significant change in Air Force policy. The authority provided under section 2684a is another option in assuring sustainable operations. Through the use of fiscally smart and operationally effective approaches, the Air Force continuously strives to do better at anticipating and preventing encroachment.

78. Senator BILL NELSON. Secretary Wynne, oil interests have been attempting to encroach upon military test and training ranges in the Eastern Gulf of Mexico. I would be interested to know your assessment of this risk to Air Force weapons testing and training today and into the future. I also understand that the Air Force is leading a detailed analysis to ensure we can meet future requirements for unencumbered air space in the Eastern Gulf for the broad scope of next generation hypersonic, precision, long range, and directed energy munitions and weapons. What is your role in this analysis? How is this analysis structured and how will the results be considered toward a policy decision?

Secretary WYNNE. We have thoroughly evaluated current and future mission requirements in the Gulf of Mexico. Our analysis revalidated the location of our Military Mission Line (MML). The majority of the proposed sale area is west of the MML. There is a small triangular portion of the proposed sale area which crosses to the east of the MML. We requested Minerals Management Service remove this area from the program. Therefore, the new proposed program will have minimal impact to test and training missions. In addition, there is no prohibition to conducting military missions west of the MML, with due regard to any surface structures. Our position supports a balance between the Nation's energy and DOD needs in the Gulf of Mexico.

A review of existing Contiguous United States and Outside Contiguous United States weapons ranges is being conducted to determine possible candidates to test precision and long range weapons. A draft screening report will soon be available for review which lists all of the pertinent ranges worldwide. A screening criteria is applied to pare down the list to a group of reasonable alternatives. Those alternatives will then be further researched and put into a description of proposed action and alternatives (DOPAA) document. Following senior leadership approval of the

DOPAA, an environmental impact statement will then be conducted to select a location to perform precision and long range weapons testing.

F–22 BASING

79. Senator BILL NELSON. Secretary Wynne, I am aware that the Air Force has modified its basing plan for the operational squadrons of the F–22 and has settled on the number of aircraft for the training base. How has this change affected requirement for military construction? Specifically, do you have everything you need for the training squadron at Tyndall Air Force Base to ensure the facilities will support the mission by 2008?

Secretary WYNNE. The modified basing plan has not changed the number of F–22A aircraft projected for Tyndall Air Force Base, and thus has not changed the requirement for military construction. We believe we can support the training squadron at Tyndall with the amounts already appropriated in prior years and the $1.8 million project being requested in the fiscal year 2007 President's budget.

MILITARY SPACE INVESTMENT

80. Senator BILL NELSON. Secretary Wynne, what are your greatest concerns regarding our investment strategy and program management in military space and how does this budget request deal with those challenges?

Secretary WYNNE. My greatest concern regarding our investment strategy and program management in military space is to ensure that we are funding programs that demonstrate a high likelihood of success based on proven technology maturity. We can ill afford to fund programs that are high risk and do not deliver capabilities to the warfighter on schedule.

To address this challenge, we are implementing a "Back to Basics" philosophy that reflects a "walk before you run" program construct. The cornerstone of the "Back to Basics" philosophy is to implement, wherever feasible, a classic evolutionary acquisition approach that apportions risk by applying a construct of four distinct, interrelated stages: science and technology, technology development, systems development, and system production. Appropriately funding the space portfolio will become even more important as we look to fund our programs at an increased confidence level. Space programs tend to have small production lots, small production issues such as test failures, parts problems, component delivery delays, et cetera that have large impacts to total program cost. The Young Panel has recommended budgeting to an 80/20 confidence level, which includes a 20–25 percent management reserve. Accordingly, the current budget requests funding for a higher level of confidence where possible, such as in the transformational satellite program.

EVOLVED EXPENDABLE LAUNCH VEHICLE

81. Senator BILL NELSON. Secretary Wynne, what is your evaluation of the Boeing—Lockheed Martin joint venture to produce the Evolved Expendable Launch Vehicle (EELV)?

Secretary WYNNE. The Federal Trade Commission (FTC) has final approval authority on the United Launch Alliance (ULA) anti-trust review. As part of the FTC approval process, the USD(AT&L) provides a DOD recommendation to the FTC. The Air Force is supporting the DOD evaluation of ULA for this purpose. It is premature for me to comment on the Air Force's position on ULA until a DOD position is finalized and delivered to the FTC.

QUESTIONS SUBMITTED BY SENATOR HILLARY RODHAM CLINTON

PROPOSED CUTS IN AIR NATIONAL GUARD

82. Senator CLINTON. Secretary Wynne and General Moseley, New York has more Air National Guard bases than any other State and these installations play a critical role in our national security and our homeland defense. Therefore, I have joined with many of my colleagues in expressing concern over the proposed cuts in the National Guard including the Air National Guard (ANG). Please provide additional details about the proposed cuts in the ANG, specifically addressing the following issues: Given the importance that the ANG plays in homeland defense, is the impact of any cuts on homeland defense considered when end strength reductions are considered?

Secretary WYNNE and General MOSELEY. Bottom line—to modernize the Total Air Force, operating efficiencies will have to be found through rebalancing among components, reducing redundancies and inefficient business practices, and targeted end strength reductions. The National Guard Bureau (NGB) will use the following guiding principles, methodology, and priorities:

ANG Mission

• To provide trained units and qualified persons available to support the Air Force in its mission to deliver sovereign options for the defense of the United States and its global interests—to fly and fight in air, space, and cyberspace.
• To provide trained and equipped units to protect life and property and to preserve peace, order, and public safety within the State or territory.

Guiding Principles

• Flying mission in every State.
• Proportionality—share skill sets.
• Retain surge capability with approximately 60 percent part-time, "Traditional."
• Maintain regional capability in support of disaster response.
• Priority to dual-use (Federal and State) capability, weigh against "how much capability is enough?"

Initial Methodology/Priorities

- Make units "whole."
  - Must fix shortfalls in validated/essential missions and base realignment and closure (BRAC) requirements.
- Align aircrew ratios with Air Force (1.5 to 1.25).
  - Shift from "strategic reserve" to "operational reserve."
- Align United Manpower Document (UMD) with United Type Code (UTC).
  - E.g. Combat Communications.
  - Logistics Composite Mobility (LCOM) vs. ANG manpower model.
- Regionalize domestic capability.
  - E.g. Evaluate need for both ANG Red Horse and Army National Guard (ARNG) Combat Engineers in same region.
- Force-shaping authority to target retention efforts.
  - Selective early retirement or retaining critical skills.
- If this is not enough, we must "do less with less."
  - Eliminate capability excess to ANG requirements—"Big Blue" missions.
    - E.g. Deployable Security Force.

83. Senator CLINTON. Secretary Wynne and General Moseley, are there any plans to reduce the ANG full-time equivalents, and if so, by how many?

Secretary WYNNE and General MOSELEY. There are no costs to the ANG planned in fiscal year 2007. Program Budget Decision (PBD) 720 provided guidelines and targets to the NGB to plan the future. The NGB is working with the various adjutants general to adjudicate how to respond to the guidelines for fiscal years 2008–2011. Manpower reduction is one option. PBD 720 includes cuts to ANG programs of $1 billion.

84. Senator CLINTON. Secretary Wynne and General Moseley, how would a reduction support the continued global war on terror and homeland security requirements?

Secretary WYNNE and General MOSELEY. Bottom line—to modernize the total Air Force, operating efficiencies will have to be found through rebalancing among components, reducing redundancies and inefficient business practices, and targeted end strength reductions. The NGB will use the following guiding principles, methodology, and priorities:

ANG Mission

• To provide trained units and qualified persons available to support the Air Force in its mission to deliver sovereign options for the defense of the U.S. and its global interests—to fly and fight in air, space, and cyberspace.
• To provide trained and equipped units to protect life and property and to preserve peace, order, and public safety within the State or territory.

Guiding Principles

- Flying mission in every State.
- Proportionality—share skill sets.
- Retain surge capability with approximately 60 percent part-time, "Traditional."
- Maintain regional capability in support of disaster response.
- Priority to dual-use (Federal and State) capability, weigh against "how much capability is enough?"

Initial Methodology/Priorities

- Make units "whole."
  - Must fix shortfalls in validated/essential missions and BRAC requirements.
- Align aircrew ratios with USAF (1.5 to 1.25).
  - Shift from "strategic reserve" to "operational reserve."
- Align UMD with UTC.
  - E.g. Combat Communications.
  - LCOM vs. ANG manpower model.
- Regionalize domestic capability.
  - E.g. Evaluate need for both ANG Red Horse and ARNG Combat Engineers in same region.
- Force-shaping authority to target retention efforts.
  - Selective early retirement or retaining critical skills.
- If this is not enough, we must "do less with less."
  - Eliminate capability excess to ANG requirements—"Big Blue" missions.
    - E.g. Deployable Security Force.

85. Senator CLINTON. Secretary Wynne and General Moseley, has the Air Force finalized its most recent MCS? When will it be released to this committee?

Secretary WYNNE and General MOSELEY. The MCS was co-led by the Office of the Secretary of Defense for Program Analysis and Evaluation (OSD/PA&E) and the JCS J4 with participation by the Services and the COCOMs. The study is complete and the final report signed out by the Deputy Secretary of Defense on December 19, 2005. Copies of the entire report were made available to congressional offices.

COMBAT SEARCH AND RESCUE

86. Senator CLINTON. Secretary Wynne and General Moseley, as the combat search and rescue (CSAR) mission within the Air Force shifts and the current fleet of CSAR helicopters is nearing the end of its service life, please provide an update on this program focusing on these questions: What is the current plan for the rescue forces as it relates to the restructuring of the Air Force?

Secretary WYNNE. As we continue our long war against global terror, one of the crucial capabilities the Air Force provides to the joint warfighter and our Nation is dedicated CSAR. CSAR capability is consistently one of the most requested capabilities by the COCOMs. To further enhance this capability, the Air Force is taking actions to ensure the most effective means to make available these forces for any contingency. Recently, the Air Force moved administrative control of its CSAR forces under Air Combat Command (ACC) to ensure integration into all facets of the joint community including operational deployments, training, as well as national crisis response. This transition is clearly the best avenue to ensure CSAR for the joint warfighter. Also, the future acquisition of a replacement helicopter for CSAR through the CSAR–X program fits hand-in-glove with the recent transition.

General MOSELEY. I view CSAR as a moral and warfighting imperative. As the Air Force transforms in the 21st century, we will ensure a robust CSAR capability even in the current budget environment. We have recently aligned CSAR forces underneath ACC. This realignment will ensure the availability of our CSAR forces, not only for combat operations, but also for homeland defense. Also, as noted in your inquiry, the current Air Force CSAR helicopter fleet is approaching the end of its service life; to continue future CSAR operations the Air Force requires a new platform through the CSAR–X program. CSAR–X, currently in sourcing, will not only sustain the Air Force ability to perform CSAR but will offer faster response, greater survivability, and greater rescue capabilities. The recent realignment, coupled with

the future recapitalization with CSAR–X, will increase the capability of the superb CSAR forces the Air Force provides.

87. Senator CLINTON. Secretary Wynne and General Moseley, detail the current operations tempo and the maintenance status of the current fleet.

Secretary WYNNE and General MOSELEY. The Air Force currently has approximately 29,000 personnel and 240 aircraft deployed worldwide, and another 40 aircraft on alert or flying in support of Operation Noble Eagle.

However, the Air Force is unique among the Services in that a very large number of people serve multiple COCOMs at one time—often from home station. On any given day, approximately 210,000 of our total operating force of 405,000 airmen are engaged and actively supporting COCOM operations. Some serve through deployment and posturing for the Air Expeditionary Force (AEF), but many more through strategic missions such as missile duty, strategic mobility, and forward presence.

The current Active-Duty Special Operations utilization rate for the HH–60 and HC–130 separately and combined by fiscal year from 2001 to fiscal year 2006/2 is provided in the table below. Average HH–60Gs deployed to CENTCOM increased from 13 in fiscal year 2002 to 15.8 aircraft in fiscal year 2006/2 and average HC–130Ps deployed to CENTCOM declined from 54.9 in fiscal year 2002 to 13.9 aircraft in fiscal year 2006/2.

Active HH–60 and HC–130P UTE Rate

	Fiscal Year					
	2001	2002	2003	2004	2005	2006
HH060G	30.4	31.2	29.1	29.7	30.2	37.8
HC130P	32.0	43.1	36.9	36.7	39.5	37.8
Combined	30.7	33.5	30.6	31.0	31.7	32.5

Active HH–60 and HC–130P MC Rate

	Fiscal Year					
	2001	2002	2003	2004	2005	2006
HH060G	68.7	68.1	66.7	68.5	73.4	74.8
HC130P	73.4	75.9	72.3	71.3	68.4	78.8
Combined	69.6	69.6	67.7	69.0	72.6	75.5

Note: Fiscal year 2006 MC Standard for HC–130P = 72 percent and HH–60G = 70 percent.

88. Senator CLINTON. Secretary Wynne and General Moseley, what is the status of the acquisition of a new helicopter for your CSAR mission area?

Secretary WYNNE and General MOSELEY. The CSAR–X is currently in source selection. We expect a Milestone B defense acquisition board (DAB) and contract award in August 2006.

89. Senator CLINTON. Secretary Wynne and General Moseley, has the OSD approved the acquisition strategy for CSAR–X? If not, why not?

Secretary WYNNE and General MOSELEY. The acquisition strategy is currently in coordination with Office of the Secretary of Defense for Acquistion, Technology, and Logistics (OSD(AT&L)). Additionally, OSD(AT&L) conducted an investment program review (also referred to as the concept decision review) on March 23, 2006, to examine the program affordability, requirements, and additional directed mixed-fleet analysis, and affirmed "that the department is on track for the planned August CSAR–X DAB."

PREDATOR Bs FOR AIR NATIONAL GUARD

90. Senator CLINTON. Secretary Wynne and General Moseley, the Air Force made preliminary plans for the Predator MQ–9 beddown at the 174th Fighter Wing New York Air National Guard at Hancock in the first quarter, fiscal year 2010. This coincides with the agreement General Jumper made with several members of the congressional New York delegation last year. What is the timeline for final funding and production decisions of the MQ–9?

Secretary WYNNE and General MOSELEY. Currently, MQ–9 aircraft are in initial, low-rate production, while the system undergoes system development and demonstration. Following completion of initial operational test and evaluation and a corresponding Milestone "C" production decision, which is scheduled for the first quarter fiscal year 2009, the Air Force will commence full-rate production. Current program funding supports this schedule.

91. Senator CLINTON. Secretary Wynne and General Moseley, what, if any, mechanical/design issues need to be worked out prior to these decisions?

Secretary WYNNE and General MOSELEY. The most significant new capabilities remaining to be developed as part of the MQ–9 system development and demonstration effort are: a stores management system, which allows the aircraft to communicate with and efficiently employ precision-guided weapons; a 45 KVA electrical power generation system; a digital electronic engine control to increase flight endurance by optimizing engine performance; increased-strength landing gear to allow the MQ–9 to land using normal procedures without having to jettison unexpended weapons; and a characterization of Lynx Synthetic Aperture Radar automatic static target cueing.

92. Senator CLINTON. Secretary Wynne and General Moseley, these decision impact another timeline which is for the programmatic movement (retirement) of the 174th's F–16s to Fort Wayne, Indiana (second quarter 2009). General Jumper stated that no F–16s would be moved until Predators were on the base and operational. Can you provide assurance that regardless of what happens with the timeline of funding and production decisions of the MQ–9, the F–16s at Hancock will not move until Predators are on base?

Secretary WYNNE and General MOSELEY. Our current plan includes IOC with fully-trained New York ANG manpower and a Ground Control Station at Hancock Field by the first quarter of fiscal year 2010. It is important to note that it takes a minimum of 6 months and a maximum of 1 year to train IOC crews and maintainers. Qualified crews at Hancock Field can operate Predators that are forward deployed throughout the world. This "reach back" sourcing allows New York ANG members at Hancock Field to provide immediate combat capability even as MQ–9s are being delivered. With the F–16s programmed to continue flying until the second quarter of fiscal year 2009, we anticipate a smooth transition as we re-role the combat capability of New York ANG at Hancock Field.

C–5A REFURBISHMENT AND C–17S

93. Senator CLINTON. Secretary Wynne and General Moseley, are there any plans to provide C–17s to the ANG?

Secretary WYNNE and General MOSELEY. The ANG currently has eight C–17s assigned to the 172nd AW in Jackson, Mississippi, plus an associate unit at Hickam Air Force Base (AFB). An additional C–17 associate unit is planned for Elmendorf AFB. Under our current total force construct, no additional C–17 aircraft will be assigned to the ANG.

94. Senator CLINTON. Secretary Wynne and General Moseley, will all C–5s, both As and Bs, go through the re-engining (RERP) process and AMP?

Secretary WYNNE and General MOSELEY. The current plan is to modernize the entire C–5 fleet (C–5 As, Bs, and Cs) with AMP and RERP modifications. This plan is currently in review with the costs, schedule, and resources required.

COMPUTER SCIENCE AND CYBERSECURITY RESEARCH

95. Senator CLINTON. Secretary Wynne and General Moseley, how much funding is the Air Force request for research in computer science and cybersecurity?

Secretary WYNNE and General MOSELEY. As part of its fiscal year 2007 President's budget request, the Air Force requested $14.7 million for research in computer science and $25.0 million for research in cybersecurity.

96. Senator CLINTON. Secretary Wynne and General Moseley, how much of this funding is for fundamental research efforts?

Secretary WYNNE and General MOSELEY. As part of its fiscal year 2007 President's budget request, the Air Force requested $6.7 million for fundamental or basic research in computer science and $5.2 million for fundamental or basic research in cybersecurity.

97. Senator CLINTON. Secretary Wynne and General Moseley, how are these investments coordinated with Defense Advanced Research Projects Agency (DARPA) programs in similar areas?

Secretary WYNNE and General MOSELEY. Air Force investments in computer science and cybersecurity are closely coordinated with DARPA to ensure programs complement each other, do not duplicate research, and both DARPA and the Air Force gain maximum benefit by leveraging each others' funding. At DARPA's request, Air Force scientists, engineers, and program managers assist DARPA in defining research topics, writing solicitations, and evaluating inputs received from academia and industry. DARPA then selects the Air Force to be their executive agent in managing the contract and technical program for the majority of these projects.

98. Senator CLINTON. Secretary Wynne and General Moseley, is the Air Force the lead Service for funding 6.1 (basic research) in cybersecurity? If not, who is?

Secretary WYNNE and General MOSELEY. The Air Force is not the lead Service for funding 6.1 (basic research) in cybersecurity. The DOD has not designated a lead Service in this area.

[Whereupon, at 11:35 a.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2007

TUESDAY, MARCH 7, 2006

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

COMBATANT COMMANDERS ON THEIR MILITARY STRATEGY AND OPERATIONAL REQUIREMENTS

The committee met, pursuant to notice, at 9:36 a.m. in room SD–106, Dirksen Senate Office Building, Senator John Warner (chairman) presiding.

Committee members present: Senators Warner, McCain, Inhofe, Collins, Talent, Cornyn, Thune, Levin, Reed, Akaka, and Clinton.

Committee staff members present: Charles S. Abell, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: William M. Caniano, professional staff member; Regina A. Dubey, professional staff member; Ambrose R. Hock, professional staff member; Gregory T. Kiley, professional staff member; Derek J. Maurer, professional staff member; David M. Morriss, counsel; Lucian L. Niemeyer, professional staff member; Lynn F. Rusten, professional staff member; Sean G. Stackley, professional staff member; and Scott W. Stucky, general counsel.

Minority staff members present: Richard D. DeBobes, Democratic staff director; Daniel J. Cox, Jr., professional staff member; Gabriella Eisen, research assistant; Evelyn N. Farkas, professional staff member; Richard W. Fieldhouse, professional staff member; Bridget W. Higgins, research assistant; Michael J. McCord, professional staff member; and William G.P. Monahan, minority counsel.

Staff assistants present: Jessica L. Kingston, Benjamin L. Rubin, and Pendred K. Wilson.

Committee members' assistants present: Samuel Zega, assistant to Senator Warner; Christopher J. Paul, assistant to Senator McCain; John A. Bonsell, assistant to Senator Inhofe; Arch Galloway II, assistant to Senator Sessions; Mackenzie M. Eaglen, assistant to Senator Collins; D'Arcy Grisier, assistant to Senator Ensign; Russell J. Thomasson, assistant to Senator Cornyn; Stuart C. Mallory, assistant to Senator Thune; Elizabeth King, assistant to Senator Reed; Darcie Tokioka, assistant to Senator Akaka; William K. Sutey, assistant to Senator Bill Nelson; and Andrew Shapiro, assistant to Senator Clinton.

OPENING STATEMENT OF SENATOR JOHN WARNER, CHAIRMAN

Chairman WARNER. Good morning, everyone. The Armed Services Committee meets today to receive testimony from Admiral Fallon, Commander, U.S. Pacific Command (PACOM); General Bell, Commander, U.S. Forces Korea (USFK); and General Jones, Commander, U.S. Forces European Command (EUCOM), Supreme Allied Commander, Europe.

I want to thank each of you and your families, for the leadership, the dedication, and the service that you've given our Nation for so many years. I ask that you convey on behalf of all the members of this committee to the men and women under your command the Nation's deep gratitude for their respective service and their families.

We look forward today to your insights on the developments in your area of operations, as well as your assessment of the administration's fiscal year 2007 defense budget request as it relates to your area of responsibility (AOR). The committee is also interested to hear your views with regard to the Quadrennial Defense Review (QDR) and about the status of planned changes to the U.S. force posture in the years to come.

North Korea—and we will start off with North Korea—has shown extraordinary twists and turns here in the past few years; withdrawn from the Nuclear Nonproliferation Treaty, the NPT, and resumed production of plutonium for nuclear weapons. Although the participants in the Six-Party Talks agreed last year on a statement of principles to guide their further negotiations, North Korea rather abruptly walked back and is currently boycotting a resumption of the talks.

North Korea's willingness to halt and dismantle its nuclear weapons program is in question. This situation poses a grave threat to the regional and international stability. I hope that the United States, working closely with our friends and allies, can resolve this situation through diplomatic means.

Admiral Fallon and General Bell, we look forward to hearing your assessment of this complex situation on the Korean peninsula. The committee is particularly interested in any changes you have seen over the past year in North Korea's military posture, as well as your assessment of North Korea's nuclear program, ballistic missile and proliferation activities, and the readiness of our forces and those of South Korea to respond to any possible developments on the peninsula, both now and in the future.

Developments in China are of continuing interest to this committee. Admiral Fallon, I look forward to your assessment of China's military modernization program and plans and the impact of this military modernization on the U.S. interests in the region. Clearly, China is developing military capabilities far beyond its requirements to defend its own interests in the homeland. What are their intentions?

I would also be interested in your assessment of the current state of China-Taiwan relations in light of the recent decision by the Taiwanese president to dissolve the National Unification Council and China's continuing buildup of its missiles across the strait.

In the Asia-Pacific region, the global war on terrorism is being waged in Singapore, Malaysia, Thailand, the Philippines, Indonesia, and other nations. I understand that you have recently visited several of these countries, Admiral, and I look forward to an update on your opinions.

General Jones, there has been significant activity in North Atlantic Treaty Organization (NATO) since you appeared before this committee last year. The committee is interested in your assessment of how well the alliance, now 26 members strong, is functioning or not functioning in your judgment as well as they should. Our NATO allies' spending—what are their defense budgets and what is it in relation to what we are spending here in our Nation?

Are they developing the capabilities needed to keep the alliance militarily effective and interoperable? How is the NATO decision-making process working? I know that has been a matter of concern to you. Are there plans for further enlargement of the alliance in your judgment?

NATO is increasing the activity in out of area missions. This is appropriate and welcome, given that Europe is largely stable and that threats to international security are increasingly global. Since August 2003, NATO has been leading the International Security and Assistance Force (ISAF) in Afghanistan. The committee is particularly interested to hear your report on how the expansion of the NATO ISAF mission throughout Afghanistan is proceeding.

Last week General Maples, Director of the Defense Intelligence Agency (DIA), testified before this committee that the security situation in Afghanistan is worsening and could further deteriorate in the coming spring. Should that undesired scenario unfold, what would be the likely effect on the planned expansion of the NATO ISAF force?

This committee is keenly interested in NATO's commitment to help train Iraq security forces. NATO made this commitment at the Istanbul summit in June 2004, but the follow-through has been slower than we had hoped. We look forward to your report on the status and results to date of NATO's training mission in Iraq.

Further, General Jones, you have been a leader in promoting an enhanced strategic partnership with Africa and highlighting the important strategic role Africa plays in supplying energy, fighting against terrorism, and promoting regional stability. The committee looks forward to hearing about the efforts of your command to counterterrorist and transnational threats in Africa and to help African nations develop their capabilities to effectively address security and stability changes. The committee is also interested in your assessment of China's expanding activities in Africa and your views on the possibility of an expanded role for NATO in Darfur.

Another region of continuing interest to this committee is the Balkans, the one area of Europe that is most prone to conflict. We look forward to your assessment of the political and military situation there and to hearing about the status of the NATO forces currently serving in Kosovo.

Again, we welcome all of our witnesses today and thank you again for your service.

Senator Levin.

STATEMENT OF SENATOR CARL LEVIN

Senator LEVIN. Thank you, Mr. Chairman. First let me join you in welcoming our witnesses and thanking them for their leadership and for the work that their commands have done in their AORs, and also in support of other efforts, including those in Iraq and Afghanistan.

Relative to North Korea, analysts say that North Korea could now have up to 12 nuclear weapons this year. North Korean officials have declared that they have a nuclear weapons arsenal and that they have reprocessed the fuel rods that had been frozen from 1994 to 2003 under the Agreed Framework. The reactor the North Koreans restarted over a year ago continues to produce plutonium and another reactor which had been under construction could produce many more times the plutonium than the existing one.

Meanwhile, the Six-Party Talks remain stalled over counterfeiting issues that the United States raised in the same month the last round of talks concluded. There is apparently no diplomatic progress and this time North Korea has not frozen its nuclear activities during the talks. North Korea continues to use the time to bolster its nuclear arsenal.

U.S. forces in Europe and in the Pacific will undergo a major realignment as part of the administration's integrated global posture and basing strategy. In Europe this plan calls for the return of thousands of troops to military bases in the United States, the closing of hundreds of bases in the territories of our traditional NATO allies, and the creation of new basing arrangements in Eastern Europe and Africa as European Command's strategic emphasis shifts to the East and the South.

While many of these changes are necessary as the Department of Defense (DOD) moves to lighter, more flexible expeditionary forces, concerns have been raised by the congressionally-mandated overseas basing commission and others as to whether the Department is moving too quickly or cutting our forward stationed forces too deeply without adequately considering the impact such a reduction in U.S. presence in Europe and NATO will have on our influence and leadership globally.

I look forward to General Jones' views on the pros and cons associated with our posture realignment in the EUCOM's AOR and I also look forward to hearing from Admiral Fallon and General Bell on the strategic logic and challenges of our reposturing, particularly in Korea and Japan.

NATO is also undergoing a major transformation. This past year has seen NATO make the shift from an alliance based on collective defense to one based on collective security in response to today's threats. NATO has demonstrated its willingness to operate outside the alliance's borders leading and expanding the ISAF in Afghanistan; deploying a mission inside Iraq to train Iraqi security forces; providing humanitarian assistance to Pakistani earthquake victims; and giving logistical support to African Union (AU) peacekeepers in Darfur, Sudan.

However, as General Jones noted in an interview last October, even as NATO has demonstrated a willingness to do more, there appears to be a desire on the part of some NATO members to fund less. Despite NATO members' commitment at the 2003 Prague

Summit to a spending goal of 2 percent of each country's Gross Domestic Product (GDP) for defense, a majority of NATO members are below the mark. Further, the recent Dutch debate over participating in the expanded ISAF mission in southern Afghanistan raises concerns over whether allies will provide the resources to match NATO's new missions. General Jones, I hope you would address those concerns today.

I want to commend General Jones for the EUCOM's strong leadership in elevating the strategic importance of Africa, both as a part of the counterterrorism strategy and because of Africa's significant political and economic potential. Through its theater security cooperation programs, the EUCOM has been proactive in building partner nations' security capacity and establishing important relationships in this too often neglected part of the world.

Relative to the crisis in Darfur, I want to thank you, General Jones, for passing along a message at my request to the NATO Secretary General. On January 30, 2006, a bipartisan group of 34 Senators signed a letter to President Bush urging him to take immediate steps to help end the violence in Darfur. On February 1, I wrote you, General Jones, asking that you provide a copy of that letter to the NATO Secretary General, urging him to engage NATO members in developing options for an expanded NATO role in addressing that crisis. I thank you for your assistance in that regard.

I support President Bush's call for at least a doubling of the international peacekeeping force in Darfur and note the recent moves by the U.N. Security Council to have the U.N. Secretary General begin planning for the AU's mission in the region to transition to a U.N. peacekeeping mission. But that transition is months away and meanwhile the crisis appears to be worsening, including spilling over into neighboring Chad. I would very much like to hear from General Jones on what role NATO might play in the near-term in assisting the AU mission in Darfur and what needs to be done to ensure that the political will and resources are provided.

I would ask, Mr. Chairman, that the rest of my statement, including a number of thoughts relative to the situation in India and various issues that relate to our relationship with China, be inserted in the record at this time.

[The prepared statement of Senator Levin follows:]

PREPARED STATEMENT BY SENATOR CARL LEVIN

Let me join the Chairman in welcoming our witnesses—General Jones, Admiral Fallon, and General Bell. I would like to extend our thanks to all of you for the work that your commands have done in your areas of responsibility, and in support of other efforts, especially those in Iraq and Afghanistan.

The vital strategic issues that we have to explore this morning include: 1) the situation on the Korean peninsula; 2) China's military modernization and strategic objectives; 3) the impact of Indo-U.S. strategic initiatives; 4) U.S. global force posture in the Pacific and European Command (EUCOM) areas of responsibility; 5) North Atlantic Treaty Organization's (NATO) new missions in out-of-area operations such as Afghanistan, Iraq, the Balkans and elsewhere; and 6) the international and U.S. response to the crisis in Darfur.

Analysts say North Korea could have up to 12 nuclear weapons this year. North Korean officials have asserted that they have a "nuclear weapons arsenal," and that they reprocessed the 8,000 fuel rods that had been frozen from 1994 to 2003 under the Agreed Framework. This means that over the last 4 years North Korea has potentially produced up to six more nuclear weapons on top of the one to two devices

the Intelligence Community assessed that they already had. In addition, the 5 megawatt reactor the North Koreans restarted over a year ago continues to produce enough plutonium for about another nuclear device per year. If the 50 megawatt reactor under construction is finished in a couple of years, as some reports indicate may be possible, North Korea would be able to produce 11 additional nuclear weapons annually.

Meanwhile, the Six-Party Talks remain stalled over counterfeiting issues that the United States raised in the same month the last round of talks concluded. There is no diplomatic progress, and unlike the negotiating process in the 1990s, North Korea has not frozen its nuclear activities.

The recently released Quadrennial Defense Review states that "U.S. policy remains focused on encouraging China to play a constructive, peaceful role in the Asia-Pacific region and to serve as a partner in addressing common security challenges, including terrorism, proliferation, narcotics and piracy." Given the concerns raised by China's rapid military modernization and global engagement activities, it is incumbent upon our Government to devise a wise policy vis-a-vis China, one that does not box us—or them—into any corners militarily or politically.

The other potential Asian power, India, is one that the United States has seen increased defense cooperation with since the late 1990s. The relationship between our two democracies is clearly moving in a constructive direction. Nevertheless, some concerns have been raised about the impact of one potential area of strategic cooperation—the recently announced civil nuclear agreement. This committee needs to know what impact this agreement would have—if Congress took action to allow it to come into force—on global nonproliferation efforts and on the regional nuclear balance.

U.S. forces in Europe and the Pacific will undergo a major realignment as part of the administration's Integrated Global Posture and Basing Strategy. In Europe, this plan calls for the return of thousands of troops to military bases in the United States; the closing of hundreds of bases on the territories of our traditional NATO allies; and the creation of new basing arrangements in Eastern Europe and Africa as EUCOM's strategic emphasis shifts to the east and south. While many of these changes are necessary as the Department moves to lighter, more flexible expeditionary forces, concerns have been raised, by the congressionally-mandated Overseas Basing Commission and others, that the Department may be moving too quickly and cutting our forward-stationed forces too deeply without adequately considering the impact such a reduction in U.S. presence in Europe and NATO will have on our influence and leadership globally. I would be interested in getting your views, General Jones, on the benefits and downsides associated with our posture realignment in the EUCOM's area of responsibility. I also look forward to hearing from Admiral Fallon and General Bell regarding reposturing, particularly in Korea and Japan.

NATO also is undergoing a major transformation. This past year has seen NATO make the shift from an alliance based on collective defense to one based on collective security in response to today's threats. NATO has demonstrated its willingness to operate outside the alliance's borders leading and expanding the International Security Assistance Force, ISAF, in Afghanistan; deploying a mission inside Iraq to train Iraqi security forces; providing humanitarian assistance to Pakistani earthquake victims; and giving logistical support to African Union peacekeepers in Darfur, Sudan. However, as General Jones noted in an interview last October, even as NATO has demonstrated a willingness to do more, there appears to be a desire on the part of some of NATO members to "fund less." Despite NATO members' commitment at the 2003 Prague Summit to a spending goal of 2 percent of each country's GDP for defense, a majority of NATO members are below that mark. Further, the recent Dutch debate over participating in the expanded ISAF mission in southern Afghanistan raises concerns. General Jones, I hope you will address these concerns today.

I want to commend you for EUCOM's strong leadership in elevating the strategic importance of Africa, both as part of a counterterrorism strategy and because of Africa's significant political and economic potential. Through its Theater Security Cooperation programs, EUCOM has been proactive in building partner nations' security capacity and establishing important relationships in this too-often neglected part of the world. Regarding the crisis in Darfur, Sudan, I want to thank you, General Jones, for passing along a message at my request to the NATO Secretary General. On January 30, 2006, a bipartisan group of 34 Senators, including myself, signed a letter to President George Bush urging him to take immediate steps to help end the violence in Darfur, Sudan. On February 1, 2006, I wrote to you, General Jones, asking that you provide a copy of that letter to the NATO Secretary General, and urging him to engage NATO in resolving that crisis. Thank you for your assistance. I support President Bush's call for at least a doubling of the international

peacekeeping force in Darfur and note the recent moves by the U.N. Security Council to have U.N. Secretary General Kofi Annan begin planning for the African Union's mission in the region to transition to a U.N. peacekeeping mission. But that transition is months away, and meanwhile the crisis appears to be worsening, including spilling over into neighboring Chad. I would like to get your thoughts about what role NATO might play in the near-term in assisting the African Union mission in Darfur and what needs to be done to ensure that the political will and resources are provided.

There are many other issues I hope we can touch on today including: (1) our evolving relationship with Japan; (2) efforts to combat terrorism, especially in Southeast Asia and Africa; (3) the future of our military relationship with Indonesia, the world's most populous Muslim country; and (4) the status of Kosovo and the impact of recent elections there on ongoing talks.

I look forward to hearing from our witnesses regarding these issues and their assessments of how adequately the budget request for fiscal year 2007 and beyond meets their operational, readiness, and quality of life requirements.

Thank you.

Chairman WARNER. Without objection.

Senator LEVIN. Thank you.

Chairman WARNER. Thank you very much, Senator.

Our committee will hold a closed hearing immediately following this in our committee room, SR–222, to receive such further testimony as each of the witnesses desires and to respond to questions. We will also put in today's record the entire statement by each of our distinguished witnesses. I commend you for getting them here in a timely way and they are quite prodigious in size. So I think we had best get a brief overview from each of the witnesses and we will proceed to our questions.

Admiral, will you lead off.

STATEMENT OF ADM WILLIAM J. FALLON, USN, COMMANDER, UNITED STATES PACIFIC COMMAND

Admiral FALLON. Yes, sir. Mr. Chairman, Senator Levin, distinguished members of the committee: It is a great pleasure and honor to be here representing the men and women of PACOM to testify this morning regarding our military strategy and operational requirements in the Asia Pacific region. The Pacific area is dynamic, vibrant, and I will tell you that overall the outlook is optimistic among most of the people in this region.

Of course, we still have some deep-seated and long-standing frictions and mistrusts among nations that are a source of continuing challenge in the area. I realize that now, having been new in the job last year, the magnitude of this area. It is indeed vast. I told you last year that I was going to make an effort to get out and about as quickly as possible to see as many of these countries as I could, to meet the leaders, to get a first-hand view of just what is going on. I will tell you that I have been successful in being able to visit many of the countries.

In terms of assessments, I will tell you that we are working hard to maintain the readiness of our forces in every area and I think we are in very good shape in that regard. I will also tell you that we have a great emphasis on maintaining our alliances in the region, so that we can work with our partners on issues within the region and in other parts of the world. The other major area of emphasis is on helping countries to develop their own capacities and capabilities, to deal with their internal problems, to deal with their people, so that we try our best to eliminate the conditions that

have been prone to foster the extremist activity that has resulted in so many problems in the world. We work very hard to try to orchestrate our theater security and cooperation plans with the Department of State (DOS) and with each of the nations in the area.

I will tell you that the priorities that I established last year are still I think appropriate, first off, to maintain our activities in the global war on terror, both within the region—and I will cover that in a second—and to support activities ongoing in the Central Command (CENTCOM), to mature our joint and combined warfighting. We have been continuing to work on that—I want to make sure that our operations plans and forces are credible if we should need to call upon people to execute those plans—continuing to advance our regional security cooperation throughout the Asia Pacific area, and then working to posture our forces for agile and responsive movement if required.

To address some specific issues, in terms of overall threat, I will tell you that since last year there have been several areas that have been actually decreasing in tension, and I would point out Kashmir on the Indian-Pakistan border as one area to highlight. The situation in Korea, General Bell can cover in great detail, but my assessment of that is that some progress was made in that Six-Party Talks. Actually a couple of sessions were held and that was a good opportunity to get people together to at least go over a framework. As far as substantive results of those sessions, I think the jury is still out. I know that Ambassador Hill is working this hard, looking forward to another engagement.

The situation in China, the tension in the Taiwan Strait, I would characterize as significantly reduced from a year ago, although in recent weeks the move by Chin Shui-ben to take action with the Unification Council has caused some concern. But I will cite the fact that the response from China has been pretty muted. There has not been much of a reaction and that is a change from past activity. But I think it is an area that we obviously have to continue to watch.

Chairman WARNER. Would you bring the mike up a little tighter. Your voice is failing and a lot of people in the back cannot hear.

Admiral FALLON. All right, sir.

Chairman WARNER. Thank you.

Admiral FALLON. Regarding the Taiwan situation, we have been working with the military of Taiwan to encourage them to take steps to bolster their own defense, which I think would be exceedingly useful both for themselves and to help us. I will tell you that we have had success in that regard and we are going to continue to work with them closely to move that particular initiative forward.

Regarding our current military operations, we are supporting anti-terrorist activities in Southeast Asia, particularly in the Philippines. I have recently come back from a trip to Indonesia and Malaysia, reporting that both of those countries are moving out smartly in tightening security, particularly in the area around the Sulu-Aceh Sea, which has historically seen a lot of problematic activity, with numerous terrorist groups, working in the area to train their forces and to prepare for terrorist acts which they have carried out in the region.

Regarding the budget for 2007 and the readiness of our forces, I am satisfied that we are generally moving forward in areas that would be helpful in the Pacific area, and I do not have any specific requirements that are not being met. We are paying close attention to force protection in every one of our areas in which we have people, working with our own component commanders and with the nations which we deploy forces to for exercises or training or operations. This is something that we watch every day and I'm confident that we have a handle on it.

The other major area of endeavor is the business of force posture changes as we look to the future. As you mentioned, we have just concluded a major strategic review with Japan. We are in the process of working out the details of implementation. In fact, as we are here this morning there is a meeting occurring later on today in Hawaii where the representatives of Japan are going to sit down again with Office of the Secretary of Defense (OSD) and with our people to try to work through details of this very, very comprehensive scheme.

General Bell, I am sure, is going to address the changes in Korea that are going to result in our moving essentially out of Seoul and down into two enclaves further south in the country. We have just concluded this past year a strategic framework agreement with Singapore, a staunch ally that continues to support our efforts in that area and give us access to some very excellent port and airfield facilities.

There are other countries throughout the region. I will not go name by name, but—Australia, our very staunch ally, we continue a close relationship with that nation, enhancing our training program. I would also highlight the fact that during the tsunami relief response earlier last year we were able to take advantage of a good relationship with the country of Thailand to stage forces, and again just in the past couple of weeks, in response to a disaster in the Philippines, the advantage of having our forward-deployed, very well prepared forces, enabled us to respond within 36 hours to have people on the ground in the southern Philippines in Leyte trying to help people, to relieve their suffering and do what we could to help that nation to recover from its efforts, from yet another natural disaster.

So as you can see, it is a busy theater. We have lots going on. Our men and women are working hard every day to support a wide range of activities. We are delighted to be there serving, and I want to tell you that our people thank this committee for your very strong support every day of our efforts. The soldiers, sailors, airmen, and marines in the PACOM are very proud to serve this Nation in the many endeavors in which they are engaged and we are very, very pleased to be working in the Asia Pacific area.

I would be pleased to answer your questions when my colleagues here have had their opportunity to have an opening statement. Thank you very much, sir.

[The prepared statement of Admiral Fallon follows:]

PREPARED STATEMENT BY ADM WILLIAM J. FALLON, USN

INTRODUCTION

Mr. Chairman and members of the committee: On behalf of the men and women of the United States Pacific Command (PACOM), I thank you for this opportunity to testify on the posture of our command, and provide an assessment of security in the Asia-Pacific region.

The Asia-Pacific region is an area of dynamic human activity, unprecedented economic growth and continuing security challenges in several areas. During this past year, Pacific-based U.S. military forces have served in large numbers in Iraq and Afghanistan, provided relief to thousands in the wake of natural disasters, built capacity in Southeast Asian nations combating terrorists and helped stabilize the region through exercises and engagement with countries throughout Asia and the Pacific.

In the past year, I have traveled extensively throughout the PACOM area of responsibility, meeting with military and government leaders, familiarizing myself first hand with issues, and determining how we—in concert with allies and partners—should prioritize efforts. These face-to-face discussions and first hand experiences have been very helpful in charting the course of our work. Several key impressions frame my overall assessment of the region.

In Northeast Asia, the U.S.—Japan relationship—the only military alliance for the Japanese—continues as the cornerstone for security in that area. The soon to be concluded Defense Policy Review Initiative (DPRI) has charted the strategic way ahead for the alliance and established a framework for the future U.S. force structure in Japan.

The U.S.-Republic of Korea (ROK) alliance is healthy and evolving. The transformation and rebalancing of our combined military forces continue on pace with no impact to our readiness to decisively defeat aggression from North Korea, if required. The North Korean leadership remains an enigma and the known ballistic missile capability of this country plus the potential possession of nuclear weapons are cause for continuing concern and attention to the Korean Peninsula. The Six-Party Talks, while not yet yielding a resolution to the North Korean nuclear issue, provide an encouraging framework for regional diplomatic leadership by the ROK, Japan, Russia, and China.

China's economic momentum and military modernization are conspicuous and influential. Regional leaders value the prosperity generated by their growing neighbor. Much of Asia's recovery from the late 1990's financial crisis was a direct result of strong Chinese markets. Asia-Pacific nations are grateful for the many decades of security and stability which a strong U.S. military presence has provided to the region. But most nations also want to share in the economic benefits which are being generated by China. Consequently, a positive relationship with both China and the United States remains the goal of most nations.

China continues to modernize its armed forces and acquire new capabilities at an accelerating rate. While nowhere near U.S. military capabilities, the People's Liberation Army (PLA) is enhancing a diverse and robust array of military hardware. While economic, commercial and almost every other type of interaction between the U.S. and China has been accelerating, military-to-military ties have lagged. We are working hard now to change the vector in this area, to encourage Chinese military leaders to substantively engage with us in a more transparent manner. In my discussions with PLA military leaders, they indicated a willingness to reciprocate. It is important to advance our mutual military relationship, not only to ease tension and suspicion but to encourage, by example, Chinese participation in the full range of international engagement.

While consistently seeking to assure the People's Republic of China (PRC) of our desire for peaceful resolution of cross-strait issues, we retain our strong commitment to the defense of Taiwan should it be threatened by PRC military action. In this regard we have firmly and consistently advocated a stronger commitment and investment by Taiwan in its own defense. We welcome the general reduction in cross-strait tension between China and Taiwan, but recognize the potential for danger in this relationship.

Southeast Asia is the front line of the war on terror in PACOM. Activities by terrorists and their supporters have been centered in the Philippines, Indonesia, and Malaysia, particularly in the area of the Sulawesi Sea. With the cooperation of those nations, we have been building capacity and strengthening the ability of those countries to resist the activities of the terrorists and to actively seek their capture or demise.

In Indonesia, we are in the early stages of applying newly available foreign military financing and we anticipate that this investment, along with continued infusion of security assistance funding next year, will support efforts to professionalize and reform the Indonesian military. Terrorist and separatist perpetuated violence in southern Thailand, Sri Lanka, Nepal, and Bangladesh is also a serious concern.

Relations with India are strongly positive. The world's largest democracy has much in common with us. We seek to reinforce the administration's effort to build a U.S.-India strategic partnership by enhancing our military-to-military interaction, particularly with increased exercises and engagement.

These impressions highlight both the challenges and opportunities in the PACOM area of responsibility. We have in place key elements to succeed in advancing U.S. security interests and enhancing regional stability—vibrant alliances, opportunities for new partnerships, combat ready and agile forces, and committed soldiers, sailors, airmen, and marines to lead our efforts. As we move forward, our initiatives are organized into five focus areas—prosecuting and winning the war on terror; maturing our joint and combined warfighting capabilities and readiness; ensuring the credibility of our operational plans; advancing regional security cooperation; and, posturing forces for agile and responsive employment.

WINNING THE WAR ON TERROR

Winning the war on terror is our highest priority at PACOM. Cooperating nations of the region, particularly Australia, Japan, Republic of Korea, Thailand, Singapore, Fiji, Mongolia, and New Zealand, are making or have made significant, worldwide contributions to the war effort in Iraq and Afghanistan. Tonga has previously committed forces and we expect force contributions again in 2006.

Within Asia and the Pacific, we strive to eliminate the violence that now threatens the people and stability of the region and, more importantly, to transform at-risk environments—by, with, and through our regional partners. In every case, we work closely with the host nation, the OSD, the DOS, and our U.S. Ambassadors in crafting our approaches to the at-risk areas.

Southeast Asia remains the PACOM focal point in the war on terror. It has experienced significant terrorist activity—as evidenced by the October 2005 bombing in Bali. In the southern Philippines, Mindanao and the Sulu archipelago remain a sanctuary, training and recruiting ground for terrorist organizations. We continue efforts to create a secure and stable environment.

Operation Enduring Freedom-Philippines (OEF–P) remains focused on training, advising, and assisting war on terror efforts of the armed forces of the Philippines (AFP). As a result, we note both operational and organizational improvement in counterterrorism capacity of the AFP and other Philippine security forces. For example, AFP units have been able to sustain themselves for longer periods in the field. Additionally, they have been able to better coordinate across services to pursue objectives. Other efforts, such as strategic communication, humanitarian and civil assistance, civil-military operations, intelligence fusion, and ongoing peace negotiations between the Philippine government and separatist Moro Islamic Liberation Front (MILF), have eroded support to the Abu Sayyaf Group and Jemaah Islamyah. In summary, we have made progress, but more can and will be done.

The Government of Indonesia's commitment to thwarting extremism and maritime security is readily evident, and recent operations against key terrorist leaders demonstrate that the skill and capabilities of Indonesian forces are improving. Indonesian security forces aggressively pursued terrorists responsible for the October 2005 Bali bombing, resulting in the death of one of the top two Jemaah Islamyah leaders, Al Zahari.

To support and accelerate Indonesian counterterror actions, and to enhance maritime security, particularly in the strategically important Strait of Malacca, we endorse a rapid, concerted infusion of assistance. Aid to the Indonesian military (TNI) will help sustain ongoing reforms as well as increase capacity for action against security threats and bolster their professionalism. Our assistance to the TNI will contribute to the long-term success of the Indonesian democracy—and ultimately—help remove conditions that breed terrorism. In the wake of the recent DOS decision to waive the Fiscal Year 2006 Foreign Operations Appropriations restrictions in the interest of national security, we have moved out smartly to implement Foreign Military Financing (FMF) for Indonesia. As we move forward in this new partnership, we remain committed to the improving the professionalism of the TNI and we will continue to closely observe and emphasize their support for human rights.

The dedicated professionals of our Joint Interagency Task Force-West (JIATF–W) made major contributions in furthering war on terror objectives by attacking a key enabler of terrorism—transnational crime—in an exceptionally cost-effective way.

JIATF–W personnel coordinated military-to-military training, information sharing, law enforcement training and infrastructure development projects throughout the theater but primarily among countries with the greatest threat of drug-related funding to terrorist activities. In a major success, the Interagency Fusion Center in Jakarta, Indonesia provided significant assistance to the raid of an industrial-scale drug lab outside Jakarta on November 11, 2005, the largest seizure in Indonesian history and among the largest in the world. The Philippine center is also operational and contributing to counter transnational threats.

Forces from the Special Operations Command (SOCOM) Pacific play a key role in supporting PACOM war on terror operations. They lead the effort in the Philippines—in concert with our Filipino partners—helping stabilize and improve the social-political environment. In addition to operations in the Philippines, the Joint Combined Exchange Training (JCET) program is the principal mechanism used by Special Operations Forces (SOF) to assist partner nations in building capacity to defeat terrorism and improve our understanding of complexity of the local environment.

MATURE OUR JOINT AND COMBINED WARFIGHTING CAPABILITY AND READINESS

Fundamental to success in the war on terror and continued stability in the Asia-Pacific region is our joint and combined warfighting capability and readiness. As virtually every operation and activity is conducted jointly and in concert with allies, it is important that we train to operate more effectively as a multinational team.

The revised PACOM training plan is specifically designed to mature joint and combined warfighting capability, and advance security cooperation while more effectively using resources. During the past year, we have completely reviewed our training program with the goals of maximizing scarce training dollars and minimizing unnecessary stress on the force. We aligned, reduced, and, where appropriate, eliminated exercises. By leveraging rotational forces in theater, we can meet obligations with partners and allies, enhance training opportunities and demonstrate resolve. As one example, Exercise Cobra Gold continues as a premier multilateral event with 5 countries partnering in a Command Post Exercise and more than 20 countries participating within the Multinational Planning and Augmentation Team. We are also using this existing venue to lead the Asia—Pacific Global Peace Operations Initiative (GPOI) training and certification. Through the routine interaction created by our exercises, we expect to reduce existing interoperability barriers, increase military capacity and confidence, and enhance the likelihood of an effective regional response to future crises.

Maturing our capability and readiness also requires operational improvements that not only span the spectrum of mission types—from nontraditional to combat operations—but also reflect the maritime nature of our theater.

Undersea Superiority

The Pacific Fleet has renewed its focus on Anti-Submarine Warfare (ASW) in view of the proliferation and increased capability of submarines in Asia and the Pacific. Continued enhancement of air, surface, subsurface, and C^4I systems, as well as regular training and operations with partners and allies, will ensure our sustained ability to dominate any submarine threat.

Deep Intelligence Penetration/Persistent Surveillance

We remain overly dependent on technical collection for our human intelligence (HUMINT)—a dependency that prevents us from gaining an acceptable degree of insight into adversary intent. Such insight is necessary, however, if commanders are to effectively shape, deter, or respond militarily, particularly during the initial, escalatory stage of a crisis. We are working to adopt better management processes to meet our knowledge goals. However, increased and focused capabilities—more persistent, deep, and discreet surveillance, better regional expertise, better HUMINT—are needed to better assess adversary intentions.

Command and Control (C2)

A robust, reliable, secure, and shared communications architecture is critical to the C2 of military forces in joint and combined warfighting. To support current plans and future network-centric operations, we need to provide sufficient Military Satellite Communications (MILSATCOM) capabilities across the vast Pacific region. We are working to diversify critical command, control, communications, and computers (C^4) sites to reduce the possibility of a disabling attack on our networks. Furthermore, to facilitate coalition interoperability, critical to the war on terror, we need to rapidly move from bilateral to multinational information sharing. Since extremism does not respect borders, meaningful counterterror response requires all af-

fected nations to join hands, creating nodes of knowledge to thwart attacks. The ongoing effort to improve information sharing among Strait of Malacca littoral states is a good example.

Strategic and Intratheater Lift

Given the size and maritime nature of our AOR, agile employment—in responding to conventional attack or for a nontraditional mission—requires a reliable, versatile, complementary, and rapid airlift and sealift force. The arrival of U.S. Air Force (USAF) C–17s this year at Hickam Air Force Base (AFB), Hawaii and Elmendorf AFB, Alaska adds increased airlift capacity. We are working to ensure that beddown support requirements, such as maintenance and training facilities, practice assault air strips, and associated infrastructure, keep pace with the aircraft delivery schedule.

High-Speed Vessels (HSVs) are a cost effective sealift alternative, providing an exceptionally flexible augment to intra-theater airlift assets. The acquisition of HSVs can significantly enhance the rapid deployment of the Stryker Brigade Combat Teams and the mobility of SOF throughout the AOR. We favor continued leasing of HSVs as an interim capability, and strongly support a more aggressive acquisition process to expedite Joint HSV delivery.

Prepositioned Stocks (PREPO)/Preferred Munitions

Due to the time-distance challenges in this theater, PACOM forces require readily available and properly maintained PREPO stocks at the outset of any conflict. With command-level attention, we have elevated the effectiveness of PREPO maintenance. However, we still have an immediate need for replenishment of these stocks and other preferred munitions, particularly Global Positioning Satellite (GPS)-aided and laser-guided weapons. The appropriate mix of emerging weapons such as Guided Multiple Launch Rocket System, new Patriot missiles, and the Joint Air-to-Surface Standoff Munitions will be important in the future.

Air dominance, sea control, effective ballistic, and cruise missile defense, and the ability to counter chemical, biological, radiological, and nuclear (CBRN) attacks on our forces and homeland are essential requirements to military readiness in the Pacific theater. Throughout our operating environment, these capabilities enable our forces to gain access, freely maneuver, and focus on the objective—whether conducting maritime interdiction operations or preventing an adversary's lodgment. We support Joint and Service programs that would preserve our superiority.

ENSURE OPERATIONAL PLANS ARE CREDIBLE

Operational plans form the basis for military requirements in peacetime and initial response in war. As such, they must be both credible and executable. At PACOM, we bring to the planning process a culture that challenges assumptions, analyzes with rigor, and demands refinement when variables change. For homeland defense, we work with Northern Command (NORTHCOM) to refine and exercise comprehensive strategies that safeguard Americans. Additionally, annual exercises, such as Terminal Fury, enable us to more closely examine key aspects and potential friction points in our plans and to develop options which optimize capabilities. Equally important, our staffs gain confidence in their ability to execute as a result of these exercises.

ADVANCE REGIONAL SECURITY COOPERATION

Our Theater Security Cooperation Plan serves as the primary blueprint to enhance U.S. relationships and military capacities of allies and regional partners. It is fully coordinated with our embassy country teams and integrates available resources—security assistance, military-to-military exchanges, exercises, cooperative technology development, and outreach programs—into a coherent, mutually supportive set of activities for each country. Of note, our enlisted leadership development program, targeted at militaries in developing nations, serves to enhance the professionalism and capacity of this key cohort. With stronger noncommissioned officers, we believe that the operational professionalism of units is increased as well as individual soldier leadership, important in building capability and respect for human rights.

We view these security cooperation activities as essential to the execution of U.S. strategy. For relatively low cost, we can make progress in each of the PACOM focus areas, and we facilitate situations in which future challenges can be met through strong regional cooperation and capacity.

Japan

The U.S.-Japan alliance remains the most important pact in the Pacific and is as strong as ever. Approximately 50,000 U.S. Armed Forces personnel are in Japan, either permanently assigned or forward deployed with Naval Forces. The Government of Japan also provides approximately $4 billion annually in host nation support to our basing arrangements. These forward-stationed and forward-deployed forces send a strong signal of U.S. commitment to maintaining peace and stability in the region as well as providing a ready response force in East Asia.

Our alliance is undergoing important changes, ensuring its relevance for the long-term. Continuing the work announced in the Alliance Transformation and Realignment Report in October, we are developing detailed implementation plans with Japan for each of the proposed posture changes (discussed later in this text). Simultaneously, we are conducting a U.S.-Japan interoperability study, exploring ways to improve how our forces coordinate a wide range of operations. Close collaboration is also ongoing for cooperative missile defense, an effort that will improve the security of Japan as well as the U.S.

Prime Minister Koizumi has demonstrated exceptional leadership in support of the U.S.—Japan security alliance and guided the Japanese government (GOJ) and military through significant change. With renewal of its Special Legislation, Japan continued its deployment of Self-Defense Force (SDF) personnel to Iraq and the Indian Ocean in support of OEF. Additionally, Japan expeditiously deployed its SDF to Indonesia for humanitarian relief in the aftermath of the tsunami disaster. These actions clearly show the willingness and capability of the GOJ to deploy the SDF regionally and globally in support of security and humanitarian operations.

Republic of Korea (ROK)

The U.S.-ROK alliance is sound and continues to form the foundation to peace and security on the Korean peninsula. Our alliance remains focused on the most immediate security threat to the Korean people—North Korea (Democratic People's Republic of Korea—(DPRK)). The DPRK maintains more than 70 percent of its forces within 100 kilometers of the Demilitarized Zone (DMZ) and its export of missiles and missile technology poses a very serious proliferation concern. Other illicit activities—including probable state-run narcotics and currency counterfeiting enterprises—continue to finance the DPRK regime while undermining regional security.

After four complete rounds of Six-Party Talks aimed at eliminating North Korea's nuclear weapons programs, it is clear that deliberate and coordinated multilateral efforts between the ROK, Japan, Russia, and China must continue. The strong ROK-U.S. defense partnership has been an essential cornerstone of the effort to deter aggression and resolve the North Korean nuclear issue peacefully through regional diplomacy.

The ROK-U.S. alliance must remain adaptable in light of the changing security environment, including unconventional threats, China's military modernization, and the potential for reconciliation between the Koreas. The ROK and U.S. are working to transform both our militaries and the alliance. We also hope to foster greater trilateral military cooperation between the ROK, Japan, and the U.S., and we welcome Korea's adoption of a more regional view of security and stability. By moving forward as partners we will continue to successfully modernize the alliance for our mutual and enduring benefit.

Australia

One of our closest and steadfast allies, plays a key role in the Pacific and is a staunch partner in the war on terror. U.S. and Australian military forces coordinate security cooperation and counterterrorism activities in the Philippines, Indonesia, and Malaysia. Additionally, Australia plays a leading role in regional security with operations in East Timor, the Regional Assistance Mission to the Solomon Islands, and maritime security in the Pacific Islands.

High quality, bilateral training between the Australian Defense Force and the U.S. Armed Forces has been a longstanding and fundamental tenet of our alliance, resulting in successful combined operations in East Timor, Afghanistan, the Persian Gulf, Iraq, and tsunami relief. The establishment of a Joint Combined Training Centre in Australia's Northern Territory will take bilateral training to a new level, allowing our combined forces to prepare for a modern and dynamic threat environment. In addition, we are strengthening intelligence sharing with Australia to further enhance our bilateral cooperation and interoperability.

Republic of the Philippines

The Republic of the Philippines is a steadfast ally in Southeast Asia, and our mutual commitment to this alliance was just reinforced by rapid U.S. civil and military

response to February's Leyte mudslide disaster. Challenged by recent threats to stability, the Philippine Government (GRP) appears committed to democratic practices and rule of law. The GRP has taken the lead on initiatives to improve our counterterrorism cooperation, and at the same time, we see steady progress in Philippine Defense Reform. The GRP is committed to a comprehensive reform program that includes a multiyear planning and budgeting process and publication of annual Defense Planning Guidance. The Philippine Government is setting aside resources to retrain and re-equip up to 14 battalions with U.S. material every year for the next 5 years and is confident this effort will succeed with very modest U.S. assistance. President Arroyo deserves credit for reducing the Philippine budget deficit by 22 percent in 2005. This strong fiscal position makes military reform more affordable. As Philippine commitment is demonstrated, we should reinforce progress appropriately.

I am encouraged by the continued support and involvement of the Philippine government in significant regional events. This year they endorsed the Proliferation Security Initiative and its Statement of Interdiction Principles. They actively participated in the Association of Southeast Asian Nations (ASEAN) Regional Forum venues addressing counterterrorism and maritime security and cooperated with Australia and other friends and allies on diverse security matters.

Thailand

Thailand is a Major Non-NATO Ally, Treaty Ally, and partner which maintains a robust military relationship with the U.S. Having led military peace observers in Aceh, Indonesia, and completed engineering deployments in Afghanistan and Iraq, Thailand routinely demonstrates international commitment and also supports our training requirements by generously hosting the premier PACOM multilateral exercise, Cobra Gold. This annual exercise is a centerpiece for building regional competencies to respond to a wide range of transnational security threats and humanitarian relief contingencies. Also, Thailand has been particularly open and cooperative in the war on terror and counternarcotics efforts, and a year ago hosted U.S. and multi-nation tsunami relief efforts. We continue to stay abreast of the terrorist activity in the Southern Provinces.

India

We are working with our Indian armed forces counterparts to realize the goal of national strategic partnership envisioned by President Bush and Prime Minister Manmohan Singh. As vibrant democracies, India and the U.S. are working together to resolve issues of mutual interest such as maritime security, counterterrorism, and disaster relief. This year, PACOM forces conducted more complex and realistic training exercises with the Indian military, including the Malabar naval exercise with aircraft carriers from both nations, the second in a series of Army exercises leading to a brigade-level Command Post exercise, and the Cope India air exercise featuring a wide range of Indian and U.S. aircraft. As U.S. and Indian security interests overlap, we will ensure our military interaction enhances interoperability and fosters a military-to-military relationship based on trust. We believe a strong, democratic India will be a cornerstone of stability in the region.

Singapore and the U.S. signed a Strategic Framework Agreement in July 2005 recognizing Singapore as a major security cooperation partner. This agreement, and the supporting Defense Cooperation Agreement, solidifies strategic access to Singapore for visiting U.S. forces and provides a framework to guide our expanding bilateral security relationship. Maritime security cooperation remains a key common interest, and we continue to work with Singapore and other partners to improve capacity in this area. In August 2005, Singapore, a regional leader within the Proliferation Security Initiative (PSI), held the first Joint and Combined PSI Exercise in Asia. A staunch supporter of the war on terror, Singapore continues to provide forces to Operation Iraqi Freedom (OIF) and OEF.

Indonesia plays a unique strategic role in Southeast Asia and the Muslim world. As the world's most populous Muslim nation, located astride strategic trade routes, Indonesian democracy is critically important to security in the Pacific.

Over the past year, we have advanced engagement with the Indonesian military by completing the first JCET since 1992, providing $11 million of medical supplies, and formalizing the military-to-military security consultative process. Our strategy for moving forward is carefully targeted toward areas such as humanitarian assistance and maritime security. We are well on the way to providing $15 million in C–130 parts to the Indonesian Air Force through the foreign military sales system to help Indonesia improve its airlift capacity, particularly important in responding to natural disasters. We also plan to use $1 million in Foreign Military Financing (FMF) to support critical improvement to the Indonesian Navy maritime security in-

frastructure. Additional FMF funding in fiscal year 2007 would allow us to continue airlift development and speed the deployment of coastal radars and communications equipment essential to Indonesia and maritime security for the region.

As we move forward in this renewed partnership, we remain committed to the improved professionalism and reform of the Indonesian military. We will closely observe and strengthen their demonstrated support for human rights—a major PACOM focus, continually emphasized during numerous high level visits with Indonesia. Just last week, I returned from Indonesia, and several of my component commanders have recently visited—each of us is heartened by the progress and values we observed. Of note, President Yudhoyono has warmly greeted the recent U.S. policy changes and remains deeply committed to continued military reforms.

China

The rapidly expanding economy, growing demand for energy and clear aim to assume a more prominent role in regional and international affairs is having a major impact on the Asia-Pacific security environment. PACOM activities have been in concert with the Taiwan Relations Act (TRA) of 1979, the three Joint U.S.-PRC communiqué's (1972, 1979, 1982) and the One China policy. These policies have helped maintain peace and stability in the area of the Taiwan Strait for the past quarter century. DOD has two obligations under the TRA: assist Taiwan in maintaining its self-defense capability and retain the capacity to resist any use of force against Taiwan. Our efforts are aimed to prevent miscalculation which might result in conflict.

The PRC has continued to acquire new hardware and expand military capabilities. While not constituting a capability near that of the U.S., the increasing sophistication and size of modern military equipment, coupled with the lack of clear national intent with regard to this military capability, merits our close attention. Until the PRC renounces any intention of using force to resolve the Taiwan issue, we will maintain sufficient military capability in the region to meet our obligations under the TRA.

Given the complex and extensive relationship between the U.S. and PRC and the expressed desire to deepen the military relationship between us by the political leaders of both countries, PACOM has been strongly advocating a reinvigorated military-to-military relationship in a variety of areas. We have sought to focus in areas of common interest but have made clear to PLA leaders that the relationship should be guided by principles of transparency and reciprocity.

Taiwan

Our relationship with Taiwan is also guided by the TRA. Recognizing that tensions in the area have relaxed in the past year, PACOM has continued to encourage both Taiwan and the PRC to work to resolve peacefully their differences. Enhancing the ability of Taiwan to defend itself is the focus of our military engagement with Taiwan and we have seen strong interest by the Taiwan military in strengthening their defensive capabilities. We will continue to encourage their acquisition of useful technologies and a strong commitment to their own defense.

Mongolia

Mongolia remains a staunch ally fighting terror around the world, whether through involvement in Iraq, or as a volunteer for U.N. missions. Our relationship remains strong. The Mongolians strive to establish a regional center for Peacekeeping Training. Khaan Quest, a PACOM-Mongolia Peacekeeping exercise, will serve as a capstone to this year's peacekeeping training efforts. We are moving from a bilateral to a multi-lateral forum to include other nations in the region in this exercise. PACOM is steadfast in our support of Mongolian Defense Reform efforts; providing guidance and direction to align with more efficient models of Command Structure with a Joint Defense Assessment.

Russia

EUCOM is the supported command for Theater Security Cooperation planning and coordination with the Russian Federation with PACOM in a supporting role. Extensive coordination with EUCOM ensures security cooperation efforts are consistent and mutually supporting. PACOM interaction with Russia during 2005 saw some success; including the actual rescue of a trapped Russian submarine crew, the 11th trilateral search and rescue exercise with Canada and the U.S., and the historic port visit by the U.S.S. *Cushing* to Petropavlovsk—the first U.S. Navy warship visit there since World War II. Cooperative Threat Reduction interaction suffered because of sharply reduced funding.

Sri Lanka

Limited progress occurred over the past year in the peace process between the Government of Sri Lanka (GSL) and the Liberation Tigers of Tamil Eelam (LTTE). After a flurry of violence following the November 2005 elections, we are encouraged by the recent talks in Geneva by the GSL and the LTTE and the plan to continue these talks in the near future. The PACOM security cooperation program with the Sri Lankan armed forces helps deter renewed violence by improving its preparedness as well as demonstrating to the LTTE that the GSL has U.S. support. Military-to-military activities are aimed at developing institutional values that ensure civilian control of the military, and a military commitment to human rights.

Nepal

Policy decisions as a result of King Gyanendra's February 2005 assumption of direct rule prevented PACOM from allocating the $1.48 million in planned Foreign Military Financing (FMF) for Nepal. Prior to the cessation of engagement, FMF and Special Forces Joint Combined Exercise Training with the Royal Nepalese Army (RNA) Rangers were making a difference in Nepal. International pressure and current U.S. policy regarding military-to-military activities with His Majesty's Government of Nepal have yielded little progress in democratic reform. The security situation in Nepal is deteriorating as the Maoist campaign of terror against the government and people intensifies. The RNA is increasingly challenged in its attempt to protect the population against the terrorists.

Bangladesh

We seek to reinforce shared values of democracy and human rights with the Bangladesh armed forces through security cooperation and training. PACOM objectives are to assist Bangladesh in fighting extremism, developing border control, increasing maritime security, and developing the counterterror skills necessary to align its security capabilities. The security situation in this country is deteriorating as Muslim extremists take advantage of corrupt government with increased terrorist violence.

Malaysia

This country has a strongly expanding economy and growing affluence. The government supported the "Eyes in the Sky" initiative to increase combined aerial surveillance over the Strait of Malacca and stood up the Malaysia Maritime Enforcement Agency, a Coast Guard-like organization, in late November 2005. Additionally, Malaysia has worked to develop the Southeast Asia Regional Center for Combating Terrorism as a hub for exchanging best practices on combating terrorism. These initiatives demonstrate a commitment to combating piracy and other maritime threats, reducing the potential for terrorists to use Malaysia for sanctuary or transit zone, and a desire to work cooperatively with regional partners to increase stability.

Vietnam

Our military-to-military relationship with Vietnam is progressing in a modest but positive direction. Vietnam accepted the International Military and Education Training (IMET) program, co-hosted a PACOM multilateral conference on military medicine, and expressed the possibility of supporting international peace operations. These are strong indicators of increased Vietnamese willingness to participate regionally. Along with prisoner of war/missing in action (POW/MIA) recovery operations, we promote a combined approach between our Armed Forces, particularly on issues that can influence regional security or make contributions in humanitarian assistance/disaster relief.

New Zealand

New Zealand has been a strong supporter of the war on terror, including operations in Afghanistan. The Government of New Zealand's 1986 legislative ban of nuclear powered ships in its waters continues to hinder improved military-to-military relations.

Compact Nations

We continue to reinforce our special relationship with the three "freely associated" states—the Federated States of Micronesia, the Republic of the Marshall Islands and the Republic of Palau. We take seriously our defense obligations to these nations under the Compacts of Free Association through the implementation of our homeland defense planning and preparation. We also recognize the significant contributions of the citizens of the compact nations as they serve with great distinction in the U.S. Armed Forces including OEF and OIF. The Marshall Islands have a particular importance as the location of the Ronald Reagan Ballistic Missile Defense

Test Site, a unique asset which is integral to the development of our Nation's missile defense programs and the conduct of space operations.

Security Assistance

One of the most important features of PACOM theater security cooperation is the security assistance effort we execute in partnership with the DOS and in close cooperation with our embassy country teams. Of special interest are the grant aid security assistance programs including IMET and FMF, powerful tools in building partnership capacity of security forces from developing countries. It is a vital element of the Philippines Defense Reform, and is enhancing counterterrorism and maritime security capabilities of other war on terror countries, such as Indonesia, Thailand, and Bangladesh. FMF is also improving the capability and readiness of war on terror coalition partners Mongolia and Fiji. PACOM countries typically receive less than 1 percent of the annual worldwide allocation of FMF. These modest investments in capacity building and prevention of the conditions which foster instability merit increased funding.

Other key programs in PACOM contribute more broadly to security cooperation by addressing transnational concerns. Our Global Peace Operations Initiative program, efforts to combat weapons of mass destruction, preparations for pandemic influenza, the periodic deployment of the hospital ship, U.S.N.S. *Mercy,* and outreach organizations like the Center of Excellence in Disaster Management and Humanitarian Assistance (COE) and the Asia-Pacific Center for Security Studies (APCSS) provide foundational expertise while establishing enduring relationships between nations of the region. Additionally, Joint POW/MIA Accounting Command has proven itself as powerful force multiplier in our efforts to meet security cooperation goals.

Pandemic Influenza

Over the past year, PACOM has conducted planning, preparation, education, and an exercise focused on pandemic influenza in an effort to prepare U.S. Pacific forces for the potential of this disease. In addition, and in cooperation with the DOS and the Department of Health and Human Services (HHS), we have engaged with other Asian-Pacific militaries to raise the collective level of awareness and cooperation. We believe such coordination will help provide better visibility into some nations in the region, and buildup limited response capability. The U.S. overseas military medical laboratories in Jakarta and Bangkok are providing essential services in support of these efforts.

U.S.N.S. Mercy Deployment

The deployment of one of the Nation's two hospital ships, U.S.N.S. *Mercy,* during the South Asia tsunami relief operations clearly demonstrated the potential of these ships to aid the needy as well as advance security cooperation. This year we plan to begin periodic humanitarian and civil assistance deployments to further our relationships, build capacity and flexibility, and encourage stable, secure environment development in key nations in the Asia-Pacific. To effectively employ resources and build upon the lessons learned and teamwork from tsunami relief, we hope to include nongovernmental organizations (NGOs) on U.S.N.S. *Mercy* to support our operational and humanitarian goals.

POSTURE FORCES FOR AGILE AND RESPONSIVE EMPLOYMENT

Forward deployed forces, ready for immediate employment, send an unambiguous signal of undiminished U.S. commitment to the Asia-Pacific area. Agile and responsive global forces also act to deter aggression, provide the National Command Authority rapid, flexible options in crises, and the ability to dominate an opponent in combat if required. We are focusing our ongoing transformation and rebalancing efforts on improving our responsiveness.

Importantly, we approached transformation and rebalancing from a regional perspective and have enjoyed the support of allies and partners in the process. In particular, the cooperation with the GOJ and the ROK has set the stage for improved combat capability while also reducing the impact on the local populace. Additionally, we are coordinating closely with the Government of Guam as we strive to optimize our future military posture. In executing the posture changes described below, we are concerned first and foremost with preserving combat capability. We will relocate U.S. forces in close consultation with allies and in a manner which retains our force employment capability. Completing the necessary infrastructure on the agreed timeline will require expeditious and continued commitment of financial resources.

The realignment and consolidation of USFK into two hubs optimally locates forces for combined defense missions, better positions U.S. forces for regional stability,

greatly reduces the number of major installations, returns most installations in Seoul to the ROK, and decreases the overall number of U.S. personnel in Korea. When completed, these initiatives will also result in joint installations that provide more modern and secure facilities, expanded training space, a less intrusive presence, and an enhanced quality of life for both Koreans and U.S. forces and their families. Additionally, transformation reciprocally supports our Korean ally's goal of building military self-reliance and a regionally capable force. The redeployment of 12,500 American forces remains on schedule for a 2008 completion.

Our Japan Alliance Transformation and Realignment negotiations through the DPRI are nearing conclusion, with an agreed implementation plan expected by March 30 of this year. This effort assessed the security environment in the region and bilaterally determined the required roles, missions, capabilities, and force structure. With this initiative, we will inaugurate several substantive changes in Japan including transfer of U.S. carrier tactical aviation from Atsugi Naval Air Facility to Marine Corps Air Facility Iwakuni, collocation of U.S. and Japanese air command and control at Yokota Air Base, reduction of the Marine footprint on Okinawa by approximately 7,000 Marines and relocation of them to Guam. Subsequent to Marine redeployment and consolidation of forces on Okinawa, we intend to return land to the Japanese and thereby mitigate some irritants to local communities. The GOJ has also approved U.S.S. *George Washington,* a nuclear carrier, as a replacement for U.S.S. *Kitty Hawk.*

In South and Southeast Asia, we are continuing efforts to increase access and theater security cooperation opportunities through the development of Cooperative Security Locations (CSL) and Forward Operating Sites (FOS). Such locations would be characterized by minimal infrastructure and periodic presence. In December 2004, we validated the CSL concept in the tsunami response.

QUALITY OF SERVICE

Our personnel readiness remains strong. Morale is high. Your continued support of our Quality of Service (QOS) initiatives contributes immensely to our combat readiness and the retention of our highly skilled soldiers, sailors, airmen, and marines. In particular, thank you for demonstrating your commitment to our military men and women and their families by approving the 3.1 percent pay raise, authorizing full Basic Allowance for Housing for reservists called to Active-Duty for more than 30 days, making permanent the increase to the Family Separation Allowance rate, enhancing the death gratuity benefit to $100,000, increasing the Servicemen's Group Life Insurance maximum amount to $400,000, and authorizing retroactive Hostile Fire and Imminent Danger Pay. In addition, by providing travel and transportation rights to family members to visit their hospitalized service member and not requiring payment for meals in a military hospital by members undergoing recuperation or therapy, you have helped to improve morale and build loyalty.

SUMMARY STATEMENT

Last year's visits to the region by the President and Defense Secretary are indicative of the growing prominence of the Asia-Pacific. The extraordinarily dedicated men and women of PACOM—serving in and out of uniform—understand the region and its importance to our national interests. We are committed and prepared to serve those interests—whether in peace or at war. The American people and Congress have provided staunch support and we sincerely appreciate your advocacy and assistance. I am proud and honored to represent the men and women of PACOM. On their behalf, thank you for your support, and thank you for this opportunity to testify on our Defense posture.

Chairman WARNER. Thank you, Admiral.

General Bell.

STATEMENT OF GEN BURWELL B. BELL III, USA, COMMANDER, UNITED NATIONS COMMAND AND REPUBLIC OF KOREA/ UNITED STATES COMBINED FORCES COMMAND, AND COMMANDER, UNITED STATES FORCES KOREA

General BELL. Thank you, Mr. Chairman, Senator Levin, distinguished members of the committee. It is my pleasure to appear before you today representing the servicemembers and DOD civilians who serve in the Republic of Korea (ROK). On behalf of these out-

standing young men and women, I want to thank you for your continuing support.

Since I assumed command in Korea last month—last year you were on the hook, Admiral Fallon, to be the new guy and that is my situation this year—I have had a chance to assess the ROK's military capability and certainly that of North Korea. It is my belief that our alliance with the ROK remains strong as a key strategic partnership for the United States, as well as for the ROK.

The ROK-U.S. alliance provides a pillar of stability in northeast Asia while it deters North Korea. The ROK-U.S. mutual defense treaty relationship has progressed from a single-purpose military alliance into a broader alliance based on shared democratic values and common interests. Although the United States has many ongoing global commitments, and I realize that, I am convinced that we must continue to stand with our South Korean partner to deter aggression on the Korean peninsula. In doing this, we will also substantially contribute to regional stability.

The success and prosperity of the ROK reflects the results of a half century of United States and American commitment. Since the Korean War, the alliance has maintained a security environment favorable to the development of what is truly a remarkable free market economy, as well as a great free and democratic society in the ROK. Today South Korea is a world economic leader. They are indeed our close friend and our partner.

One-quarter of the world's economic output is generated in northeast Asia and the ROK ranks as our seventh largest trading partner. United States trade alone in the region exceeds $500 billion a year. Our Nation, as you may know, is currently entering into negotiations with the ROK for a free trade agreement. All this is good for us at home in my view as we trade in the global economy.

Meanwhile, my assessment of the ROK military is that it is on a solid path to modernization and transformation. It continues to assume tough mission sets which heretofore could only be accomplished by the United States forces. Today, with our help, the ROK is fully capable of defending itself from North Korean aggression.

In contrast, North Korea is a significant threat that must still be deterred. North Korea's Kim regime continues to build and sustain a military arsenal far beyond any requirements for self-defense, at the dire expense of its own people's wellbeing. North Korea's military is located forward along the DMZ and is positioned to strike, well within range of Seoul, where about half of South Korea's 48 million population resides.

North Korea's missile inventory and its self-declared possession of nuclear weapons threaten the northeast Asia region and beyond. North Korea proliferates a range of weapons and technologies and it appears willing to sell to anyone. As North Korea continues to proliferate and pursue weapons of mass destruction (WMD) capability, they may eventually threaten the continental United States and indeed the entire world.

The United States and our allies have attempted significant engagement efforts with North Korea and we will continue to do so in the future. But North Korea delays discussion, breaks commitments, and disregards international standards of behavior. The Kim Jong Il regime prefers to pursue its own ends, regardless of

the good faith efforts of the United States and other regional actors.

With the reality of North Korea ever present, there is a desire in both the United States and the ROK to see our half-century alliance mature and adapt to the contemporary and foreseeable security environments. I think this approach is reasonable and healthy.

As we support the ROK's desire for a greater role in its own defense, we also complement our efforts to meet our own transformation objectives. In the past few years, we have begun to reposition our forces south of Seoul, redeploy selected units to our home shores, and return valuable land to the Korean people. This process will continue over the next few years.

Recently the ROK government has asked us to revise the command structure which characterizes our current military relationship should war break out on the peninsula. Today the alliance calls for a combined or equally shared operational command arrangement between our two nations, under my leadership of what we call the Combined Forces Command (CFC). In the future, South Korea would like to move to a command relationship where they would independently direct combat operations of their forces, and the United States forces would transition from our current equally shared command relationship to more of a supporting role. The ROK military is in my view modern and capable and my assessment is that this arrangement that they seek will make sense for both nations, while continuing to effectively deter and ensure victory should deterrence fail.

In the future, to support the ROK where our ally is exercising independent combat command, I envision U.S. military contributions to the alliance to be air- and naval-centric. As I see it, our past commitment to the ROK and the region has significantly benefited our own Nation as well as that of the ROK. Throughout our history, the United States has prided itself in our promotion of democracy, free market economies, the celebration of individual freedoms and rights, and the propagation of peace and security. The ROK-U.S. alliance demonstrates our continued dedication to those ideals today and into the future.

That is my current assessment. I really do thank you for this opportunity to appear before you today and I look forward to taking your questions during this hearing. Thank you, Mr. Chairman.

[The prepared statement of General Bell follows:]

PREPARED STATEMENT BY GEN B.B. BELL III, USA

Mr. Chairman, and distinguished members of the committee, thank you for the opportunity to appear before you today as Commander, United Nations Command; Commander, ROK—United States CFC; and Commander, USFK. It is my distinct honor to represent the soldiers, sailors, airmen, marines, and their families who serve in the ROK. On behalf of these outstanding men and women who serve our country, I thank you for your unwavering commitment to our Nation's Armed Forces and improving the quality of life of our servicemembers and their families. Your support allows us to ensure security on the Korean peninsula and promote stability in the Northeast Asia region. I appreciate this opportunity to report on the state of the Command and on the strengthening of the ROK-United States Alliance.

Much has changed in the more than half-century of the ROK-United States Alliance, change affected both by the events of September 11, 2001 and by new developments on the Korean peninsula, revealing a far more complex security environment. These changes have resulted in increased security responsibilities for the United States and increased interdependence with our allies and coalition partners

throughout the world. A new generation of South Korean leaders, cognizant of their national achievements, is eager to achieve a more constructive relationship with North Korea and to take a more active role in regional affairs. At the same time, while still dependent on international aid for economic survival, North Korea has continued to defy international conventions through its declared possession of nuclear weapons, presenting a clear threat to both the region and the entire world.

While the dynamics of the security environment are evolving and our security relationships continue to mature, the fundamental purpose of the ROK-United States Alliance remains unwavering: deter and defend against a North Korean threat; and sustain a mutual commitment to regional security and stability. We continue to encounter calculated North Korean efforts to divide an alliance that has been the foundation for peace and prosperity in the Northeast Asia region for over half a century. Together, we are working to transform the ROK-United States Alliance into a stronger, far more capable alliance, while setting conditions for an enduring United States military presence in Korea. This military transformation of the ROK-United States CFC will also bolster regional security and stability, promote prosperity, and better defend democracy in the region.

THE NORTHEAST ASIA SECURITY ENVIRONMENT

The United States has significant, long-term interests in Northeast Asia; namely, mitigating threats to regional stability, promoting economic cooperation and free market enterprise, and fulfilling our commitments to allies and friends. The long-standing presence of United States forces and the strength of our strategic partnerships provide the foundation for stability and the catalyst for continued cooperation and prosperity in the region. Forward-deployed United States forces demonstrate our resolve to strengthen and expand alliances, counter the proliferation of weapons of mass destruction, work with partners and friends to defuse regional conflicts, and stand with our partners to oppose threats to freedom wherever they arise. United States forces based in South Korea, along with military forces from the ROK and other regional partners, enable the promotion of long-term regional stability by continuing to deter an increasingly manipulative and provocative North Korea.

Northeast Asia is a nexus of economic might. United States trade in the region accounted for about 24 percent of our Nation's total international trade in goods for 2005, exceeding the share of goods traded with the European Union (EU) and second only to our trade with the countries of the North American Free Trade Agreement (NAFTA). Bilateral United States-ROK trade alone totaled $72 billion in 2005. All told, over one-quarter of the world's total trade flows through the Northeast Asia region. With this trade and investment likely to expand in the future, the stability of Northeast Asia is essential to the vitality of global markets, upon which the prosperity of the United States also greatly relies.

While economic cooperation and interdependence within Northeast Asia represent a positive trend toward encouraging stable relations, our military presence remains essential in a region that includes five of the world's six largest militaries, three of the world's proven nuclear powers, and one self-declared nuclear state—North Korea. Historical enmity amongst nations, coupled with the continuing upward trend in regional military expenditures, present the potential for large-scale military competition and corresponding instability. Over the last decade, while average global defense spending has declined, defense spending in Northeast Asia has increased by about one quarter.

Within this context, North Korea continues to defy the international community by declaring its possession of nuclear weapons, which are a threat to the security and stability of the peninsula, the region, and the world. The Six-Party Talks between the United States, ROK, North Korea, China, Japan, and Russia on the issue of North Korea's nuclear weapons programs represent the six countries most engaged in this area of the world with respect to the assurances of a peaceful and stable Korean peninsula. The United States is committed to resolving the North Korean nuclear issue peacefully. Because the North Korean nuclear issue is complex, the solution will likely be complicated, requiring substantial effort by all parties involved. However, the fact that the six parties remain engaged is an indication of positive intent. Throughout this process, the Alliance will remain ready to deter, and if necessary, to defeat a North Korean attack.

NORTH KOREAN CHALLENGES TO REGIONAL AND GLOBAL SECURITY

North Korea poses a variety of threats to regional and global stability: an active nuclear weapons development program; growing proliferation of missiles and missile technology; assessed possession of chemical weapons and a biological research program; large conventional and SOF; and a failing economy. Its leader, Kim Jong Il,

shows little regard for the welfare of ordinary citizens, and uses extensive internal security measures to ensure that no internal challenge to his regime emerges. He increasingly encourages illicit activities such as drug trafficking and counterfeiting of U.S. currency to generate hard cash, and demonstrates little regard for international convention or agreements. The regime repeatedly uses the threat of large-scale war and WMD in order to extort aid or other concessions from the international community.

Kim Jong Il's paramount concern is to remain firmly in control. He rules the Nation through a small cadre of elites who control all aspects of North Korean life. While the reunification of the peninsula under North Korean control remains the primary stated purpose of his regime, the ultimate goal of the North Korean dictator is self-preservation. Currently, there is little evidence to suggest that any internal threat to the regime exists.

The North Korean Military

The world's most militarized nation in proportion to population, North Korea has the world's fourth largest Armed Forces with over 1.2 million Active-Duty personnel, and more than 5 million Reserves. Mandatory military conscription lasts 8 years on average, with most servicemen performing the same job in the same unit the entire period. This stability in the ranks allows North Korean units to maintain readiness while limiting the expenditure of scarce resources. With more than 70 percent of its Active-Duty combat forces deployed south of the Pyongyang-Wonsan line, within approximately 50 miles of the DMZ, North Korea poses a significant and immediate threat to the security of the ROK.

Despite aging equipment and simplistic methods, North Korea's conventional military forces pose a continuing threat due to its sheer size and forward positions. Approximately 250 long-range artillery systems are within range of Seoul from their current locations. Although qualitatively inferior, North Korea's air force and navy, with over 1,600 aircraft, 700 ships, and the world's largest submarine fleet, are postured to launch operations against the ROK or other nations in the region with little or no warning.

While North Korean economic difficulties have impaired the readiness, modernization, and sustainability of its conventional forces to some degree, North Korea, through its "Military First" policy, has continued significant investment in asymmetric capabilities that include nuclear weapons programs, SOF, missiles, and WMD.

North Korean Asymmetric Threats: Nuclear Capabilities, Special Forces, Missiles, and WMD

North Korea's asymmetric capabilities are substantial and represent a significant threat to the ROK and the region. The most pressing concern of these threats is North Korea's nuclear weapons programs. North Korea's abandonment of the 1994 Agreed Framework and International Atomic Energy Agency (IAEA) Safeguards Agreement, withdrawal from the Nuclear Non-Proliferation Treaty, restart of the Yongbyon nuclear reactor, and declarations that it possesses nuclear weapons and reprocessed 8,000 spent nuclear fuel rods are all matters of great concern. North Korea claims to have nuclear weapons—a claim the Director of National Intelligence (DNI), Ambassador John D. Negroponte, assesses as probably true. These weapons are a threat to regional stability and, if proliferated, global security. In addition, the Kim Jong Il regime continues to use its "nuclear deterrent capability" as a bargaining tool for economic assistance and political concessions.

North Korea's 100,000-man SOF are the world's largest and enjoy the highest military funding priority for the regime. Tough, well trained, and profoundly loyal, these forces are engaged in strategic reconnaissance and illicit activities in support of the regime. During conflict, these forces will direct long-range missile and artillery strikes against key facilities in the ROK, attack to disrupt command facilities of the ROK-United States CFC, and seek to destroy the Alliance's ability to generate combat power through off-peninsula reinforcement.

The North Korean ballistic missile inventory includes over 600 SCUD missiles that can deliver conventional or chemical munitions across the entire peninsula. North Korea also possesses as many as 200 medium range ballistic No Dong missiles with a range of 1300km that are capable of reaching Japan with these same payloads. Reports indicate North Korea is also preparing to field a new intermediate range ballistic missile which could easily reach United States facilities in Okinawa, Guam, and possibly Alaska. The regime's continued development of a three-stage variant of the Taepo Dong missile, which could be operational within the next decade, would not only provide North Korea the capability to directly target the continental United States, it would also allow North Korea—the world's leading supplier

of missiles and related production technologies—the ability to provide its clients with the intercontinental capability to undermine stability in other regions.

The size of North Korea's chemical weapons stockpile is likely significant. We assess North Korea is probably capable of weaponizing chemical agents for conventional weapons systems, missiles, and unconventional delivery. Some reports suggest that Pyongyang may have a biological weapons research program. North Korea believes its nuclear and missile programs complement its conventional military capabilities to contribute to its security, providing deterrents to external intervention. Given North Korea's record of ballistic missile proliferation, we are concerned they may proliferate WMD.

The North Korean Economy

Severe economic problems remain the most pressing threat to the viability of the Kim Jong Il regime. Despite North Korea's limited experiments with free-market reform, its leadership is struggling with the cumulative impacts of a decade of economic decline. Total economic output has dropped nearly 25 percent since 1992 and factories operate at less than 25 percent capacity. The Nation's power and transportation infrastructure are in need of massive overhaul and agricultural output can only feed two-thirds of the population. Compounding these difficulties, the regime institutes a "Military First" Policy which directs approximately one-third of the limited domestic output to the military. This policy ensures that the military receives top priority with all resources, thus limiting the resources that could be used for the welfare of the North Korean people. While many factors contribute to North Korea's economic decline, the regime's high rate of military spending remains the major impediment to long-term recovery. North Korea's economy remains bolstered by aid from the international community. The regime also directs illicit activities such as drug trafficking, smuggling, and counterfeiting, as well as the proliferation and international sale of missiles, missile technology, and conventional arms to raise hard currency.

Assessment of the North Korean Threats

Despite its apparent economic decline and political isolation, North Korea continues to pose a dangerous and complex threat to regional and global peace and security. It maintains a massive, offensively postured conventional force that far exceeds the requirements to defend its country. There is little evidence to suggest the regime will abandon its "Military First" Policy, provocative diplomacy, nuclear challenges, missile proliferation and illegal activities, all of which are designed to contribute to its survival. North Korea will continue to maintain its bellicose stance toward the rest of the world, implementing limited policy and economic changes, while subjecting its people to continued repression. For now and into the foreseeable future, it will remain a major threat to stability and security in Northeast Asia and the world.

THE REPUBLIC OF KOREA-UNITED STATES ALLIANCE

The ROK-United States Alliance has, for over 50 years, guaranteed the security of the ROK against the threat of North Korean aggression, while enhancing peace and stability in the region. This alliance was forged during the Korean War and is exemplified today through the CFC. While there have been many challenges in the region, the ROK—United States Alliance has remained stalwart in its mutual and enduring commitment to the security of the ROK and stability in the region. The ROK has been and remains a reliable ally to the United States, promoting peace and stability in the region and around the world.

The Republic of Korea Today

In the course of the Alliance's half-century of economic and security cooperation, the ROK has emerged as one of the leading economic powers and one of the preeminent democracies in the region. The ROK is the world's 12th largest economy with a gross national income of $673 billion; exceeded in the region only by Japan and China. With economic growth fueled by global exports of high technology and consumer goods, the ROK is a major economic partner for the United States, ranking as our seventh-largest trading partner, seventh-largest export market, and an important investment location for American companies.

While the ROK has firmly secured its place as an important player in the global economy, declines in domestic consumption and business investment have slowed the growth of the economy over the past few years. Although private consumption appears to be improving, high household debt continues to be an issue of concern as well as the generation of jobs, particularly for South Korean youth. The effort to achieve 5 percent economic growth this year, while improving employment, will

remain a top priority for the Roh administration. This recovery is essential to realizing the ROK's vision of becoming the transportation, financial, and information technology hubs of Northeast Asia, and in improving the quality of life for all of its citizens.

On the political front, the ROK enjoys a vibrant democracy. Generational perspectives impact the ROK's view of the threat posed by North Korea, which at times impacts the South Korean perception on the importance of our longstanding alliance. While impassioned debates and public demonstrations clearly exist, most South Koreans share the same view on two important issues: first, a nuclear armed North Korea is an intolerable threat to stability in the region, and second, a catastrophic failure within North Korea would destabilize the entire region and have extremely adverse consequences for South Korea.

In an effort to lessen the dangers of these potential threats, the Roh administration has adopted its "Policy for Peace and Prosperity" in guiding South Korea's approach to inter-Korean relations. This policy formally opposes North Korea's pursuit of nuclear weapons while continuing efforts toward inter-Korean rapprochement through humanitarian assistance, family reunions, tourism, and trade.

As a result of this policy, inter-Korean trade and South Korean aid to the North grew to over $1 billion last year. In July 2005, the tenth meeting of the Inter-Korean Economic Promotion Committee was held in Seoul. In its discussions, the two governments agreed to combine economic production factors such as labor, capital, and technology to achieve balanced development of both nations' economies; invest in North Korea's Kaesong Industrial Complex; and conduct discussions on fisheries cooperation to promulgate peace in the West Sea. Through its Policy for Peace and Prosperity, Seoul hopes to promote gradual economic integration and reconciliation, providing the catalyst for a formal peace agreement to replace the Korean Armistice Agreement. While this is the intent, full implementation of this policy is predicated on resolving the North Korean nuclear issue on favorable terms for the region.

Strengthening the Republic of Korea-United States Alliance

During the December 2002 34th Security Consultative Meeting (SCM) the United States Secretary of Defense and the Republic of Korea Minister of National Defense established the Future of the Alliance (FOTA) Policy Initiative, a 2-year dialogue designed to develop options for modernizing and strengthening the alliance. Following the conclusion of the FOTA dialogue in late 2004, the ROK-United States Security Policy Initiative (SPI) was established as a high-level consultative forum to address the broader, long-term issues of the alliance, and to monitor the successful implementation of the initiatives that were begun under FOTA. Major SPI agenda items include managing the relocation of USFK, transferring military missions and responsibilities from American forces to Korean forces, enhancing combined readiness, and expanding security cooperation. The goal of these discussions is to develop a broad, comprehensive alliance based upon guiding principles that underpin our two nations. It is our expectation that this new vision will look beyond potential threats from North Korea and produce a robust view of what the alliance stands for, showcasing it as the embodiment of our common principles, common values, and common objectives to include democracy, open markets, nonproliferation, counterterrorism, human rights, rule of law, and civilian control of the military.

During senior policy dialogues in 2005, it was mutually agreed to appropriately accelerate discussions on command relations and the transfer of wartime operational control in light of the ROK's increasing role in its national defense. The two alliance partners set a goal of presenting agreed recommendations on future command relationships, to include wartime operational control, at the 38th SCM in the fall of 2006.

In March 2004, the Roh administration published its first-ever national security strategy outlining its plan for the peaceful unification of Korea and for common prosperity in Northeast Asia. In this plan, the administration restates its opposition to North Korea's pursuit of nuclear weapons, while stating its "plans to first resolve the North Korean nuclear issue through dialogue based on a firm national defense posture." [1]

This strategy also outlines the Roh administration's plan for a more self-reliant defense posture, advocating the continued transformation of the ROK-United States alliance, the promotion of security cooperation with other nations, and the enhance-

[1] Republic of Korea National Security Council, Peace, Prosperity and National Security: National Security Strategy of the Republic of Korea (Seoul, Cheongwadae, 1 May 2004), 21. In November 2004, President Roh stated that "there is no other means than dialogue [to resolve the North Korean nuclear issue]." Roh Moo-hyun, "Speech by President Roh Moo-hyun at a Luncheon Hosted by the World Affairs Council of the United States," (13 November 2004).

ment of its own capabilities to assume greater responsibility for the defense of the ROK. This "Cooperative Self-Defense Pursuit Plan" accommodates the reduction of United States military forces in Korea, the relocation of United States forces to the south of Seoul, and the transfer of a number of military missions from United States forces to ROK forces as the first of many steps toward a more self-reliant defense posture.

During 2005, the ROK government unveiled a draft defense transformation initiative called Defense Reform 2020. The year 2020 is the objective year for this defense transformation initiative, which envisions the development of a technology oriented, qualitative defense force that is capable of self-reliance while still strongly aligned with the United States. Additional targeted reforms include the increased civilianization of the defense ministry; the reformation of defense management systems for military justice, personnel management, defense acquisition, and the reorganization of the Joint Chiefs of Staff as a warfighting planning and execution headquarters.

Under the defense reform initiative, the Republic of Korea's Ministry of National Defense has requested an average defense budget increase of 11 percent per year until 2015, followed thereafter by an average increase rate of 9 percent until 2020. In December 2005, the National Assembly provided $22 billion for defense in 2006—a 6.7-percent increase over the 2005 budget. While this defense budget increase shows growth, successful execution of Defense Reform 2020 requires both legislative support and consistent, substantive annual defense budget increases to enable the ROK to achieve its stated defense objectives.

With the ROK's increasing economic capacity and prominence in the international community, a balanced defense burden sharing arrangement in support of United States forces in Korea is fundamental to the strength of the Alliance. Early last year, the ROK and United States concluded a 2-year Special Measures Agreement for 2005 and 2006. Per this agreement, the ROK agreed to provide a 2-year annual payment of $680 billion Korean Won (~$680 million), resulting in a decrease in 2005 of $67 billion Korean Won (~$67 million) for non-personnel stationing costs of United States forces in Korea from 2004 levels. Inevitably, such funding shortfalls require the USFK to make difficult decisions on important combat readiness issues. Clearly, defense burdensharing is advantageous to both Alliance partners. For the United States, the ROK's willingness to equitably share appropriate defense costs is a solid indicator that United States forces in Korea are wanted, needed, and respected by our host. For the ROK, cost-sharing contributions are returned back to the Korean economy at a ratio greater than one point four to one. These funds are injected directly back into the South Korean economy by paying the salaries of Korean USFK employees, Korean contractors, and Korean construction firms. Additionally, as the ROK builds its self-reliant defense force, the United States continues to invest in capabilities enhancements that contribute enormously to the security of the ROK. As the Alliance evolves, the ROK and the United States must develop a burden sharing framework that accurately reflects the realities of our allied partnership and properly supports United States forces in the ROK.

During their May 2003 Summit Meeting, President Bush and President Roh noted the significance of the 50-year partnership and highlighted the importance of building a dynamic alliance relationship for continued peace and prosperity on the Korean peninsula and in Northeast Asia. Noting the ROK's growing national strength, the presidents pledged to increase mutual security cooperation and to modernize the ROK—United States Alliance. These same sentiments were again echoed in their November 2005 bilateral meeting in Gyeongju, South Korea during the Asia-Pacific Economic Cooperation (APEC) Economic Leaders' Meeting. During this bilateral summit, the two sides introduced a new strategic dialogue for ministerial-level talks between the United States Secretary of State and the Republic of Korea Foreign Minister. Under this framework, the ROK and the United States will periodically discuss and review bilateral, regional, and global issues of mutual interest.

During the January 2006 inaugural session of the ministerial-level strategic dialogue, the United States and ROK governments reached agreement on strategic flexibility of United States forces in Korea. The agreement has two basic tenets: the ROK fully understands the rationale for the transformation of United States global military strategy, and respects the necessity for strategic flexibility of United States forces in Korea; and in the implementation of strategic flexibility, the United States respects the ROK's position that it shall not be involved in a regional conflict against the Korean people's will. This agreement is a testament of alliance strength and solidarity between the ROK and United States.

South Korea's efforts to develop improved warfighting capabilities for self-reliant defense are consistent with the United States' aims of encouraging our allies to assume greater roles in regional security. Peaceful resolution of the North Korean nu-

clear issue, enhanced Republic of Korea military forces, and greater regional cooperation—key elements of Seoul's national security strategy—are congruent with Washington's policies, and the USFK fully supports the realization of such initiatives.

The Republic of Korea's Support of Global and Regional Security

Consistent with the spirit of mutual cooperation, the Republic of Korea continues to assist United States' efforts to promote global and regional security as an active partner in the global war on terrorism; support for operations in Iraq and Afghanistan; and participation in United Nations' peacekeeping, humanitarian assistance, and disaster relief missions. Recalling the sacrifice of so many countries during the Korean War, the Republic of Korea's ability to now contribute to international stability elsewhere is commendable and noteworthy.

Since 2002, the Republic of Korea has been an active supporter in the global war on terrorism, contributing millions of dollars in aid for reconstruction and providing and deploying a large contingent of troops to support operations in Afghanistan and Iraq. In 2004, the Republic of Korea National Assembly authorized the military deployment of South Korea's Zaytun [2] Division to assist with stability and reconstruction efforts in Iraq. In August 2004, the Republic of Korea deployed this unit to Iraq, where it joined the ranks of its previously deployed advance contingent of medics and engineers at Irbil in Northern Iraq. In December 2005, the Republic of Korea National Assembly approved a second, 1-year extension of the Zaytun Unit to remain in Iraq through 2006, although with a reduced force structure of 2,300 troops. The Republic of Korea's continued participation in OIF is a testament to its continuing support to the global war on terrorism, its commitment to the democratization of Iraq, and its efforts at enhancing and sustaining the Republic of Korea-United States Alliance.

At the same time, the Republic of Korea's support to Afghanistan has been substantial, to include providing a 58-person medical unit (which recently surpassed 10,000 in total medical patients treated), a 147-person engineer construction unit in Afghanistan, and contributing other military assistance worth millions of dollars.

Beyond Afghanistan and Iraq, the Republic of Korea has been a partner in United Nations peacekeeping operations around the globe. The Republic of Korea has dispatched Sudanese mission supporters in November 2005, while continuing to post medical officers in the Western Sahara, and observers deployed to the United Nations Observer Missions in Kashmir, Georgia, Liberia, and Burundi. Collectively, these contributions are a strong testament to the Republic of Korea's commitment to stability and security beyond the Korean Peninsula.

UNITED NATIONS COMMAND, COMBINED FORCES COMMAND, AND UNITED STATES FORCES KOREA

The Republic of Korea-United States Alliance, the United Nations Command, the CFC, and the USFK provide the foundation for the security of the Korean peninsula, and peace and stability in the region. Together, the forces of these commands provide a potent, integrated team with dominant military capabilities to deter any provocation and deter escalation that could destabilize the region. The commands remain trained and ready to fight, even as they are being transformed to adapt to a changing security environment by leveraging strengths of the Republic of Korea-United States Alliance and advanced warfighting technologies of increasingly more capable military forces. Throughout this transformation process, my command priorities will remain consistent: namely, to ensure peace and stability on the Korean Peninsula; strengthen the Republic of Korea—United States Alliance through transformation; enhance warfighting readiness; and improve force well-being.

Ensuring Peace and Stability on the Korean Peninsula

For over 50 years, United States forces have contributed to stability in the Republic of Korea and the region. The impenetrable friendship between our two nations continues to grow stronger every day; in large part, because of America's ongoing commitment to ensure security on the Korean Peninsula and to promote stability in the Northeast Asia region. The Republic of Korea continues to be a valuable ally and partner in the region and around the globe. The presence of United States forces in Korea demonstrates our commitment to shared interests: regional peace and stability; free trade; and the spread of democratic principles. The United Nations Command, CFC, and the USFK are trained and ready. We remain confident in our ability to deter, and if necessary, defeat aggression against the Republic of Korea.

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[2] Zaytun is Arabic for olive branch, which is a symbol representing peace.

Strengthening the Republic of Korea—United States Alliance through Transformation

During the October 2005 37th SCM, the United States Defense Secretary and Republic of Korea Defense Minister emphasized the continuing transformation of the Republic of Korea—United States Alliance into a comprehensive and dynamic bilateral relationship. Both sides concurred that transformation of the commands into a solid combined defense posture is vital to securing peace and stability on the Korean peninsula and in Northeast Asia.

United Nations Command

As the longest standing peace enforcement coalition in the history of the U.N., the United Nations Command represents the international community's enduring commitment to the security and stability of the Korean Peninsula. With 15 current member nations, the United Nations Command actively supervises compliance with the terms of the Korean Armistice Agreement, fulfilling the members' mutual pledge to "fully and faithfully carry out the terms" of the Armistice, and if there is a renewal of North Korean armed attack, to provide a unified and prompt response to preserve the security of the Republic of Korea.

With exclusive authority south of the Military Demarcation Line for the maintenance of the Armistice, the United Nations Command holds meetings with the North Korean People's Army, inspects U.N. units along the DMZ, and conducts investigations into alleged violations to prevent minor incidents from escalating into destabilizing crises. In October 2004, the responsibility for the protection of the Joint Security Area at Panmunjom shifted from the United States Army to Republic of Korea forces. This mission transfer is part of the Alliance agreement that recognizes the increased capabilities of the Republic of Korea military.

Although the United Nations Command is a multi-national organization, the United States has historically provided the Command with a majority of its personnel, while other coalition members have primarily functioned in liaison and advisory roles. It is the Command's intent to create a truly multi-national staff by expanding the roles of the member nations and integrating them more fully into our contingency and operational planning and operations. This integration is even more vital with the recent opening of two inter-Korean transportation corridors crossing the DMZ. The United Nations Command has approached coalition members to augment its staff to assist in the management of the two transportation corridors crossing the DMZ. The United Kingdom, Australia, France, and New Zealand now provide officers on a rotational basis for these duties. Several other countries, including Columbia, Philippines, and Thailand, are also considering sending augmentees. Additionally, member nations participated in the first contingency planning conference last year and are sending observers to major exercises with the objective of integrating their expertise where it is needed. The United Nations Command hopes to further expand the coalition on a more permanent basis throughout the United Nations Command staff.

Combined Forces Command and United States Forces Korea

Since its inception nearly 30 years ago in 1978, the CFC has been the warfighting command supporting the Republic of Korea-United States Alliance. Through authority based on the 1953 Mutual Defense Treaty between the Republic of Korea and the United States, the CFC provides the cornerstone of deterrence against North Korean aggression, and if deterrence fails, is ready to win decisively. Vigilant and well trained, the CFC is the most powerful combined warfighting alliance in the world today.

The CFC continues to adapt to the changing security environment by advancing warfighting technologies and leveraging a more capable Republic of Korea military force. United States capabilities enhancements are significant, including the fielding of the PAC–3 Patriot Missile System coupled with the stationing of a Patriot brigade headquarters, and a second Patriot battalion with two additional Patriot batteries to strengthen our theater missile defense. The upgrade of our Apache Helicopters to AH–64D Longbows greatly increases the lethality and survivability of that weapon system and significantly enhances its ability to destroy North Korea's long-range artillery that threatens Seoul. The Republic of Korea is also enhancing its military capabilities as it continues to field and upgrade its fleet of K1A1 tanks, K–9 self-propelled howitzers, and multiple launch rocket systems. Additionally, in 2005 it launched its first Landing Platform Experimental (LPX) amphibious ship, and the first 4 of 40 F–15K multi-role fighters. The Republic of Korea is also in the final stages of constructing a new naval base for their third fleet. This facility will include a nuclear-powered carrier capable pier and will be completed in late June 2006.

We must continue to expand our capabilities and revise the way we conduct operations. Simultaneous maneuvers, parallel planning, effects-based operations, and asymmetrical assaults all conducted in a dynamic battlespace will improve the conduct of our future combined operations.

As a result of combat capabilities enhancements, in 2003 the United States and the Republic of Korea agreed to transfer 10 selected military missions from United States forces to Republic of Korea forces over a 3-year period. This effort, which began in 2004, continues and to date we have successfully transferred seven missions, to include the early transfer of the Main Supply Route Regulation Enforcement mission, the Counterfire Task Force Headquarters mission (transferred last year on time and with a subsequent increase in capability), and most recently, in January 2006, the Maritime Counter SOF mission. Indeed, this is a direct reflection of the Republic of Korea's military capabilities. With the Republic of Korea's procurement of required equipment and training, it is expected that each of the remaining three missions will also be transferred without any loss in combined readiness.

Concurrent to these mission transfers, the United States and Republic of Korea governments agreed to the reduction of 12,500 personnel from United States Forces Korea over a 5-year period which began in 2004. Per this agreement, between 2004 and 2005, we reduced 8,000 troops to include the deployment of the U.S. Second Infantry Division's 2nd Brigade Combat Team to Iraq, followed thereafter by its restationing at Fort Carson, Colorado. This year we will reduce 2,000 more troops, and in 2007 and 2008, an additional 2,500 will be reduced, leaving an authorized end strength of 25,000 military personnel on the peninsula.

This reduction plan principally affects the Eighth United States Army, which is reducing its force by 40 percent as it simultaneously restructures many of its units as part of the Department of the Army's Total Force Transformation effort. Army-wide, the United States is tailoring its command and control echelons from four headquarters-type elements—brigade, division, corps, and field army—to three types of headquarters elements, while forming modular, self-sustaining brigade-level organizations. The Eighth United States Army's transformation efforts align with this, and last year the Second Infantry Division completed the transformation of its division headquarters; heavy brigade combat team; fires brigades; and combat aviation brigade. Seventh U.S. Air Force is also reducing, but on a much smaller scale.

Finally, we have made significant progress in properly aligning U.S. forces in Korea. In October 2004, the Republic of Korea Minister of National Defense and Commander, USFK signed the Yongsan Relocation Plan Agreement, which was ratified by the Republic of Korea National Assembly in December 2004. According to the terms of that agreement, the headquarters elements of the United Nations Command, CFC and USFK will relocate to Camp Humphreys, near Pyeongtaek, in 2007, and all other units at Yongsan will finish relocating by December 2008.

The realignment of the United States Army's 2nd Infantry Division is part of this alignment plan which, when complete, will allow United States forces to assume a more efficient and less intrusive footprint within two hubs of enduring installations south of Seoul's Han River, significantly improving the quality of life for our servicemembers, while returning valuable land to the citizens of the Republic of Korea.

Per our international agreements, we are making significant progress in relocating United States forces from facilities and areas in and north of Seoul into two hubs of enduring installations south of Seoul. At the end of 2005, we had closed a total of 31 USFK facilities and areas, amounting to 11,000 acres with a tax assessed value of over $500 million. By the end of 2008, we will have closed 59 facilities and areas—two thirds of all land, granted under the Status of Forces Agreement, totaling 36,000 acres.

In exchange for the eventual return of the majority of our dispersed camps, the Republic of Korea, per our agreements, has purchased an additional 2,852 acres of land that is needed to expand Camp Humphreys and Osan Air Base to accommodate our relocation. It has now granted the first 200 acre parcel to USFK, and is currently conducting an environmental impact assessment of all these properties that will be completed in September 2006. Thereafter, the land will be prepared and major construction initiated.

The relocation of the 2nd Infantry Division will begin once construction at Camp Humphreys is complete. Sustained funding of United States military construction projects in Korea, coupled with sufficient host nation-funded construction by the Republic of Korea, is crucial for this plan to remain on track.

Enhancing Warfighting Readiness

While our militaries transform, it is critical that we continue to enhance readiness, and the key to enhancing readiness is by ensuring unfettered access to suitable training ranges and areas for the CFC. As Commander of CFC, vested with

combined delegated authority, warfighting readiness is a major priority. Training ranges in Korea are small, austere, de-centrally managed, and subject to encroachment. As our military capabilities are enhanced and transformed, our training facilities must keep pace. We must work together on a long-term solution to keep our Combined Forces trained and ready in the future. Our recent upgrades to Pilsung Range, and planned upgrades at Chik-do Range, are only the beginning of that long-term combined solution. Of great immediate concern is the closure of Koon-ni Range. Closing that range was the right decision, but we now have a loss of training capacity in Korea until Chik-do Range modifications are completed later this summer. Until that time, we need to regain required levels of training access to keep USFK forces combat ready. These forces are critical to seizing the initiative should the Republic of Korea be attacked. We are working closely with the Republic of Korea government to restore training access.

Training is central to our capabilities and at the core of what binds our CFC into an effective fighting force. Tough, realistic, battle-focused training will enable our components to deter hostile acts of aggression and, if necessary, defeat the forces that mount an external attack against the Republic of Korea. As a forward deployed force, we must be ready at all times to deploy to wartime locations and conduct operations. The robust annual CFC exercise programs ensure that we are trained and ready for contingencies. The theater-level exercises—Ulchi-Focus Lens; Reception, Staging, Onward Movement, and Integration; and Foal Eagle—collectively train over 400,000 Republic of Korea and United States active and Reserve component personnel in the critical tasks essential to deterring, and if necessary, defeating North Korean aggression against the Republic of Korea. These command post and field training exercises use battle simulations technologies to train leaders in battle command, leveraging the significant United States theater-wide investment in Command, Control, Communications, Computers, and Intelligence (C^4I) systems. These combat enablers provide the Collaborative Information Environment to plan, execute, and assess effects from distributed locations; allowing the CFC to see, understand, and act to dominate the battlespace.

Ulchi-Focus Lens is a simulation-driven command post exercise focused on joint and combined effects-based operations, and sustaining command and control, logistics, and dominant maneuver skill sets. The objective of the Reception, Staging, Onward Movement, and Integration, or RSO&I exercise, is to improve our ability to rapidly reinforce and sustain operations in the Korean theater. Foal Eagle is a tactical-level joint and combined exercise that hones warfighting and interoperability skills. These exercises, supplemented by subordinate command training programs, ensure that the CFC remains ready and capable to win decisively, thus deterring North Korean aggression.

Your continued support to our joint and combined training programs and theater exercises are critical to our readiness, as is your support to our capabilities enhancements. Key focus areas for modernization are: joint and C^4; theater missile defense; intelligence, surveillance, and reconnaissance (ISR); prepositioned equipment and logistics; and counterfire and precision munitions.

With your help, we have made meaningful progress in Joint and Combined C^4 integration and interoperability. The CFC and the USFK have successfully linked all United States and Republic of Korea command centers and staff elements with secure and protected information systems. Each command center is equipped with increased bandwidth to provide shared situational awareness via a near real-time common operational picture of the battlespace. These command centers are equipped with secure video teleconference, collaboration tools, and information portals which are supported across a Combined Enterprise Regional Information Exchange System (CENTRIXS) network enterprise. This capability enables parallel planning for all Combined Forces and USFK units as well as other friendly forces. Current initiatives in coalition interoperability seek to extend a seamless command and control capability throughout the theater that will greatly improve multi-national information sharing capability. Your support for these improvements and your assistance in coupling our coalition warfighting C^4 systems to hardened, secure long-haul strategic communications nodes on peninsula and throughout the region is essential to our continued progress in this important area.

The regional missile threat requires a robust theater missile defense system to protect critical CFC capabilities and personnel. PAC–3 Patriot Missile System upgrades and improved munitions have significantly enhanced our posture. To protect critical United States facilities in Korea, we must complete upgrading the remainder of our systems with advanced theater missile defense capabilities. Continued production of PAC–3 missiles in the near-term, followed by continued development of the Theater High Altitude Air Defense (THAAD), Airborne Laser, and Aegis Ballistic Missile Defense (BMD) will provide the layered missile defense capability we

require in the future. Your continued support to these and other service component programs remains essential to protecting our forces on peninsula, and to our ability to reinforce the peninsula in the event of a crisis.

Robust ISR capabilities are essential to provide sufficient warning of an impending crisis and to support rapid, decisive operations in the event of a North Korean attack or collapse. The CFC's efforts to transform our combined intelligence capabilities are progressing, but require sustained and significant support from Congress and the combat support agencies if we are to achieve the full spectrum persistent surveillance we require to avoid surprise. Our intelligence transformation efforts are focused on three things: improving our warning posture, modernizing legacy C4I architectures and sensor suites, and improving our ability to discern intent.

As evident in the Intelligence Community's recent completion of our Intelligence Campaign Plan, there are a number of intelligence shortfalls in our national and theater coverage that require immediate attention. Chief among these are the need for persistent national and theater surveillance systems that provide continuous multi-discipline base-lining of the threat. Central to this is the accelerated fielding and installation of state-of-the-art Signal Intelligence (SIGINT), Imagery Intelligence (IMINT), and Measurement and Signal Intelligence (MASINT) sensors that are relevant to target sets. In addition to the fielding of a long-range unmanned aerial sensor, upgrades for the theater's aerial sensors, and modernization of our SIGINT and Tactical Exploitation of National Capabilities (TENCAP) architectures, the theater will benefit greatly from increased access to space systems supporting ISR operations. With these improvements to our collection capabilities, we must also sustain the expansion and modernization of our C4I architectures to improve the theater's reach back to the PACOM and the combat support agencies, to provide bridging technology to our host nation's systems, and to enable the horizontal integration of the national to tactical intelligence enterprise that supports our theater.

The Under Secretary of Defense for Intelligence and the Joint Forces Command's Information Dominance Center Initiative and Project Morning Calm have demonstrated the technical approaches we require to improve our theater's intelligence architecture and to fuse live intelligence with operational data in a common domain to speed decision making. Continued support for this effort will allow us to expand the fielding of Information Dominance Center technology across our joint and combined components, and to extend a common architecture across the enterprise to enable rapid data sharing and collaboration in near real time. Support to these initiatives will provide us with the timely, accurate assessments we require to establish conditions that enable rapid dominance of the battlespace. Your continued support to modernizing intelligence, surveillance, and reconnaissance capabilities is required and an essential investment for the Alliance.

Logistically supporting USFK is a complex, multi-faceted undertaking. The proximity of the North Korean threat, coupled with the long distances from United States sustainment bases, requires a robust and responsive logistics system to support United States forces based in Korea. The capability enhancements currently programmed will significantly improve our core logistics functions through modern pre-positioned equipment, responsive strategic transportation, and modern logistics tracking systems.

Prepositioned equipment sets, which include critical weapons systems, preferred munitions, repair parts, and essential supplies, are critical to the rapid power projection to reinforce the Korean theater. Of note, command leadership took an aggressive approach last year to improve the readiness of Army Pre-positioned Stocks in Korea. The Army Material Command significantly increased their workforce for these stocks, and from March 1 through September 23, 2005, inspected and took corrective action on 1,531 pieces of equipment in the Heavy Brigade Combat Team. These efforts ensured all of this equipment met standards. Present operational readiness of the Heavy Brigade Combat Team combat systems is at 96 percent fully mission capable. Monthly video teleconferences occur to track the maintenance and readiness, as well as the shortfall posture. However, shortages continue to exist and can only be overcome through increasing the priority of fill for Army Prepositioned Stocks and the allocation of additional funding.

Responsive strategic transportation—fast sealift ships and cargo aircraft—remains indispensable to rapidly reinforce the Korean theater and sustain United States forces. Expeditious fielding of the Air Force's C–17 fleet, and the Joint High Speed Vessel to the PACOM area of responsibility remains a high priority to support United States forces based in Korea.

Equally important is the ability to maintain in-transit visibility of supplies and equipment with a modernized joint Logistics C4I system. Lessons from OIF and OEF have highlighted several areas where relatively small investments in asset

tracking systems and theater distribution yield significant efficiencies and improve the overall effectiveness of our logistics systems.

Also of great assistance is legislation recently enacted by Congress and signed by the President that authorizes the United States government to offer, for sale or concessions, surplus ammunition and military equipment to the Republic of Korea from the War Reserve Stocks Allies—Korea (WRSA–K) program that will terminate soon. This legislation relieves the United States of the burden to maintain this stockpile and further encourages the government of the Republic of Korea to continue its stated goal of a self-reliant defense posture. Your continued support for improved logistics and sustainment programs will ensure that United States forces remain prepared with the highest levels of readiness.

Counterfire and precision strike are core capabilities for all of our contingency plans, allowing us to change the dynamics of a conflict and rapidly achieve campaign objectives. Increasing the forward stocks of preferred munitions is critical to operational success in the Korean theater. Our priority ordnance requirements include: the GPS-guided Multiple Launch Rocket System with extended range capability; a ground-launched, extended range and all weather capability to defeat hardened and deeply buried targets (HDBTs); precision guided munitions; air-to-ground missiles; and air-to-air missiles. Your continued support to these programs provides the overmatching capabilities to buttress our deterrence.

Improving Force Well-Being

The staying power of the United States military fighting for freedom in the Republic of Korea comes at a cost that is born daily by the men and women in uniform that live and work in facilities unlike their counterparts in the continental United States. Establishing a stable stationing environment will enhance readiness, force protection, and overall quality of service. Adding to your support of programs such as Assignment Incentive Pay and Cost-of-Living Allowance, our current initiatives to improve quality of life and readiness include increasing the number of accompanied personnel, increasing accompanied tour lengths to 3 years, and working with the Services to provide forces using unit rotations. Unit rotations provide the benefit of enhanced readiness and unit cohesion as well as reducing personnel turbulence. These measures, in addition to upgrades to facilities (e.g., housing, schools, commissaries, community centers) and equitable pay, provide an attractive working environment that result in an increased number of military and civilian personnel extending their tours. These initiatives also allow us to recruit and retain the talented and motivated people we need to accomplish our mission in Korea.

Furthermore, improvements in programs such as the Army's Family Readiness Group, which recently incorporated programs to support unaccompanied servicemembers' families living outside of the Korean peninsula, ensure that these families are properly cared for during their separation. With your assistance, we will continue to sustain momentum and continue to build on these initiatives.

Upgrading and Building New Infrastructure

The relocation of USFK to two hubs of enduring installations will provide a unique opportunity to upgrade our servicemembers' quality-of-life while establishing the long-term infrastructure that is required to maintain an enduring presence on the peninsula. As we move forward with our overall construction master plan—executable with sustained military construction funding under the Future Years Defense Plan and host nation-funded construction—we must also maintain our existing facilities. Your support of our Sustainment, Restoration, and Modernization Program requirements, along with host-nation contributions, will allow us to complete our infrastructure renewal program to enhance our force protection posture and the quality of life for our personnel. The President's fiscal year 2007 budget request includes several military construction projects that are essential to our forces in Korea and critical to the execution of our overall theater master plan.

The challenge in recapitalizing our infrastructure is substantial and continues to be underfunded. Our facilities and infrastructure are old: over one-third of the buildings in the command are between 25 and 50 years old and another one-third are classified as temporary structures. Due to previously underfunded Sustainment, Restoration, and Modernization Programs, many buildings have deferred maintenance, contributing to their continual deterioration. Our annual allocations for sustainment funding have been about 50 percent of requirements, while restoration and modernization funding has been much less than that. A robust Sustainment, Restoration, and Modernization profile is absolutely essential if we are to maximize the appropriated military construction dollars we receive. Without the funds to sustain, restore, and modernize our facilities, we will perpetually be relegated to live and work in run-down, patched-up facilities.

Many of our unaccompanied and accompanied servicemembers continue to live in substandard housing, whether in military facilities or in crowded urban areas outside our installations. Our realignment to two enduring hubs will allow us to focus on improving living and working conditions at our enduring installations; to this end, sustained access to several different funding programs will be essential to include United States military construction, host nation-funded construction, and commercial build-to-lease programs.

We are making good progress towards achieving the DOD's goal to house all unaccompanied servicemembers in adequate installation housing by 2007. The Army and Air Force are using military construction to build 10 unaccompanied housing facilities (or 3,316 barracks spaces)—6 facilities at Camp Humphreys, 2 at Osan Air Base, and 2 at Kunsan Air Base. In addition, we are contracting two host-nation funded construction projects in our southeast hub to provide adequate barracks space for all of our marines and sailors assigned to Camp Mu Juk in Pohang. To improve the unaccompanied senior enlisted and officer quarters, we have contracted a commercial build-to-lease project at K–16 Air Base and plan similar projects at Camp Humphreys. In fiscal year 2007, I am requesting $123.7 million in military construction funds to build two barracks complexes at Camp Humphreys ($77 million) and a large dormitory at Kunsan Air Base ($46.7 million).

Currently, over 25 percent of our Government family housing units do not meet the DOD minimum living standards. Continued support for family housing construction in Korea through commercial build-to-lease projects will help ensure quality housing for all our servicemembers' families, facilitating the attainment of DOD or Service living standards, and is essential to support the relocation program. I want to assure you that we will continue to be stalwart stewards of the appropriations that you entrust to us, which will provide our servicemembers with adequate working and living facilities.

Force Protection

Well being is about providing a safe, high quality, productive, and predictable environment. Through the combined efforts of our men and women, we will employ appropriate force-protection measures to ensure that all members stationed in the Republic of Korea can go about their daily lives confident that we have done everything possible to safeguard and protect them. I expect commanders to empower subordinates while holding them accountable for the safety of their soldiers, sailors, airmen, and marines.

Prostitution and Human Trafficking and Sexual Assault

USFK has a zero tolerance policy towards prostitution and human trafficking. To ensure members are fully aware of this policy, we initiated a four-pronged approach focusing on awareness, identification, reduction and enforcement. As a result, we experienced few violations in the past year that resulted in disciplinary action. Equally important is the command's initiatives in combating sexual assault. Since its inception in 2004, the USFK Sexual Assault Working Group has developed and implemented an education program for training our leaders and servicemembers on awareness and prevention of sexual assault. This training stresses sexual assault risk factors and victim care. I will continue to be vigilant in enforcing the sexual assault prevention programs and zero tolerance approach adopted by the command. Promoting dignity and respect are of the utmost importance and a mandate we fully embrace within USFK.

Ensuring Equitable Pay

Major improvements have been made on the pay disparity in the Republic of Korea. For the first time in over 50 years of the Alliance, a cost-of-living allowance (COLA) was authorized in 2003. Additionally, the Army and the Air Force implemented the Assignment Incentive Pay (AIP) Program, authorizing a cash incentive for servicemembers who are willing to extend their tours in Korea. So far, over 14,000 soldiers and airmen have volunteered for AIP, saving the DOD nearly $67 million in reduced permanent change of station costs. Although the cost savings will be reduced due to recent program enhancements such as payment beginning the month of signature, the benefits of this program are immeasurable. Following on the great success of the Army and Air Force, in January 2006, the Navy implemented AIP for its sailors. AIP improves stability, predictability, and operational readiness of the Alliance.

TRANSFORMING FOR THE FUTURE

Transformation of USFK is well underway. Your continued investments in equipment and infrastructure are greatly improving our operational capabilities and the

quality of life for United States servicemembers, DOD civilian employees, and family members. Our transformed forces and state-of-the-art capabilities greatly improve deterrence on the peninsula by providing strategically mobile overmatching power to dissuade potential threats to Alliance interests. Your continued support will ensure we achieve our transformation objectives by providing our forces with the resources needed to deter aggression and to foster peace and stability on the Korean peninsula and in the region.

You can be justifiably proud of the soldiers, sailors, airmen, marines, and civilians serving in the Republic of Korea. Their daily dedication and performance continue to earn the trust and confidence that you have placed in them.

Chairman WARNER. Thank you very much, General.

General Jones.

STATEMENT OF GEN. JAMES L. JONES, JR., USMC, COMMANDER, UNITED STATES EUROPEAN COMMAND AND SUPREME ALLIED COMMANDER, EUROPE

General JONES. Good morning, Mr. Chairman, Senator Levin, members of the committee. It is a great honor and a pleasure for me to be once again in front of this remarkable committee that means so much to the welfare and security of our Nation, our families, and our troops, and we thank you for everything you do for us.

I am particularly honored to be at the same table with Admiral Fallon, whom I have known for a number of years, and General Bell. General Bell just recently left Europe, where he commanded the U.S. Army in Europe and lent his considerable skills to the transformation of the U.S. Army's footprint. I have enjoyed very much our personal and professional relationships and I am delighted that the Secretary of Defense saw fit to ask General Bell to stay on on Active-Duty and take over this very important command.

I would also like to bring to the committee's attention the presence today of an extraordinary marine, sitting to my left rear, the fourteenth Sergeant Major of the Marine Corps and the first Sergeant Major of the Supreme Headquarters, Allied Powers in Europe, Sergeant Major Al McMichael, who for over 35 years has been the consummate marine, typifying everything that we want in a staff noncommissioned officer (NCO), providing leadership, mentorship, guidance, courage, dedication. He and his wife have contributed immeasurably to the status of the Marine Corps today and through his leadership and innovation as the first Sergeant Major of Supreme Headquarters Allied Powers Europe (SHAPE) in NATO he has virtually singlehandedly, with just a few of his colleagues, brought eight nations to adopt the NCO structure, mostly in Eastern Europe, to adopt an NCO structure that they had never had before. He has done that in a remarkable 2½ years.

Sergeant Major McMichael will be leaving Active-Duty this summer after a sterling career and I wanted to take a few moments to highlight this remarkable American and his remarkable contribution to the security of our Nation. Thank you, Sergeant Major.

Chairman WARNER. Thank you very much. [Applause.]

I think it is most appropriate that you do that, General Jones. Particularly I was impressed with his work to establish the concept of the NCO structure. Former Warsaw Pact nations and indeed the old Soviet Union just did not put that emphasis on its military, and that is today's military. So I commend you, Sergeant.

General JONES. Thank you, sir.

As the Commander of the United States European Command and as the Supreme Allied Commander, Europe (SACEUR), we continue to commit our resources towards proactively addressing the challenges and opportunities of our new security landscape, while stressing the ever-important transatlantic relationships necessary to preserve our security, our collective security, as Senator Levin pointed out.

With your support, we are now implementing the transformation in depth that I originally discussed with you in 2003 during my first year in this assignment. This portion of the strategic theater transformation is achieving a posture and force capability that ensures the greatest strategic effect while providing operational agility to serve as both a supporting and supported combatant commander within the framework of the U.S. National Security Strategy and the National Defense Strategy.

Your continued backing also ensures that we maintain sufficient critical assets and capabilities in theater to sustain forward stationed and rotational conventional and special operations forces. These forces preserve our leadership role throughout our theater. They provide a visible example for NATO's transformation. They serve as a defense in depth for homeland security. They strengthen U.S. diplomacy and foreign policy. They signal the United States' commitment to the transatlantic link. They demonstrate the United States Government's resolve and bolster common security through a critical array of theater security cooperation programs.

We base our strategies on the principle that it is much more cost effective to prevent conflict than it is to stop one once it has started. The scope and diversity of the 91 sovereign nations that fall within EUCOM's AOR encompass the full range of human conditions and government. As such, our theater requires a multifaceted approach, including a complementary relationship with many international organizations in developing and implementing a strategy that fully addresses the challenges to European, African, and the United States' strategic interests.

Despite being faced with nontraditional and continually evolving threats, we are committed to expanding the peace and prosperity long enjoyed by Western Europe to Eastern Europe and Africa. Our development of a more agile force and strengthening of our trans-Atlantic partnerships has enhanced our capability to conduct far-reaching operations while ensuring that Europe remains engaged in a collaborative effort to counter common security challenges both today and in the future.

The centerpiece of our efforts remains our theater security cooperation programs. These programs represent a much-needed proactive approach to building partnership capacity with the intent of enabling emerging democracies to defend their homelands, defeat terrorist extremists, develop common economic and security interests, and respond to health crises such as potential pandemic influenza outbreaks.

Our approach is regional, linking individual country objectives to broader theater goals. We assist our friends and allies in developing the capabilities required to conduct effective peacekeeping and contingency operations with well-trained, disciplined forces.

This helps mitigate the conditions that lead to conflict, paves the way for peaceful growth, and reduces the would-be burden on U.S. involvement.

In Europe, our priorities are to deepen and strengthen our relations with allied and partner nations, to assist our allies in developing capabilities to deploy rapidly and to be interoperable with our forces, to encourage our allies in developing a robust special operations force capability, to align our forces in a manner that enables a more rapid deployment to areas of instability, and to increase U.S. influence with our new NATO members.

In Africa, our priorities are to increase the capability of African nations to conduct peacekeeping and contingency operations, to protect their natural resources, and to promote stability by providing medical advice and assistance in dealing with health issues such as HIV–AIDS, cholera, malaria, and other diseases that have both humanitarian and strategic consequences.

In trans-Saharan Africa, EUCOM supports the long-term interagency plan to combat terrorism, the plan known as Trans-Sahara Counterterrorism Initiative, through Operation Enduring Freedom Trans-Sahara (OEF–TS). Using a preventive approach, EUCOM builds indigenous capacity and facilitates cooperation among governments in the region in order for them to gain better control of their territories and deny terrorist groups a safe haven.

Of equal importance, OEF–TS promotes democratic governance while fostering the development, education, and emphasis of the military's proper role in supporting democratic ideals. Political instability in Africa, left unattended or unaddressed, will require reactive and repeated interventions at enormous cost in the future. Prudent funding, coupled with small military-to-military engagement today, will pay enormous dividends in the future. It will strengthen our presence and offset the gains of other state actors in this critical region.

I remain optimistic that the steady development of the African regional organizations, combined with modest, consistent investment in our efforts in Africa, will assist in halting the deteriorating conditions and impede the potential for some regions in Africa to become the next front in the war on terrorism.

The United States' continued security cooperation measures will ultimately lead to peace, stability, and hope for people who have little at present. In this context, the future of EUCOM is as critical today as it ever was, perhaps even more so, to the implementation of our Nation's policies and our commitment to the forward defense of freedom.

Better synchronization and more streamlined policy and legislative lines of authority at the interagency level will provide increased efficiencies and greatly assist in developing and implementing a more effective overarching strategy for achieving these foreign policy objectives. Such reforms might also prevent some nations from turning elsewhere for security assistance needs.

With regard to the relevance of NATO in the post-Cold War era, as the SACEUR I am among those who passionately believe in the relevance and importance of NATO in this still new and emerging century. NATO is transforming and redefining itself as we speak to meet the new challenges of this century. It is making significant

progress and is in the midst of the most fundamental physical and philosophical transformation in its history.

While operational structures have been transformed, the political and military decisionmaking procedures of the alliance, as well as the budgetary funding mechanisms, are also being addressed. Much more needs to be done with regard to the funding mechanisms which support our operations, to include the new and emerging NATO response force.

Formerly anchored to the need for common defense against the Soviet Union, the alliance is now identifying and committing itself to a new set of anchor points. Such anchor points could potentially include a better definition of operations in support of combating terrorism, enhancing security, stability, and reconstruction activities, increasing its attention to critical infrastructure security, ensuring the security of the flow of energy to markets and consumers, and more actively engaging in preventing the proliferation of WMD and corresponding consequence management actions.

NATO's commitment to ongoing operations, 30,000 troops deployed on three different continents today, including the ISAF in Afghanistan, NATO's training mission in Iraq, NATO assistance to the AU in Darfur, Operation Active Endeavor in the Mediterranean, the Balkan operations with emphasis on Kosovo, and humanitarian operations in response to Katrina and Pakistan disasters, demonstrates that NATO has turned the corner from common defense and begun the journey to promote stabilization and security at strategic distances, and all of this in the past 3 years.

NATO remains the preeminent security alliance in the world. I believe it is destined to provide its most significant contribution at some point in the future. Keeping this in mind, our leadership of and contributions to this alliance are more critical now than at any time in the alliance's history. This year's November summit in Riga, Latvia, will cap this year as one of the most remarkable in the history of the alliance.

In conclusion, the EUCOM is fully and actively engaged in a diverse and expanding AOR while simultaneously transforming its posture to better meet the new and evolving security environment. Success will require institutional innovation, increasingly cohesive and more comprehensive national approaches to the challenges, greater coordination throughout the interagency and within the framework of the international community, and investment in a number of critically important areas, such as military construction, security cooperation programs, and our theater intelligence architecture.

As we further refine the nature and scope of our efforts to implement an effective security strategy, we would do well to reflect and appreciate the value of our leadership role in global affairs. We should redouble our efforts to remain a shining example of the principles of freedom which stand as a beacon of hope for so many in our unsettled world.

The indispensable benefits of our forward-deployed presence will continue to be a hallmark of our efforts as we expand our national influence and enhance the framework of our theater cooperation programs.

We look forward to working with the members of this committee as we assist in the development of effective security structures that are essential to our theater, our Nation, and to our allies. 2007 will be a critically important year in this regard, and on behalf of the soldiers, sailors, airmen, marines, DOD civilians, contractors of EUCOM, and their family members, I want to express our gratitude for your continuing support, especially during this very challenging time.

Thank you, Mr. Chairman.

[The prepared statement of General Jones follows:]

PREPARED STATEMENT BY GEN. JAMES L. JONES, USMC

INTRODUCTION

Chairman Warner, Senator Levin, distinguished members of the committee, thank you once again for the opportunity to appear before you to discuss the United States European Command (EUCOM). On behalf of the soldiers, sailors, airmen, marines, Department of Defense civil servants, civilian contractors of EUCOM, and their family members, I want to express our gratitude for your continued support, especially during these very challenging times.

In my testimony before this committee over the past 3 years, I have emphasized the changing security landscape that has emerged since the end of the Cold War. It continues to evolve in ways that were largely unforeseen just a few years ago. An increasingly interconnected world is shaping our economic, political, and social realities in a manner that is in stark contrast to the previous century. The wide scope and unpredictable nature of this new landscape has compelled us to develop new strategies that require the harmonization of the full spectrum of national power. In concert with our friends and allies, as the Commander, EUCOM and as SACEUR, I have continued to commit our resources to proactively address the challenges and opportunities of this new environment.

With the support of the United States Congress, we have begun to implement the "transformation in depth" I originally discussed with you in 2003. The path and pace of our transformation is continually assessed in order to ensure that we meet our Nation's strategic goals.

The intricacy of the changing security landscape also reaffirms the importance of our transatlantic relationships in preserving the security and stability of our Homeland, that of our allies and partner nations, increasingly in areas outside the traditional borders of the North Atlantic Treaty Organization (NATO). The founding principles that prompted NATO's creation over 50 years ago remain valid today, albeit for different and evolving purposes. NATO's "raison d'etre" no longer simply addresses common defense, but addresses the evolving necessity for common security in the face of the asymmetric array of threats now facing the Alliance.

By establishing new capabilities and undertaking nontraditional missions, NATO is increasingly able to better address the challenges of the new security environment. A key relationship in NATO's continuing evolution is EUCOM. EUCOM is the "sine qua non" embodiment of the U.S. military's commitment to NATO and to our theater's allies. The simultaneous transformations, which both began in 2003, are central to our ability to meet both the challenges and enormous opportunities of the 21st century.

Our main security objective in EUCOM is to achieve a posture and force capability that ensures greater strategic effect, both within our area of responsibility and with other combatant commands within the framework of the U.S. National Security Strategy and the National Defense Strategy. Forward-stationed and rotational forces will preserve our leadership role in NATO and provide a visible model for its transformation. Our agile forces also enhance our capability to conduct operations, and ensure that Europe remains engaged in a collaborative effort to counter common security challenges, both today and in the future. This transatlantic partnership will dramatically help solidify regional and global security efforts.

The developed world faces threats that are sub-national and supra-national; threats which are based on ideological, theological, cultural, ethnic, and political factors. Our adversaries do not recognize international law, sovereignty or accepted international norms of behavior. As such they are able to exploit the seams of the international order. This reality, and our understanding of the new world "disorder," brings with it unique challenges that require new and different approaches by which

we cooperate with our allies, allocate resources, and develop strategies to protect our national interests.

Our current structures do not always give us the required agility, flexibility, and responsiveness needed to convert innovative ideas into actionable programs. The complexities of the world and the diversity of its threats require our continued focus on fully implementing our transformation. We must institutionalize our new operational concepts, complete our institutional reforms, and reform our enhanced business and acquisition practices in order to better provide positive outcomes to our many undertakings. With continuing reform we can assist our friends and allies in securing their borders, defeating terrorism, and improving the economic outlook in many regions of the European-African theater.

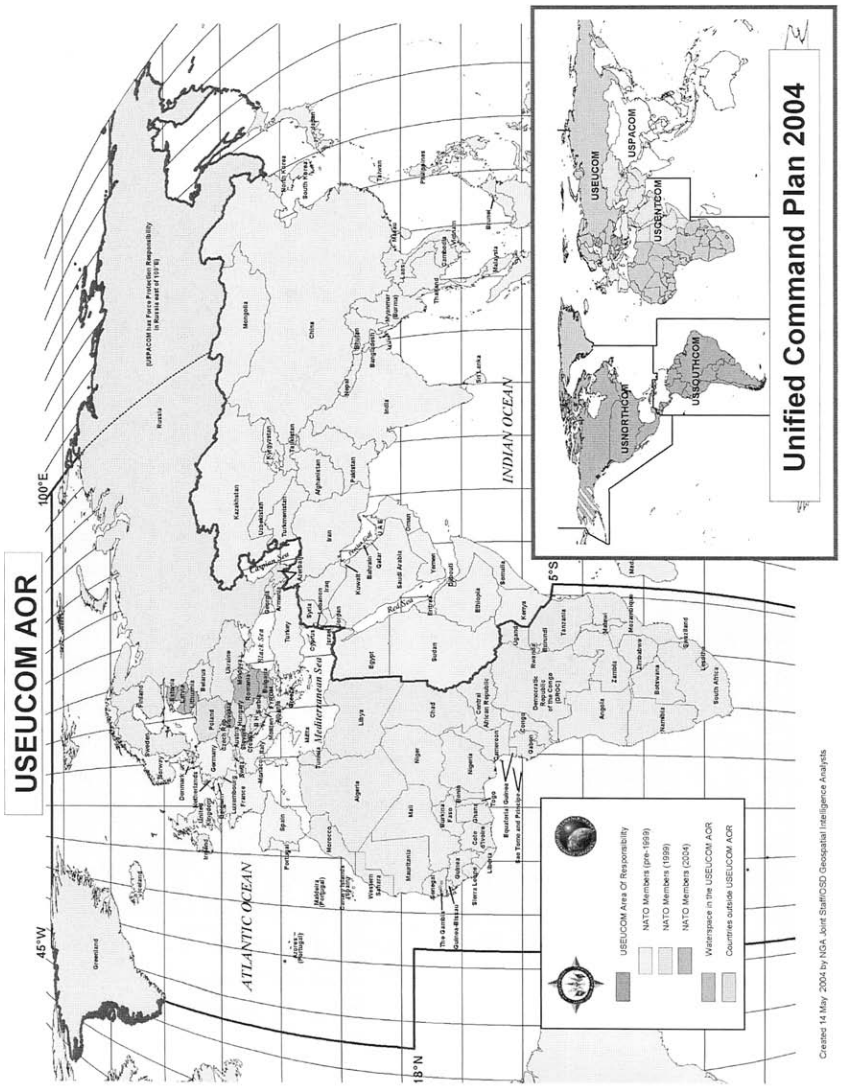
I remain optimistic that the steady development of African regional organizations presents opportunities to positively shape the security environment for the continent. An improved security posture among African partner nations, Regional Economic Communities, and the AU is a key element in winning the global war on terrorism. Working with partners, allies, and multiple United States Government agencies, we are making long-term investments in African-developed programs that are aimed at improving that posture.

I appreciate the opportunity to discuss recent developments and to highlight the latest activities in the various regions of our theater. I will also discuss ongoing initiatives within the command and the key theater investment needs required to maintain and employ our forces in a manner that supports our transformation efforts. I hope to show how programs executed with our security partners further our national security interests. Lastly, I will offer some suggestions with regard to how transformation improves the ability of a combatant commander to better achieve our national strategic goals and objectives.

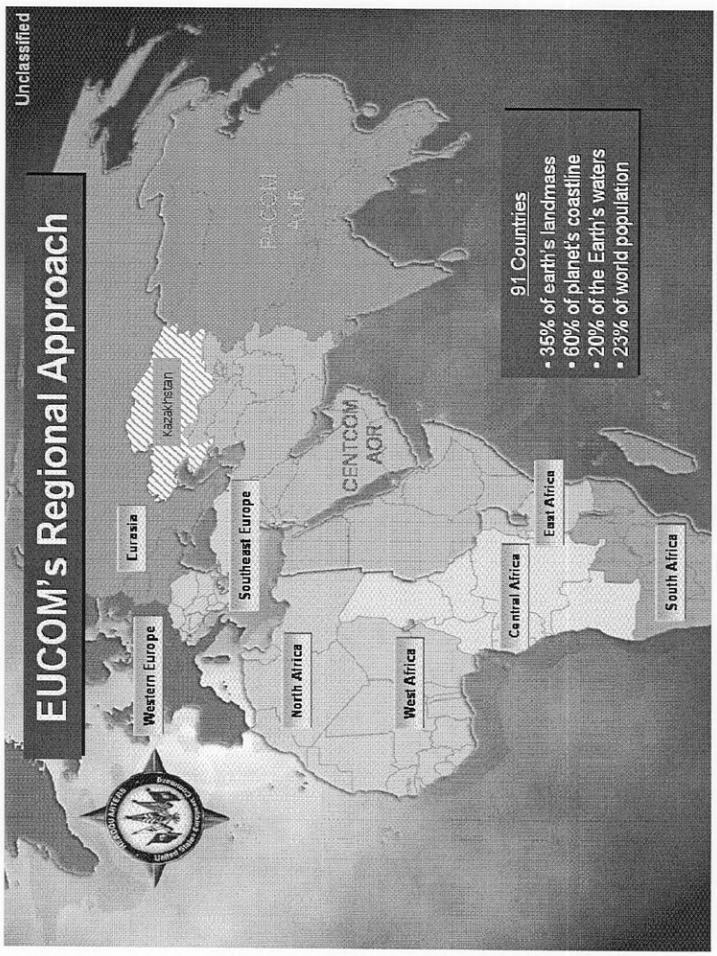
STRATEGIC ASSESSMENT

The EUCOM area of responsibility comprises a vast geographic region covering over 46 million square miles of land and water, stretching from the northern tip of Norway to the southern tip of South Africa, and from Greenland in the west to Russia's Pacific coastline (See Enclosure 1). The scope and diversity of these 91 sovereign nations encompass the full range of human conditions and governments. As such, our theater requires a multi-faceted approach, including a complementary relationship with many international organizations in developing and implementing a strategy that fully addresses the challenges to European, African, and U.S. strategic interests. Therefore, rather than focus on 91 individual nations, our theater perspective and efforts are framed around 8 regions and special relationships with Russia and Ukraine (See Enclosure 2). This approach is supported by our experiences that problems are often not confined by national boundaries, but require regional solutions.

Enclosure 1: United States European Command Area of Responsibility



Enclosure 2: EUCOM's Regional Approach to Theater Security Cooperation



Western Europe has now benefited from 60 years of peace and stability. Our strategic goal is to expand similar peace and prosperity to Eastern Europe and Africa. Our ability to maintain this prolonged period of stability is attributable to our shared recognition of the threat once posed by the Soviet Union and the common desire to establish an alliance that would seek to safeguard the freedom and security of its members. Today, in the absence of a discernable, predictable, and traditional threat, we are faced with a more menacing adversary; one that is multi-dimensional, non-traditional, and continually evolving from region to region. It metastasizes itself in ways that presents challenges to a coherent, collective security strategy to rapidly and effectively address its asymmetric expansion.

Progress toward a more peaceful and prosperous world in this century is predicated on recognizing the new array of challenges that clearly threaten our common interests, strengthening NATO as the centerpiece of our regional security framework, and implementing a comprehensive strategy that can effectively address our concerns. As a global community we struggle to come to agreement on what truly threatens our common security. We also need better coherence concerning the most effective response to the challenges we all face.

Issues that were previously overshadowed by the 20th century threat of conventional and nuclear war have come to the forefront. In no particular order, these threats include pandemic disease, terrorism, famine, economic collapse, uncontrolled illegal immigration, proliferation of weapons of mass destruction, narcotrafficking, radical fundamentalism, and of course, armed conflict. These perils are transnational in nature and are not easily contained within established geopolitical borders or by the past century's traditional military structures. Our historical experience in working within alliances and coalitions has shown us that the most lasting solutions to existing threats will be found within collaborative and multifaceted approaches. In other words, common solutions for common problems are probably the best path to success.

Terrorism has only recently emerged as our preeminent security threat. Many European nations have dealt with terrorism for a much longer period of time, and hold differing views on how to combat it successfully. For example, some perceive terrorism as an issue for local national law enforcement rather than a problem to be handled by classic military means. We view terrorism as an interconnected network that is global in nature, requiring both domestic (interagency) and international participation in order to defeat it. To the point that terrorism is a threat to all of us, there is no disagreement on either side of the Atlantic.

While our respective approaches to countering terrorism may differ somewhat, I believe we are now closer to understanding its nature and the structures that provide it support. For example, the success both the U.S. and Europe have had in reducing traditional means of support to such networks is clearly forcing terrorist groups to turn to alternative means of financing. There is no question but that transnational crime and the terrorist world are converging. Terrorist groups increasingly adopt the same methods as organized crime and have developed their own money laundering, drug processing and trafficking rings, as well as human smuggling operations. To ensure success in our goals of advancing common security in the 21st century we must adjust our tactics correspondingly in order to counter the new array of threats.

It is clear that the primary fronts in the war on terror are currently in Afghanistan and Iraq; however, EUCOM's current and future impact on this front is a point of strategic interest. Today, increasing numbers of foreign fighter support to both areas originate from, train in, and transit through the EUCOM AOR. There is evidence that terrorist efforts may eventually shift from Iraq and Afghanistan to Northern Africa and Western Europe as experienced fighters return from the Middle East. The time to prepare for this strategic transition is now.

Europe

Our successful Western European strategy was built on the foundation of common values and common interests. Without full European assistance in addressing the demographic, cultural, and energy challenges which loom on the near horizon, our long-term collective security interests will be at higher risk. Even as we orient our focus on regions to the south and east, new demographic and energy security issues are evolving to highlight emergent fault lines within Western Europe itself. Last year's riots in France, the recent natural gas dispute between Russia and the Ukraine, and rapidly changing demographics are but three of the challenges Europe will face in the near future.

From our shared foundation of common interests we continue to reinforce three main pillars. First, we continue to promote and seek to preserve NATO as the primary instrument for European security while encouraging the European Union's military capability to develop, but not in competition with the proven capability of the Alliance. Our second pillar encourages our European allies to play a greater role in their own security affairs. Third, we encourage the modernization of Europe's military capabilities to become more expeditionary and to be better able to cope with our mutual security challenges.

NATO and EUCOM continue to build partnerships with Russia and Ukraine, including the development of security cooperation architectures which have proven to be effective in ensuring access to the region and promoting common interest. EUCOM conducts regular military consultations with the Russian military and we are making steady progress through the U.S.-Russia Work Plan in developing a normalized military relationship that moves us past the days of the Cold War. NATO routinely conducts high-level consultations on a wide range of interoperability security issues with the Russian Foreign Ministry, Defense Ministry and General Staff. NATO's establishment of Military Liaison Missions in Moscow and Kiev has improved communications and facilitated day-to-day coordination of activities. Similarly, Russia, as a Partner Nation, has a full delegation permanently assigned to my NATO headquarters at SHAPE.

Ukraine's strategic location, recent history as a contributor to coalition operations, and its newly reinvigorated policy of Euro-Atlantic integration, make it an increasingly important regional ally. The Ukraine is at a crossroads between achieving modern western institutions and Soviet models. Its near-term success or failure will effect the political evolution of the entire region. We are working hard to expand and accelerate our already robust military cooperation with Ukraine. Through our bilateral work plan we assist Ukraine in adopting the military and defense reforms necessary to achieve NATO aspirations, and to enable them to continue to provide trained and ready forces to coalition operations.

Africa

Political instability in Africa is exacerbated by social, economic, and security problems related to high population growth rates, poor land management, desertification, agricultural and environmental disruptions, massive refugee movements and, pandemic conditions. Over the past 5 years, the United States has responded to humanitarian crises and political instability in Somalia, Mozambique, Liberia, Chad, Sierra Leone, the Democratic Republic of Congo, Cöte d'Ivoire, and most recently in Darfur.

For the past few years, we have worked to take a more engaged approach to achieving long-term stability through proactive, preventive measures. Consequences for inaction may include continued and repeated U.S. intervention in conflicts and humanitarian crises, disruption of economic trade vital to the development of Africa's nascent economies, and increased presence of radical fundamentalism, especially in Africa's vast ungoverned spaces.

Violence in West Africa has created ungoverned pockets that extend across national borders and threaten to further destabilize an already fragile region. Broad expanses of marginally governed areas can become havens for terrorists and criminals and have become attractive to terrorist groups increasingly denied sanctuaries in Afghanistan and the Middle East. North Africa, and in particular the Pan-Sahel region of Sub-Saharan Africa, offers opportunities to Islamic extremists, smugglers, and various insurgent groups. Parts of Africa have also become home to "franchise groups" who ally themselves with major terrorist organizations and have the unique characteristic of being composed of native African members.

East Africa continues to undergo great human tragedy, as exemplified by the situation in Darfur. In response to a request from the African Union (AU) NATO has provided airlift, coordination of strategic airlift movement, and staff capacity training to the African Union Mission in Sudan (AMIS). This AU mission has had some limited success, but the situation in Darfur remains critical. There have been discussions concerning a possible transition of AMIS to the U.N., with a general realization that the eventual handover of the mission to an international organization will be necessary.

Africa's vast potential makes African stability a near-term global strategic imperative. The Gulf of Guinea is a largely poorly governed maritime security region where smuggling, piracy, and oil bunkering are a way of life. Africa currently provides over 15 percent of U.S. oil imports and recent explorations in the Gulf of Guinea region indicate potential Reserves that could account for 25–35 percent of U.S. imports within the next decade. In addition to their size, these high-quality Reserves also have the advantage of geo-strategic location on the west coast of Africa, allowing for rapid transit by sea to Western Europe and the United States. Through the interagency process, we will increasingly assist the AU and African regional organizations in developing their security structures and in fostering continent-wide efforts to achieve stability and security. Throughout our engagement, we will continue to assist in the fight against HIV–AIDS, perhaps the region's greatest ongoing internal struggle.

The United States is not unchallenged in its quest to gain influence in and access to Africa. We face continuing competition by other nations seeking international political support and access to natural resources. As Asia's emerging industries expand, requirements for petroleum products and strategic metals will grow exponentially and will likely compete more intensely for these resources with the U.S. Other nations offer money, military aid, and political support, and many other incentives without the conditions that we traditionally require.

It is in our national interest to help Africa achieve broad-based and sustainable economic, security, political and social development. This is the most effective way to fight hunger, poverty, and extremism. Over the longer term, EUCOM will work aggressively with our interagency partners, allied nations, and the African regional organizations to advance our common interests and values. There can be no doubt that Africa will occupy an increasingly larger amount of our national attention in the years ahead. Early recognition of this reality is very important.

U.S. EUROPEAN COMMAND

In support of our national engagement policies in Europe and Africa, EUCOM continues our efforts to expand security and stability throughout the theater. The challenges I have previously enumerated are what the National Defense Strategy terms "irregular and catastrophic." Enduring success against such challenges has both an interagency and an international component. Continued investment in our current transformational capabilities and initiatives is critical to furthering our international collaborative efforts toward achieving common security. In order to be successful in the strategic environment in which we find ourselves, we must be capable of responding to a much wider variety of potential contingencies.

In this context, the future of EUCOM is as critical as ever, perhaps even more so, to the implementation of our Nation's policies and our commitment to the forward defense of freedom. Our forward-based and rotational forces are powerful and visible instruments of national influence: They provide defense-in-depth for homeland security; strengthen U.S. diplomacy and foreign policy; signal U.S. commitment to the transatlantic link; demonstrate U.S. Government resolve; and bolster common security through a critical array of Theater Security Cooperation (TSC) programs. The majority of our operations are "peace support" operations, ranging from peace enforcement, to stability operations, to training missions and exercises. Proactive peacetime engagement activities reassure allies and partners, promote stability and mitigate the conditions that lead to conflict. We base our strategies on the principle that it is much more cost effective to prevent conflict than it is to stop one once it has started.

Due to the modern day complexity of our theater's security challenges, U.S. efforts will require a broad interagency approach. In EUCOM we integrate our TSC program in ways that maximize effectiveness of each TSC dollar by allocating resources towards priority countries and regions identified by our plans. We work to improve interagency coordination across the spectrum of governmental and nongovernmental organizations in order to achieve optimal national results. As I will discuss, a critical component to this effort is the long overdue implementation of necessary TSC reforms.

Strategic Theater Transformation

We execute our Strategic Theater Transformation (STT) plan in order to posture ourselves to meet the emerging security landscape. Our objective remains constant: to enhance our strategic effect and our operational agility. Success hinges on maintaining sufficient critical assets and capabilities in theater as both a "supported and a supporting" combatant command. Such assets include: mobility; power projection platforms; operating bases; a joint forces command structure; nurturing and developing alliances and coalition partners; integrated intelligence systems; and agile, expeditionary forces. To ensure the full implementation of our STT plan, we request an investment of $940 million in military construction and family housing in fiscal year 2007. While this is a large request, it needs to be understood within the overall context of our STT plan which supports the Secretary of Defense's Global Defense Posture.

Since 2003 and projected through 2006 we will have closed 43 bases and installations and repatriated approximately 10,000 forces and 13,800 family members. Upon the completion of our STT plan we anticipate the closure of several hundred bases and installations and the return of over 40,000 military personnel, 65,000 DOD civilians, and over 57,000 family members. The rightsizing of forces and bases in Europe has yielded considerable benefits to DOD's ability to manage personnel and infrastructure globally, while empowering EUCOM to counter new threats throughout a greater proportion of the AOR.

Certain elements of the EUCOM transformation plan—including force levels, training, and access to facilities and protocols to assure freedom of action for our forward forces—continue to be negotiated with host nations. Additionally, our transformation is being coordinated through the Services, the Joint Staff and OSD. It is also being synchronized with the efforts of other combatant commands, NATO, and the results of the Base Closure and Realignment Commission (BRAC) process in the United States.

Through a dramatically reformed forward presence concept, we will create a more adaptive infrastructure with increased use of rotational units to improve on our operational reach and tactical flexibility. Increasing access to strategic host nation infrastructure and cooperation with friendly nations will improve our responsiveness. Our evaluation of infrastructure requires focus on Main Operating Bases (MOBs), Forward Operating Sites (FOSs), and Cooperative Security Locations (CSLs).

In Europe, our basing strategy seeks to sustain and leverage our commitments to our longstanding alliances. We maintain a robust presence in Western Europe—making necessary improvements to existing bases and training facilities—while at the same time shifting our focus to improving the ability of new allies and partners to be able to deploy rapidly and operate with our forces. The goals of this strategy are to deepen and strengthen relations with our newer allies; develop our focus to the south and east of our theater; maintain our national commitment to NATO; and to improve our interoperability with like-minded friends, allies, and major NGOs. The Eastern Europe Task Force initiative in Romania and Bulgaria is a good example of our developing relationship towards the east.

For relatively small, but consistent investments, our theater efforts in Africa will have major impacts on the multitude of strategic, security, economic, and political challenges we face. As we strive to assist in halting the deteriorating conditions in this increasingly important continent, we impact on Africa's potential for becoming the next front in the war on terrorism. We should remain engaged in Africa in order to build upon international relationships and to strengthen the many institutions that help mitigate the risk of armed conflict and provide relief when they do occur.

Theater Security Cooperation

Our TSC programs remain the centerpiece of our efforts to promote common security to strengthen the transatlantic link. TSC programs represent a much needed proactive approach to building partnership capacity with the aim of enabling emerging democracies to defend their homelands, address and reduce regional conflicts, defeat terrorist extremists, develop common economic and security interests, and respond to health crises, such as pandemic influenza outbreaks. Our approach is regional, linking individual country objectives to broader theater goals. Assisting our allies in developing the capabilities required to conduct effective peacekeeping and contingency operations with well-trained, disciplined forces helps mitigate the conditions that lead to conflict, prepares the way for success, and reduces the potential burden of U.S. involvement. Excluding Israel, we have requested a total of $166.6 million in Foreign Military Financing (FMF) and $40.5 million in International Military Education and Training (IMET) for fiscal year 2007. If approved, these programs will have direct benefit in regions where we need them the most.

Regional Approach

In EUCOM our TSC strategy derives from regional priorities and policy themes outlined in the Secretary of Defense's Security Cooperation Guidance. Our priorities are: to deepen and strengthen our relations with allied and partner nations; to assist our allies in developing capabilities to deploy rapidly and to be interoperable with U.S. forces; to encourage our allies in developing a robust SOF capability; to align our forces in a manner that enables a more rapid deployment to areas of instability; and to increase U.S. influence with new NATO members. We continue to focus on enhancing stability through Operation Active Endeavor, NATO's only Article V counterterrorism operation. Additionally, we have strategic security interests in other regions such as the Black Sea and the Caucuses. We will continue to support the Balkans in their reconstruction and in their eventual, but still conditional, integration into Euro-Atlantic institutions. Multinational training and exercises are essential elements of our regional approach to build military-to-military cooperation, to improve interoperability, and to facilitate the development of professional militaries. Our continuing mission in Georgia is a good example of "low investment, high yield" TSC strategy.

In Africa, our priorities are to increase the capability of African nations to conduct peacekeeping and contingency operations in each of their five regions, particularly through the AU and other regional organizations; to protect natural resources; and to promote stability by providing medical advice and assistance in dealing with health issues such as HIV/AIDS, cholera, malaria, and other diseases that have both humanitarian and strategic consequences.

Stability programs targeting improvements in health, education, good governance, and civil infrastructure are focused on countries with the greatest need. Development of effective security structures in Africa will establish the foundation for future success; however, they are dependent on the commitment of manpower, as well as the financial and institutional resources necessary to establish and sustain real progress. Working with donor nations and the interagency, our security initiatives—providing military training and education and enhancing peace operations capabilities, resources, and infrastructure—are focused on countries that possess the capability and show the desire to lead Africa into the future. African security issues will increasingly continue to directly affect our homeland security. Modest near-term in-

vestments will enable us to avert future crises that could, left unaddressed, require costly intervention in the future.

Trans-Sahara Counterterrorism Initiative (TSCTI)

TSCTI is the long-term interagency plan to combat terrorism in trans-Saharan Africa using a full range of political, economic and security tools. The need for TSCTI stems from concern over the expansion of operations of Islamic terrorist organizations in the Sahel region, a region that approximates the size of the United States. In EUCOM we support TSCTI through our involvement in Operation Enduring Freedom-Trans Sahara (OEF–TS). OEF–TS is a regional and preventive approach to combat terrorism and enhance partner nation border security and response in Trans Sahara Africa. It is designed to assist governments who seek to better control their territories and to prevent large areas from becoming safe havens for terrorist groups. TSCTI builds upon the successful 2002 Pan Sahel Initiative (PSI) which helped train and equip at least one rapid-reaction company in each of the four Sahel states: Mali, Mauritania, Niger, and Chad. TSCTI is a follow on effort, more ambitious in both programmatic and geographic terms.

TSCTI's overall approach is straightforward: to build indigenous capacity and facilitate cooperation among governments in the region. Participating nations, Algeria, Chad, Mali, Mauritania, Morocco, Niger, Senegal, Nigeria and Tunisia, join in the struggle against Islamic extremism in the Sahel region. This cooperation strengthens regional counterterrorism capabilities, enhances and institutionalizes cooperation among the region's security forces, promotes democratic governance, fosters development and education, emphasizes the military's proper role in supporting democratic ideals and ultimately strengthens our bilateral relationships in the region. It also assists participating nations in halting the illegal flow of arms, goods, and people through the region, helps nations better protect their vast borders and contributes to common security.

Political instability in Africa, left unattended or unaddressed will require reactive and repeated interventions at enormous costs (i.e. Liberia). For a relatively small investment, TSCTI has the potential to produce significant results in countering terrorism. It will be a powerful brake on future terrorist expansion, leading to an increasingly stable region. The administration is working to integrate TSCTI into future budget and planning cycles. Long-term, continuous engagement will build bonds where few existed and strengthen those already established. The United States should continue security cooperation measures with nations supporting regional initiatives which ultimately lead to peace, stability, and hope for people who have little at present.

Global Peace Operations Initiative (GPOI)

GPOI is a Department of State program, which is planned and implemented in consultation with the Department of Defense to train and equip peacekeepers. The bulk of real world GPOI activities is undertaken by African Contingency Operations, Training and Assistance (ACOTA), which is directed toward African nations and currently includes 15 ACOTA "partners." Countries considered for GPOI funding must demonstrate a strong commitment to participate in Peace Support Operations, as is one of the four criteria for being an ACOTA member. In fiscal year 2005, for the first time, operating funds to the ACOTA program were distributed via GPOI channels, as opposed to being a line-item in the Bureau of African Affairs, as has been the case since 1997.

Through GPOI and our own theater security cooperation and engagement programs, we will continue to support the AU and regional organizations to help ensure their success in progressing towards self-sufficiency. We believe GPOI and ACOTA should continue to be designed to help African regional organizations and their member countries develop the military capabilities needed to respond to regional problems, protect their strategic resources, reduce internal destabilizing tensions, and further develop cooperative, mutually beneficial external relationships. Our top priority in Africa is to support the AU's Common African Defense and Security Policy (CADSP) and other viable regional security organizations. The AU's five regional economic communities are developing common policies on defense and security issues in support of the AU CADSP. In EUCOM's view, GPOI funding should support ACOTA and benefit those programs and activities that promote the growth and increase the capabilities of the AU as the lead organization for increasing African responsiveness to crises.

Caspian Guard Initiative (CGI)

CGI is a framework program designed to coordinate security cooperation activities in Azerbaijan and Kazakhstan with those of CENTCOM and other U.S. Government agencies to enhance Caspian security. CGI assists Azerbaijan and Kazakhstan in

improving their ability to prevent and, if needed, respond to terrorism, nuclear proliferation, drug and human1 trafficking, and other transnational threats in the Caspian region. With CENTCOM we work with the Defense Threat Reduction Agency (DTRA), DOS, the DOD (Under Secretary of Defense for Policy), and the Department of Energy (DOE) to improve Azerbaijan's and Kazakhstan's capacities. As a result, U.S. Government "stakeholders" know their contributions are part of a coherent, strategic effort that promotes interoperability among activities, identifies capability gaps and cooperation opportunities, and mitigates redundant and duplicative efforts. CGI-related projects in Azerbaijan and Kazakhstan include maritime special operations training, weapons of mass destruction (WMD) detection and response training and equipment, naval vessel and communications upgrades, development of rapid reaction capabilities, border enhancements, counternarcoterrorism and border control training, naval infrastructure development planning, and interministry crisis response exercises.

Maritime Security in Africa

The West Indian Ocean and Gulf of Guinea (GOG) regions of Africa are areas which epitomize the complexity of maritime security challenges. Problems such as criminal activity, piracy, environmental and fisheries violations, resource theft, and trafficking occur on a regular basis. In order to address these challenges, EUCOM is engaged in the creation of a comprehensive maritime security initiative for Africa. U.S. Naval Forces, Europe (NAVEUR), EUCOM's lead component in this initiative, has developed a robust maritime security strategy and regional 10-year campaign plan for the Gulf of Guinea region. Gulf of Guinea Guard, EUCOM's investment initiative for long-term regional security and stability, will help GOG nations protect natural resources and use their wealth to develop economically and socially. Enabling objectives of the initiative are: enhancing physical security of national ports; improving control of littoral areas; and promoting collective and cooperative maritime security beyond littoral areas.

African Contingency Operations, Training, and Assistance (ACOTA)

ACOTA is a DOS Peace Support Operations (PSO) training initiative designed to improve the AU's ability to respond quickly and professionally to regional crises at the battalion, staff, brigade, and increasingly, at the multinational and Regional Economic Community level. ACOTA has for several years been a crucial African engagement and capacity-building program, directly supporting U.S. national objectives and EUCOM theater objectives of promoting stability, democratization, and military professionalism in Africa. Objectives of the ACOTA program include training and sustaining an African peacekeeping operations forces of 40,000 personnel by 2010; developing and improving sustainable PSO capacities for African forces to deploy and conduct peace support and humanitarian relief operations within Africa; and developing new programs of PSO training that will be relevant to the African Standby Force (ASF) and the Regional Brigades as they come on line.

Our support to the DOS contract-led training will continue throughout 2006. We will continue to provide active and Reserve component uniformed mentors to support battalion or brigade-level training focused on the peace support operations skills for individual soldiers, squads, platoons, and companies, culminating with a battalion-level exercise, along with staff training and multinational exercises for larger components, mixed staffs, and more complicated joint exercises. Training for specialty units will also be included.

Security Cooperation Activities

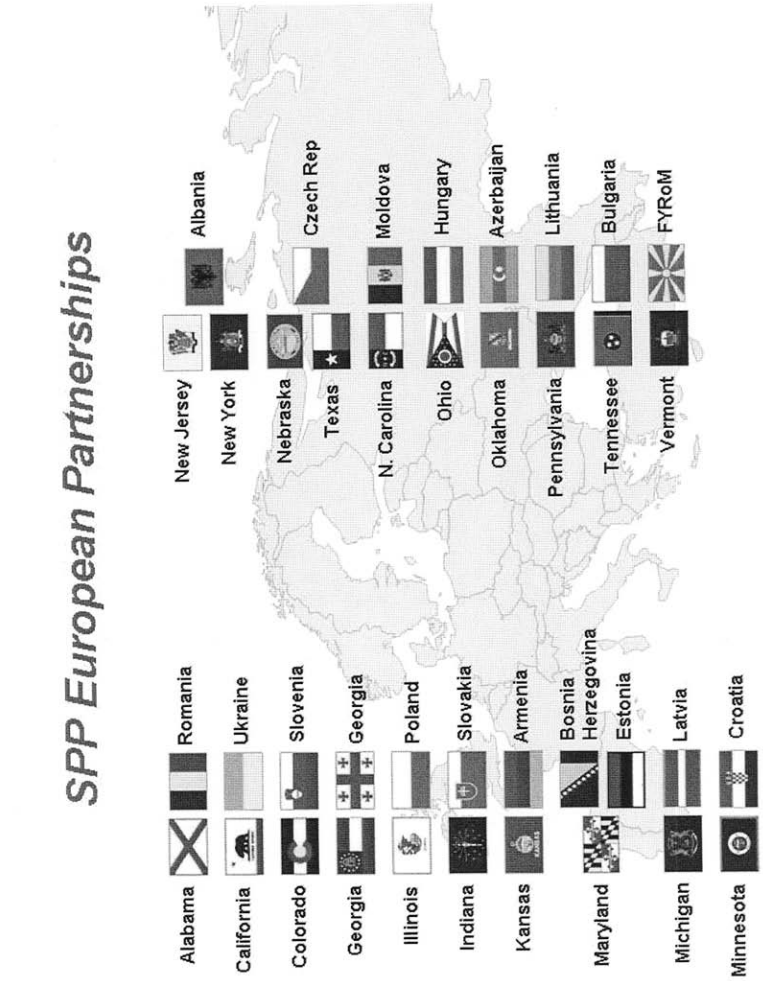
Security Cooperation Activities are managed programs planned and executed for the purpose of shaping the future security environment, spreading democratic values, and developing the potential of nations. Key among U.S. combatant command's TSC tools are Combined/Multinational Training and Exercises, FMF, Humanitarian Assistance (HA), Joint Contact Team Program (JCTP), Military-to-Military (M2M) Program, International Military Education and Training (IMET), Foreign Military Sales (FMS), and direct commercial sales. These programs provide access and influence, help build professional, capable militaries in allied and friendly nations, and promote interoperability. We execute the larger security assistance programs using our 44 Offices of Defense Cooperation in concert with U.S. Embassy Country Teams, while smaller programs are executed by Defense Attachés and Embassy Offices.

IMET remains our most powerful security cooperation tool, and proves its long-term value every day. At a relatively low cost, the program exposes foreign military and civilian leaders to U.S. military training, builds relationships, facilitates access, and builds influence. It is the single most effective tool available to demonstrate democratic control of militaries, and in many cases is the primary theater security cooperation activity that we have. Today, we continue to see the value of this pro-

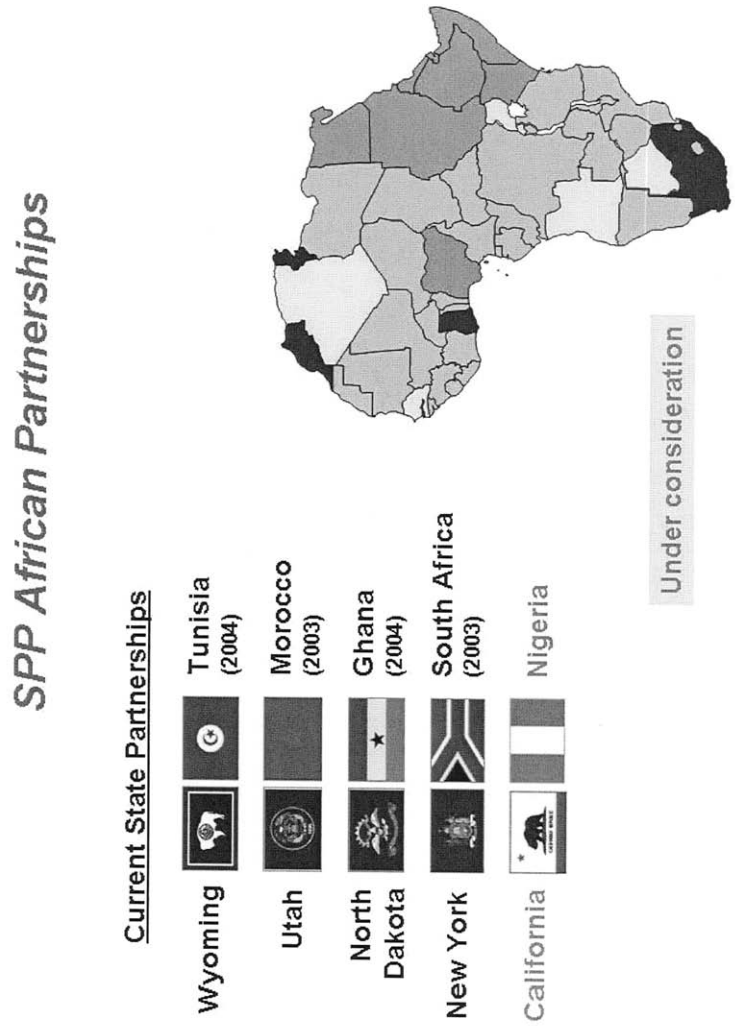
gram in the professional development and transformation of militaries in such establishing allies as Poland, Bulgaria, Romania, and many other countries.

The National Guard State Partnership Program (SPP), a united security cooperation program, also continues to be one of our most effective programs (See Enclosure 3). By linking our states and territories with designated partner countries, we promote access, enhance military capabilities, improve interoperability, and advance the principles of responsible governance. The unique civil-military nature of the National Guard allows it to actively participate in a wide range of security cooperation activities. During the past 3 years the SPP has conducted over 115 events and expanded into Africa with 5 additional partnerships, including the latest partnership between Nigeria and California.

Enclosure 3: State Partnership Program (SPP)



Enclosure 3 cont



Combating WMD is among our highest priorities, and the DTRA provides support unique within DOD that EUCOM has fully incorporated. DTRA's contributions cover the entire spectrum of our mission: Cooperative Threat Reduction programs address the nonproliferation of known WMD; detection programs address counter-proliferation, particularly interdiction of unknown items; and DTRA's exercise programs address our consequence management responsibilities, reassuring our friends and allies with regard to EUCOM capabilities.

The EUCOM Sustainment and Stability Operations Program (SSOP) in Georgia focuses on enhancing the capabilities of Georgian military forces to assist in preparing deployments in support of OIF. The U.S. and Georgia have developed a solid, cost effective partnership dedicated to promoting peace and stability and countering

terrorism. This program still serves as a model for other programs designed for the same purpose.

Additionally, U.S. Army, Europe supported training of Romanian tactical human intelligence teams at Grafenwoehr, Germany, which has been instrumental in creating military-to-military relationships between units, and in bridging the gap between U.S. and foreign military concepts. This training has allowed participating countries to replace EUCOM personnel in the Balkans, thus freeing up U.S. personnel for other duties elsewhere.

We attach great value to our programs offering multinational educational activities. They foster the professional development of emerging civilian and military leaders, reinforce ideals of democratic governance and stable apolitical militaries, and facilitate long-term dialogue with and among future international leaders. The George C. Marshall European Center for Security Studies, our preeminent transatlantic security and defense educational institution, is dedicated to the creation of a more stable security environment. It plays a major role in advancing democratic institutions and relations, peaceful engagement, and enhancing enduring partnerships between the Nations of North America, Europe and Eurasia. Three other prominent educational institutions are the NATO School, the Near East-South Asia Center for Strategic Studies, and the Africa Center for Strategic Studies (ACSS). Such educational activities achieve their greatest effectiveness when they are permanently located in the regions they are designed to influence. For the ACSS, currently based in Washington, DC, its success would be greatly enhanced by relocation to Africa, with mechanisms to give African nations greater ownership of its programs. All such schools play a central role in our engagement strategy by building trust and cooperative relationships with the leaders (current and future) of over 50 nations across Europe, Eurasia, and Africa.

HIV/AIDS Prevention Programs continue to be a key influence activity within our AOR. We have worked with DOD HIV/AIDS Prevention Program personnel in advocating projects and programs sponsored by the country teams and worked to incorporate these into the theater security cooperation plans. We appreciate the provision of $5.3 million in Public Law 109–148 for this program in Africa in fiscal year 2006. All government and nongovernmental HIV/AIDS programs are important in supporting security cooperation.

To ensure that U.S. actions are coordinated with other nations within the same region, we have established a regional security cooperation approach known as Clearinghouse Initiatives. Clearinghouses help deconflict programs, avoid duplication, and find ways to collaborate on matters of mutual interest. They have been created for Africa, the South Caucasus, and Southeast Europe, and serve as a multinational forum for interested countries to share information about security assistance programs. The goal is to capitalize on limited resources by merging various security cooperation programs into a comprehensive, synchronized regional effort.

Comprehensive TSC Reforms

Traditionally, our Armed Forces focus on fighting and winning wars. While we need to be prepared to operate across the full spectrum of conflict, in the new security landscape we conclude that early engagement, often requiring modest investment, can yield significant long-term dividends. In many cases, early actions can minimize or eliminate future engagements. Our approach to proactive versus reactive engagement highlights TSC as a cost effective and very important capability. Reforms to our existing national TSC authorization are necessary to promote greater efficiencies, and to more effectively expand U.S. influence in accordance with National Military Strategy and OSD Security Cooperation.

EUCOM has an abundance of programs, initiatives, and policies designed to help in developing and implementing our TSC strategy. There are as many as 30 sources of funding which emanate primarily from the DOD and the DOS—and which are regulated by various, often times competing, authorities and guidelines. Although the Unified Command Plan establishes the authority of the Geographic Combatant Commander (GCC) to plan and conduct security cooperation activities within an assigned area of responsibility, there are a number of programs or activities over which the GCC has no influence. Additionally, there exist government and nongovernment programs of which the GCC has no visibility.

In 2006, we will continue working to improve the efficiency and effectiveness of our TSC programs. We will complete development of effects-based, regionally focused plans that fully support nationally-directed strategic guidance. These plans, and our TSC strategy, support our overarching effects and capabilities-based theater strategic objective and effects management process. To increase efficiency, we will seek security cooperation funding and authority reform. The OSD, the Joint Staff, and individual Services work closely with the unified commands to explore ways to

improve program element structure in order to provide greater resources to the combatant commanders.

Ultimately our goals should include matching resource management with the responsibility for TSC success under the various unified regional commands. For EUCOM, this would empower us to better compete in the developing parts of our theater, particularly Africa and Central Asia. Recent changes in the Security Cooperation Guidance (SCG) which requires all DOD components to coordinate their SCG implementation strategies, plans, and activities with the relevant geographic combatant commanders and the identification of the combatant commanders as the DOD's supported entities for security cooperation is a positive development.

At the interagency level, better synchronized and more streamlined policy and legislative lines of authority would provide increased efficiencies and greatly assist in developing and implementing a more effective, overarching strategy to achieve our Nation's foreign policy objectives. Such reforms would also help develop democratic principles, common ideals, and defense reform of potential coalition partners and might also prevent some nations from turning elsewhere for security assistance needs. By streamlining these processes, we increase our agility and effectiveness, thereby allowing increased assistance and enhanced programs to those that need them most.

Component Command Activities

U.S. Army, Europe (USAREUR)

USAREUR is in the midst of transforming to restructure and refocus the Army footprint in Europe. This transformation incorporates substantial force redeployments to the United States, reconfiguring tactical units, and creating a new command and control structure.

The new command—which will be designated 7th Army—will combine the command functions of USAREUR with the warfighting capabilities of V Corps. When the transformation initiatives are complete, 7th Army will have eight separate organizations (instead of the current 20) and two permanently assigned combat brigades—a Stryker Brigade Combat Team (SBCT) in Vilseck, Germany, and an Airborne Infantry Brigade Combat Team (BCT) in Vicenza, Italy. The command is planning to utilize a third brigade on a rotational basis in support of the Eastern European Task Force.

Transformation of Army forces is now shifting from planning to execution of key decisions of the Integrated Global Presence and Basing Study (IGPBS) with the return this summer of 1st Infantry Division headquarters and one of its brigades to the Continental United States (CONUS). The other Germany-based 1st Infantry Division Brigade will redeploy to CONUS after its current tour in Iraq. The redeployment of these units from Europe is offset with the re-stationing of a 4,000 man Stryker Brigade Combat Team in Vilseck, Germany by August 2006.

Over the past 3 years, USAREUR has continued to provide substantial support to the global war on terrorism. Southern European Task Force (SETAF) and the 173rd Airborne Infantry Brigade formed the U.S.-led combat force in Afghanistan (Combined Joint Task Force 76), while V Corps headquarters re-deployed with two Brigade Combat Teams from 1st Armored Division to Iraq to form the bulk of the Multinational Corps-Iraq Headquarters for the two U.S. Army divisions, Marine Corps and coalition forces in Iraq. USAREUR recently deployed medical and support personnel to Pakistan to provide critical humanitarian assistance to earthquake victims.

Despite high rates of operational and personnel tempo, USAREUR continues to provide tremendous support to our TSC initiatives. Particularly, the command is working with our allies and partners to improve their capabilities and increase coalition contributions to multinational operations. For example, USAREUR's support to the Polish Land Forces—training NCOs and officers; supporting and participating in rehearsal exercises; and providing Mobile Training Teams to assist deployments—have directly assisted six successful Polish deployments of brigade and division headquarters to Iraq. Additionally, USAREUR led the way in nurturing our relationships with Russia and Ukraine via interoperability and peace support exercises through the ongoing Torgau Exercise series with Russia, coupled with key senior leader engagement. USAREUR continues to build upon the Peace Shield and Rapid Trident exercise programs with the Ukraine, focusing on the Ukraine's emerging Rapid Reaction Force and NATO/U.S. standard operating procedures. This year USAREUR will also initiate an airborne exchange program with the Ukraine.

USAREUR's focused activities in Eastern Europe have advanced our transformation goals throughout this critical region, helping to realign the U.S. global defense posture through cooperation with allies. Bilateral exercises in Bulgaria (immediate response) and Romania in July 2005 (ROMEX) provided both an outstanding

opportunity to train as NATO allies and test critical training areas and movement infrastructure. The Defense Cooperation Agreement with Romania will enable U.S. forces to start establishing the Eastern European Task Force (EETAF), which will operate from Forward Operating Sites at Mihail Kogalniceanu Air Base (MK) as the EETAF headquarters and adjacent to the Babadag Training Area. We are studying the concept of making Mihail Kogalniceanu Air Base a joint forward operating base for rotational presence and training of not only Army forces, but Air Force, Marine, and Special Operations units. The potential also exists to establish the EETAF operational command post at MK air base as a JTF HQs as well. Additionally, the USAREUR-led EETAF will significantly improve our ability to plan, coordinate, and execute security cooperation and allied interoperability in Eurasia and the Caucasus regions.

In Africa, USAREUR's 212th Mobile Army Surgical Hospital (MASH) led a historic mission: Exercise MEDFLAG 2005, the first-ever exercise by U.S. forces in Angola, was viewed by both U.S. and Angolan military and government officials as a tremendous success. The 212th MASH gained valuable training experience in deploying personnel and equipment in support of a humanitarian assistance operation in a challenging multinational environment by completing a civil engineering project, conducting joint training with the Angolan military, and providing medical assistance to Angola's civilian population. Immediately following this exercise, 212th MASH deployed to Pakistan to conduct operations in support of CENTCOM's earthquake assistance mission. Lastly, USAREUR has established a formal liaison—Military Liaison Officer-Africa—to establish contacts with a variety of African nations such as Senegal, Angola, Sao Tome, Nigeria, Mali, Tunisia, and others.

NCO development with partners and allies remains a cornerstone of USAREUR security cooperation. USAREUR has opened its Warrior Leader Course at Grafenwoehr to international participation by junior non-commissioned officers. Poland, Russia, Albania, and Slovenia have all participated in this IMET-funded program which will increase the level of interoperability. Furthermore, Botswana and South Africa have expressed interest in the program.

USAREUR has transformed the 7th Army Training Command to the Joint Multinational Training Command with enhanced expeditionary training, exercise capability, and theater security cooperation support. Over the last 3 years, the command conducted significant expeditionary training in both Bulgaria and Romania, while simultaneously conducting certification events for two combined joint task force headquarters (for Afghanistan and Iraq). The command continues to provide training at the brigade level to U.S. forces in Germany and to coalition partners both in Germany and in partner nations.

U.S. Air Forces Europe (USAFE)

Over the past year, USAFE has continued its broad transformation while simultaneously developing Theater Security Cooperation relationships in key geographical areas. It has also continued to provide substantial direct support to the global war on terrorism with both personnel and equipment.

The most visible change in USAFE over the past year was the transfer of mobility throughput capabilities from Rhein Main Air Base to Ramstein and Spangdahlem air bases. The closure of Rhein Main and the return of real estate to the German government was the culmination of 6 years of work and was planned and executed with no effect on either theater or global-mobility capability. This seamless transition will ensure the continued support of global military operations.

A second notable change is the activation of the Warfighting Headquarters (16 AF) at Ramstein Air Base, Germany. This is part of the overall Air Force transformational effort to enhance wartime operations. The 16 AF provides a single, full-time air component command structure capable of assuming responsibilities of a combined/Joint Air and Space Component Headquarters when required. The 16 AF ensures effective command and control of air, space, and information operations forces. A key underlying benefit of this organization is the ability to immediately transition to any mission across the full spectrum of conflict. It increases command and control capability due to embedded communication systems coupled with co-located functions such as intelligence, surveillance, and reconnaissance (ISR), and logistics.

USAFE is supporting OSD's training transformation through its implementation of the Joint National Training Capability. Together with USAREUR, USAFE is providing the warfighter integrated constructive simulations with virtual and live instrumented ranges. This provides theatre forces and NATO allies training opportunities in both joint and combined operations. We are conducting operational and tactical level exercises, linking warfighters in live, virtual and constructive scenarios. This capability allows USAFE and USAREUR, through the Warrior Preparation

Center, to link warfighters from across Europe and the world with C2 weapon systems to provide realistic and relevant training.

USAFE Theater Security Cooperation programs support the command's overarching initiatives. In 2005, USAFE participated in over 500 events with 66 of the 91 countries in our AOR. Events ranged from major JCS exercises and NATO support activities to bilateral/multilateral events. One shining example of USAFE's Theater Security Cooperation was Exercise Rescuer-Medceur 2005 with the Georgian Army. This USAFE-led exercise provided 15 NATO and Partnership for Peace nations medical training, a forum to exchange information on medical techniques and procedures, and medical assistance to the rural populace in Western Georgia.

Theater Security Cooperation also extends to the operational arena. In an effort to further interoperability and extend the capacity of U.S. ISR assets, USAFE has taken a two-pronged approach to security cooperation. First, it has almost doubled its traditional exchanges and added new contacts with our partner nations. Second, because USAFE currently operates a limited number of airborne ISR assets in this theater, it has aggressively pursued working with partner nations who have or are developing airborne ISR capabilities. By building these relationships and working with these nations on standardizing tactics, techniques, and procedures, we may have the opportunity to integrate their assets into our contingency operations.

In addition to conducting operations within the USEUCOM AOR, USAFE continues to support CENTCOM and ongoing OEF and OIF operations. The USAFE Basing Strategy maintains and improves infrastructure at its Main Operating Bases that support the massive mobility throughput that is resupplying OIF/OEF forces and other worldwide operations. A strategic cargo hub has been activated at Incirlik which has enabled increased mobility throughput to CENTCOM. Support is not limited to mobility throughput, but also includes the contributions of USAFE units and individual personnel. Additionally, 4 of USAFE's 10 flying squadrons are conducting operations in CENTCOM; USAFE C–130s are on indefinite deployment to CENTCOM; the USAFE Air Operations Center is deployed to CENTCOM and is providing effective Air Command and Control for OIF. Finally, USAFE airmen and civilians are also on individual deployments, providing critical support to support both OEF and OIF.

U.S. Naval Forces, Europe

NAVEUR continues to transform its footprint in Europe. Since it began to restructure in 2003, it has reduced assigned military personnel from more than 14,000 to just over 10,000. The command has accomplished this through the consolidation of three headquarters staffs and refocusing all activities in the AOR. This footprint will continue to shrink with the planned closure of the U.S. Naval Facility at La Maddalena, Sardinia.

While NAVEUR's mission has changed substantially, its value and impact in the AOR has not decreased. Initiatives like the U.S. Navy's Fleet Response Plan—enhancing the Fleet's surge capability—have enabled NAVEUR to focus on the development of new skill sets. While retaining the ability to maintain supremacy at sea in the traditional sense, NAVEUR is also building regional nation maritime capability and capacity to provide maritime stability, safety, and security and to help win the global war on terror.

Prime examples of effective relationship building from 2005 include the West Africa Training Cruise and the U.S.S. *Emory S. Land* deployment to the Gulf of Guinea. The West Africa Training Cruise featured U.S.S. *Gunston Hall* with embarked U.S. Marines, Spanish Marines, and Italian Marines and Army personnel working with navy and land forces from several Gulf of Guinea nations. U.S.S. *Emory S. Land* deployed to West and Central Africa where they hosted personnel from seven African nations and embarked personnel from numerous NATO partners as well. These efforts gave our emerging and enduring partners first-hand experience with our Navy, providing the type of interaction that makes lasting impressions.

This trend will continue. Already in 2006 the Navy sent the U.S.S. *Mount Whitney* to support Liberia's presidential inauguration in January and will deploy U.S.S. *Emory S. Land* to the Gulf of Guinea for 3 months this spring.

Operationally, maritime security is at the top of NAVEUR's priority list. The long range vision for maritime security in the region includes a series of Automated Identification System (AIS) receivers along the coast of West Africa providing the ability to identify ships transiting the region. AIS, coupled with a system of coastal radars able to detect suspicious vessels at sea and a communication infrastructure that will allow our partners to receive notification that there is a potential security issue/risk at sea, is the first step. These measures are attainable and affordable. Ultimately, partner navies in this region must possess the capability and capacity to engage

lawbreakers at sea. Earlier this year, NAVEUR leadership met with Gulf of Guinea nations to lay the groundwork for this priority.

Later in March, NAVEUR will jointly sponsor—with the Africa Center for Strategic Studies—a Maritime Safety and Security Workshop in Ghana that will be attended by each of the Gulf of Guinea nations, additional African maritime nations and several NATO nations. This workshop is preparatory to a maritime safety and security ministerial-level symposium this fall.

NAVEUR has also been active in engagement with all of the Black Sea littoral nations in improving maritime security in the east. Bilateral training, multi-lateral exercises, ship visits, senior officer engagements and operational staff talks are part of the engagement effort. Success stories include NAVEUR providing assistance in developing the noncommissioned officer corps of some navies in this region. This serves as a model for developing relationships with emerging partners.

NAVEUR continues to operate with NATO to strengthen enduring partnerships and improve interoperability. The NAVEUR push south and east will increasingly include NATO whenever possible. As NAVEUR increases presence in the Gulf of Guinea to the south and in the Black Sea to the east, their goal is to operate with NATO allies as frequently as possible. Force multiplying with our allies is essential to success in the maritime domain.

U.S. Marine Forces, Europe (MARFOREUR)

MARFOREUR continues to transform, while retaining its flexibility to ramp up and down based upon missions, priorities, and real world contingencies. The net effect is greater output from a smaller command.

MARFOREUR's support to the global war on terrorism remains strong. Its training of the Georgian military, now in its fourth year, through the Georgia Sustainment and Stability Operations Program (SSOP) has resulted in the deployment of over 1,000 Georgian soldiers on a permanent rotation basis to OIF since 2004. MARFOREUR's maintenance of a Hospital Liaison Staff at Landstuhl Regional Medical Center (LRMC) since January 2003 is another example of its contribution to OIF. This detachment is responsible for the in-patient reception of our wounded marines from operations throughout our AOR and CENTCOM. Over 2,500 marines and family members have been assisted by this team since its inception.

MARFOREUR's Security Cooperation activities range from individual and small team efforts to battalion and squadron-size unit deployments. In all instances, the security cooperation focus continues to shift to furthering the attainment of objectives in the Black Sea and Caucasus Regions and North and West Africa. Support to the International Military Assistance Training Team in Sierra Leone, various Africa Contingency Operations Training and Assistance program sponsored events, and numerous Joint Contact Team Program (JCTP) activities create long-term dividends for a relatively small investment. MARFOREUR's support to the Joint Exercise Program relies largely on the Marine Corps Reserves, offering unique annual training opportunities to U.S.-based forces while offsetting the impact of limited Active-Duty Force availability. MARFOREUR is coordinating activities that occur in Trans-Sahara Counter Terrorism Initiative (TSCTI) countries with Special Operations Command, Europe—such as Exercise Shared Accord in Niger and intelligence-focused JCTP events in Niger and Mali.

Special Operations Command, Europe (SOCEUR)

SOCEUR also continued to transform in 2005, while maintaining its emphasis on operations and exercises in the global war on terror. Naval Special Warfare Unit (NSWU) 10 de-activated at Rota, Spain, merging its responsibilities into NSWU Two, in Stuttgart, Germany. SOCEUR conducted operations in the Balkans, and deployed forward-stationed forces to OEF and OIF. SOCEUR designed its exercise program to have operational impacts in the global war on terror, improving partner nation capacity in Europe and Africa and diminishing the conditions that support terrorism.

SOCEUR's premier European counterterrorism exercise in Romania fostered improved cooperation with one of our new NATO members. SOCEUR will continue this trend with its 2006 European counterterrorism exercise, cooperating with new NATO nations in the Baltic region. In addition, SOCEUR deployed 900 SOF to Africa for exercise Flintlock, cooperating with our African partners to support the Trans-Sahara Counterterrorism Initiative.

With continuing support of operations in the CENTCOM's AOR, SOCEUR has fewer forces to execute security cooperation programs. To mitigate against this shortage, SOCEUR has contracted trainers and cooperated with theater partners. For example, SOCEUR facilitated Italian support to Albanian commando training, and will continue to facilitate the expansion of this cooperative effort to develop spe-

cial operation forces capability among the Adriatic nations. Despite its force availability, SOCEUR was able to conduct 15 Joint Combined Exchange Training (JCET) events in 12 countries during fiscal year 2005.

SOCEUR plans to execute 37 JCET events to 17 nations during fiscal year 2006. These JCETs will directly support Secretary of Defense Security Cooperation Guidance and USSOCOM Global Security Cooperation Strategy. SOCEUR JCETs will primarily target OEF–TS nations, with secondary emphasis upon both Caucasus/Baltic Regional Partner Development and Traditional NATO Partner Cooperation. We accept risk in not engaging with all TSC Partners in order to achieve the persistence required to make measurable progress in Trans-Saharan Africa.

Truly transformational is SOCEUR's emerging role as a model and enabler for NATO SOF. SOCEUR leads NATO's effort to develop, organize, and train interoperable SOF forces which will hopefully culminate in a U.S.-led NATO SOF component consolidated around a "Center of Excellence" for SOF. This will increase U.S. leadership opportunities as the commander of SOCEUR could ultimately be "dual-hatted" as both a NATO commander and a U.S. component commander.

Key to SOCEUR transformation initiatives and its evolving leadership role for NATO is the consolidation of our Theater SOF forces. SOCEUR, EUCOM, Special Operations Command, and DOD are developing future basing options for an eventual consolidation. The importance of maintaining relationships with both our traditional and future partners underscores the importance of sustaining SOF capabilities within our theater.

Theater Investment Needs

EUCOM's ability to transform and achieve U.S. national security objectives depends directly on the investment provided in a number of critically important areas, such as military construction, security cooperation programs, and our theater intelligence architecture (See Enclosure 4). Your support to our infrastructure programs over the next 3 years is critical to reshaping our transformed future basing posture. These investments will pay important dividends as we divest our many non-essential bases and consolidate our forces into more efficient communities such as Grafenwoehr/Vilseck, Ramstein and Spangdahlem in Germany and Vicenza/Aviano Italy.

Enclosure 4: Theater Investment Needs

LINE-ITEM MILITARY CONSTRUCTION/FAMILY HOUSING PROJECTS EUCOM AOR, FY 2007					
Comp./ Agency	**Country**	**Location**	**Project**	**Description**	**Approp. Request**
NAVEUR (SPAWAR)[1]	Italy	Sigonella		Mobile User Objective System Installation	13,051,000
USAFE (AMC[2])	Germany	Ramstein AB		C-130 Construct 2-Bay Hangar	22,000,000
USAFE (AMC)	Germany	Ramstein AB		C-130 Construct Aircraft Parts Store	3,300,000
USAFE	Germany	Ramstein AB		Ramp 1, Phase 2	27,850,000
USAFE	Germany	Ramstein AB		Replace Family Housing (101 units)	73,488,000
USAFE	Germany	Spangdahlem AB		Replace Family Housing (60 units)	39,294,000
USAFE	UK	RAF Lakenheath		Replace family housing (74 units)	35,282,000
USAFE (ACC)[3]	Classified	Classified		Global Hawk Aircraft Maintenance & Operations Complex	Classified
USAREUR	Romania	Classified	EETAF[4]	Base Camp	Classified
USAREUR	Germany	Grafenwoehr	EBG[5]	Barracks	29,000,000
USAREUR	Germany	Grafenwoehr	EBG	Barracks	29,000,000
USAREUR	Germany	Grafenwoehr	EBG	Brigade Headquarters	11,132,000
USAREUR	Germany	Grafenwoehr	EBG	Vehicle Maintenance Complex	29,500,000
USAREUR	Germany	Grafenwoehr	EBG	Vehicle Maintenance Complex	29,500,000
USAREUR	Germany	Grafenwoehr	EBG	Vehicle Maintenance Complex	29,500,000
USAREUR	Germany	Vilseck	EBG	Barracks Complex Incr 2	19,000,000
USAREUR	Italy	Vicenza	173rd[6]	Barracks Complex	46,000,000
USAREUR	Italy	Vicenza	173rd	Barracks Complex	29,000,000
USAREUR	Italy	Vicenza	173rd	Barracks Complex	41,000,000
USAREUR	Italy	Vicenza	173rd	Brigade Complex	32,000,000
USAREUR	Italy	Vicenza	173rd	Brigade Complex Infrastructure	49,000,000
USAREUR	Italy	Vicenza	173rd	Physical Fitness Center	26,000,000
TRICARE[7]	Italy	Vicenza	173rd	Enhanced Health Service Center	52,000,000
DoDEA[8]	Italy	Vicenza	173rd	New elementary School (Ederle)	31,460,000
DoDEA	Spain	Rota		Rota High School Addition	23,048,000
NSA[9]	UK	Menwith Hill Station		Ops/Tech Building at MHS Inc II	46,386,000
TOTAL					**827,591,000**

Source: FY 2007 Military Construction, Family Housing, and Base Realignment and Closure Program, available at http://www.defenselink.mil/comptroller/defbudget/fy2007/fy2007_c1.pdf

[1] Space and Naval Warfare Systems Command
[2] Air Mobility Command (USAF), US Transportation Command
[3] Air Combat Command, USAF
[4] Eastern European Task Force
[5] Efficient Basing Grafenwoehr
[6] 173rd Infantry Brigade Combat Team Consolidation
[7] Tricare Management Agency
[8] Department of Defense Dependent Education Agency
[9] National Security Agency

Enclosure 4 cont

-Component	Country	Location	Description	FY 2007 Request ($ millions)
NON LINE-ITEM MILITARY CONSTRUCTION/FAMILY HOUSING PROJECTS[2]				
USAREUR	Germany	Stuttgart	Improve Family Housing	22.0
USAREUR	Germany	Stuttgart	Improve Family Housing	25.0
USAREUR	Germany	Ansbach	Improve Family Housing	19.5
USAREUR	Germany	Wiesbaden	Improve Family Housing	7.2
USAREUR	Germany	Wiesbaden	Improve Family Housing	8.3
USAREUR	Germany	Wiesbaden	Improve Family Housing	25.0
USAFE	Germany	Ramstein	Improve Family Housing	5.2
NON LINE ITEM TOTAL				**112.2**
TOTAL MILTARY CONSTRUCTION/FAMILY HOUSING PROJECT FUNDING REQUEST				**939.8**

We continue our efforts to consolidate our geographically separated units throughout the theater at enduring, major operating bases. This will provide greater crisis response capabilities, enhance joint training opportunities, and more effectively position our assets for use in future mission areas. Upgrades to essential theater transportation nodes are essential for the sustainment of strategic throughput required to support OEF and OIF and other global contingencies and operations. Recent global deployments have reemphasized the strategic value and necessity of our MOBs in Europe.

Theater Infrastructure

Continued support of Military Construction (MILCON) is absolutely necessary in order to achieve our Strategic Theater Transformation. The theater's most important effort is to complete USAREUR's Efficient Basing Grafenwoehr (EB–G), which provides an ideal training and operating bed-down location for the majority of enabling forces with the ability to rapidly respond to current and emerging threats south and east. We are seeking an additional $176.6 million in the fiscal year 2007 budget for this initiative, which had its origin in 2003. If approved, we will be able to bring the project to 90 percent completion this year. Completing this major program permits the repositioning of 3,500 soldiers who form our early deploying units, as well as the closure of many obsolete installations, all the while supporting the desired end-state of our strategic footprint in the theater.

Equally important to adjusting the theater structure is the modular conversion of the 173rd Infantry Brigade Combat Team (ABN) beginning in fiscal year 2006. The Brigade will increase in size and capability and will be stationed south of the Alps at Main Operating Base Aviano-Vicenza, Italy, improving and ensuring its deployability. The fiscal year 2007 budget request includes $306 million for phase I of the critical mission and soldier support facilities at Vicenza for the arrival of the expanded number of soldiers and units. Continued funding of this project through fiscal year 2008 for phase II is critical to completing the remaining facilities for the standup of the modular brigade.

Finally, the fiscal year 2007 request includes a request for facilities to establish FOSs to carry out EETAF operations that foster stability via Theater Security Cooperation initiatives. This project will establish initial operating capability. The project will provide the base camp with approximately 60 percent of basic infrastructure (utilities) and operations facilities. We plan to complete base camp construction for EETAF with our fiscal year 2008 MILCON request. Through these FOSs, we will engage with multiple countries through expeditionary training events across the EUCOM's AOR.

Concurrent with these actions, we need to ensure our soldiers are housed in facilities comparable to their CONUS counterparts. The DOD goal is to modernize barracks to 1+1 standards by fiscal year 2008, although DOD accepted a 1-year delay at Army OCONUS sites. To date, we are at 70 percent, slightly behind the Army average, and appreciate your continued support of barracks projects as we strive to achieve the Army goals for modernization projects which are essential quality-of-life, retention and readiness initiatives.

Family Housing

The well-being of our military families is linked to readiness, retention, reinforcement of core values, and mission accomplishment. Housing remains at the top of the list for our servicemembers and has become even more critical over the past 3 years as many of our personnel have deployed leaving their families behind. These families are an absolutely integral part of our team and deserve quality housing.

Currently, 42 percent of our families still live in inadequate housing. The DOD-wide goal is to eliminate substandard housing by 2007. While NAVEUR will meet this goal, USAFE and USAREUR are not currently projected to meet it until 2009.

Significant Family Housing MILCON investments are included in the President's budget request for fiscal year 2007. We will not invest resources in housing we anticipate closing in the near future. USAREUR requests $107 million in MILCON funds to fully renovate more than 515 housing units in Stuttgart, Ansbach, and Wiesbaden. The closure of the logistics gateway at Rhein-Main Air Base required expansion at Main Operating Bases in Ramstein and Spangdahlem to meet EUCOM mission requirements. USAFE requests $148.0 million for new construction and renovation of 254 housing units to meet the increased family housing requirements created by the expanded mission at main operating bases in Ramstein, Spangdahlem and Lakenheath. NAVEUR continues to improve its housing inventory through build-to-lease projects and USAREUR is using this program to acquire over 800 additional houses in the Grafenwoehr area. Both USAREUR and USAFE continue to explore additional build-to-lease housing opportunities in Europe to meet our housing shortages.

Quality-of-Life Programs

Quality-of-Life programs are a top priority for this command. The top three quality-of-life issues are: obtaining quality living accommodations, predictable access to health care to include family member dental support, and dependent education programs provided by the DOD dependent schools. Paramount in this effort is the need for adequate Operations and Maintenance funding to sustain Base Operations Support programs. The importance of these programs is magnified in an overseas environment where personnel and families cannot rely on off-base options as they do in the United States.

The well-being of soldiers, sailors, airmen, marines, DOD civilians, contractors, and their families are inseparable from combat readiness and mission success. They have endured hardships in support of many diverse missions. We must match their commitment to duty and country with a pledge that our troops and their families experience a standard of living that is comparable to the society they are pledged to defend. Commanders depend on these resources to provide crucial morale programs, enhance retention, and foster esprit de corps.

To respond to the changing needs of our personnel and their families, we host an annual theater-wide quality of life conference. The command consistently receive requests for increased support of child development centers, school age programs and youth services. We are dedicated to increasing funding for child care and family child care subsidy programs as 44 percent of EUCOM personnel have children. Family member employment is also a major concern raised at our conferences, as the overseas environment limits employment opportunities. We are aggressively focusing on alternatives to enhance opportunities for spouses seeking employment, and to expand educational opportunities and unemployment compensation eligibility.

In addition, we must simplify Reserve duty status for our Reserve component members, particularly given our reliance on Reserve component augmentation in support of our mission. There are currently 32 different duty status categories for reservists which can affect operational access and greatly complicate benefits to the member. We are working through the DOD in an effort to consolidate and standardize Reserve multiple duty statuses.

Non-Lethal Capabilities

Non-lethal capabilities remain an important transformational requirement, offering a wide range of flexible response options to our forces. To combat the emerging asymmetric threats throughout our AOR, we have expanded our use of these capabilities, so that they are now a regular part of operations and exercises. Current non-lethal capabilities, while rapidly improving, still have limited application, focusing primarily on tactical, short-range, crowd control equipment, and techniques. Rapid development and acquisition of non-lethal systems with a higher degree of precision, increased range, and more effective payloads, will provide EUCOM with far greater force response options capabilities than currently exist. These capabilities will continue to have application across the full range of military operations and to offer positive alternatives to more traditional means of physical security, crowd control, force protection, and search and seizure.

Security Assistance

FMF provides critical resources to assist strategically important nations without the financial means to acquire U.S. military equipment and training. This year's FMF request for countries in the EUCOM area of responsibility, included in the

International Affairs (Function 150) account, totals approximately $2.5 billion, of which more than 90 percent is earmarked for Israel.

FMS and Direct Commercial Sales (DCS) demonstrate our Nation's continued commitment to the security of our allies and friends by allowing them to acquire superior U.S. military equipment and training. Funding requests by country in our area of responsibility are contained in Enclosure 5.

Enclosure 5: Theater Security Cooperation by Country

Funds Requested in President's FY 2007 Budget for International Military Education and Training (IMET) and Foreign Military Financing (FMF) in the EUCOM Area of Responsibility

Country	FY 2007 IMET	FY 2007 FMF
Africa		
Algeria	840,000	0
Angola	400,000	0
Benin	150,000	0
Botswana	690,000	0
Burkina Faso	120,000	0
Burundi	100,000	0
Cameroon	295,000	0
Cape Verde	145,000	0
Central African Republic	100,000	0
Chad	295,000	0
Cote d'Ivoire	50,000	0
Democratic Republic of Congo	220,000	0
Equatorial Guinea	45,000	0
Gabon	245,000	0
Gambia	120,000	0
Ghana	640,000	400,000
Guinea	345,000	0
Guinea-Bissau	100,000	0
Lesotho	45,000	0
Liberia	245,000	1,600,000
Malawi	355,000	0
Mali	45,000	0
Mauritania	130,000	0
Morocco	1,975,000	12,500,000
Mozambique	215,000	0
Namibia	45,000	0
Niger	45,000	0
Nigeria	590,000	800,000
Republic of the Congo	105,000	0
Rwanda	270,000	0
Sao Tome and Principe	200,000	0
Senegal	1,135,000	400,000
Sierra Leone	325,000	0

Enclosure 5 cont

Country	FY 2007 IMET	FY 2007 FMF
South Africa	45,000	0
Swaziland	100,000	0
Tanzania	45,000	0
Togo	120,000	0
Tunisia	1,975,000	8,500,000
Uganda	295,000	0
Zambia	245,000	0
Military Health Affairs[10]	0	1,600,000
Africa Coastal/Border Security Program[11]	0	4,000,000
Total, Africa	***13,450,000***	***29,800,000***
Europe and Eurasia		
Albania	935,000	3,200,000
Armenia	790,000	3,500,000
Azerbaijan	885,000	4,500,000
Bosnia and Herzegovina	910,000	9,000,000
Bulgaria	1,430,000	10,000,000
Croatia	45,000	0
Czech Republic	1,875,000	3,500,000
Estonia	1,185,000	4,000,000
Georgia	1,235,000	10,000,000
Greece	590,000	0
Hungary	1,480,000	2,500,000
Latvia	1,185,000	4,000,000
Lithuania	1,185,000	4,000,000
Macedonia	665,000	3,600,000
Malta	45,000	0
Moldova	885,000	500,000
Poland	2,075,000	30,000,000
Portugal	690,000	0
Romania	1,580,000	15,000,000
Russia	790,000	0
Serbia and Montenegro	45,000	0

[10] Supplements the DoD HIV/AIDS Prevention Program effort through the procurement of laboratory and medical supplies, testing equipment, rapid test field kits, and associated training capabilities that will both complement and sustain the health care training initiative in African partner countries. . Dept of State FY 2006 Budget, Request by Region/Africa at 321, available at http://www.state.gov/documents/organization/42249.pdf .

[11] EUCOM countries that will be included in this initiative may include, but are not limited to: Angola, Chad, Gabon, Ghana, Guinea, Kenya, Mali, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Tanzania and Uganda. Dept of State FY 2006 Budget, Request by Region/Africa at 316, available at http://www.state.gov/documents/organization/42249.pdf .

Enclosure 5 cont

Country	FY 2007 IMET	FY 2007 FMF
Slovakia	985,000	4,000,000
Slovenia	885,000	500,000
Turkey	2,960,000	15,000,000
Ukraine	1,725,000	10,000,000
Total, Europe and Eurasia	***27,060,000***	***136,800,000***
Total, Africa	***13,450,000***	***29,800,000***
Total, Europe/Eurasia/Africa	***40,510,000***	***166,600,000***
Near East		
Israel	0	2,340,000,000
Grand Total, EUCOM AOR	***40,510,000***	***2,506,600,000***

Source: Account Tables, FY 2007 International Affairs (Function 150) Budget Request, US Dept of State, available at http://www.state.gov/s/d/rm/rls/iab/2007/html/60203.htm

International Military Education and Training (IMET) and Expanded IMET (E–IMET) provides education and training opportunities for foreign military (IMET) and civilian personnel (E–IMET). The EUCOM portion of the fiscal year 2007 IMET request is approximately $40.5 million and like FMF, is also included in the International Affairs (Function 150) account.

Theater C⁴ISR

A critical investment need relates to the dissemination, analysis, and sharing of information. It is imperative that our C4 investment needs include information sharing, electromagnetic spectrum access, assured information networks, and a robust Satellite Communications (SATCOM) architecture for the transformed operational environment.

Our theater transformation plan places operational forces in regions not currently supported on a day-to-day basis by the DOD Global Information Grid (GIG). Establishing a networking and information sharing capacity with our allies and partners is a critical first step in mitigating this problem. We need long-term investment in persistent ISR capability with assured electromagnetic spectrum access utilizing up-to-date collection technologies to find, track and interdict mobile and technologically competent terrorist groups and platforms operating within the vast regions of Africa and Europe, including both air and maritime environments. SATCOM programs meeting the goals of the Transformational Communications Architecture are a critical step towards realizing persistent ISR capabilities.

For our expanding agenda in Africa, we need to establish a networking and information sharing capacity with our partners there so that they can better execute internal and cross-boundary counterterrorism activities in support of the global war on terror. We also need to address the chronic shortage of information assurance personnel to defend the information networks that are critical in enabling theater command and control both for warfighting and for stability, security, transition, and reconstruction operations.

We have made significant progress in our effort to establish an intelligence fusion capability within NATO to better support NATO military operations, both in and out of area. A provisional capability operates at RAF Molesworth in the United Kingdom and supports, or has recently supported, the International Security Assistance Force (ISAF) operating in Afghanistan, as well as NATO forces deployed in support of Darfur, Sudan and Pakistan earthquake relief operations. We plan on the Intelligence Fusion Center (IFC) reaching full operational capability by 2007.

In another major transformational step, we are implementing the Joint Intelligence Operations Center-Europe (JIOCEUR) as part of the greater DOD JIOC effort. JIOCEUR will enhance our ability to synchronize and direct theater and national collection, analytic, and production efforts. It will also help strengthen the intelligence and operations interface through the establishment of a robust intelligence operations and planning team capability embedded within the EUCOM Plans and Operations Center (EPOC). These measures will significantly improve our

ability to leverage all available intelligence assets against theater and component requirements.

A central aspect to our strategy in combating terrorism is the development of partner-nation intelligence capabilities and the increased utilization of their cultural and linguistic expertise. We seek to apply U.S. technological advantages to leverage partner strengths in order to build more cohesive relationships. Integrated Intelligence Security Cooperation funding coupled with information sharing authorities are required to fully leverage partner nations in the global war on terrorism.

Lastly, as more collection platforms add to the amount of data to support EUCOM, NATO, and interagency support operations, I strongly recommend increasing the capacity of our intelligence analytical force. Such an increase would facilitate fused intelligence sharing capacity across the spectrum of allied and interagency organizations, ensuring that key intelligence gets disseminated quickly to those who need it most.

Strategic Mobility and Maneuver

As we become more expeditionary, our ability to rapidly respond to crises becomes more dependent on strategic airlift and its close association with prepositioned equipment for timely projection and sustainment of operational forces. Looking south, we envision expanding our "en route" infrastructure system in order to respond to developing conditions in the vast underdeveloped expanse of sub-Saharan Africa, and elsewhere as required.

As we continue to adjust our European footprint to enable the rapid deployment of forces across Europe, Africa and elsewhere in the world, our requirement for intra-theater strategic airlift will also increase. Our small fleet of aging C–130s does not have the operational range or capacity to support rapid mobility and maneuver of forces throughout the AOR. Our experience in Exercise Flintlock 2005 revealed that successful deployment of forces to austere locations in Africa are best served by strategic airlift platform such as the C–17. USAREUR's transformation to the Brigade Combat Team force structure will also increase their dependence on heavy lift for both training and combat operations.

Much of the Service's War Reserve Material/Prepositioned Equipment within our theater has been removed in support of ongoing operations and will not be reset in the near future. For example, the Marine Corps Pre-positioning Program-Norway (MCPP–N) and the Maritime Pre-positioned Force (MPF) programs have directly supported OIF and OEF with weapons, ammunition, and equipment. The full reconstitution of these assets to pre-OIF levels is necessary and will allow us the flexibility to support real-world contingency operations and the multiple TSC initiatives of the future.

Given the current posture of our prepositioned equipment, we will temporarily rely heavily on U.S. based stocks to respond to a major contingency operation within our area of operations, making intertheater strategic lift, and hence C–17 availability, a top priority for the future.

A recent success story has been the arrival of the High Speed Vessel (HSV) Swift, a Theater Support Vessel (TSV), whose capabilities are an integral part of our transformation efforts. Its high speed, large capacity, and shallow draft provide EUCOM a viable alternative to intratheater airlift for the operational movement and sustainment of combat forces along the vast littoral region. The capability demonstrated by HSV Swift will complement both Army and SOF Transformation efforts while enhancing Marine Corps maneuver by increasing operations throughput, providing additional means to counter probable anti-access threats.

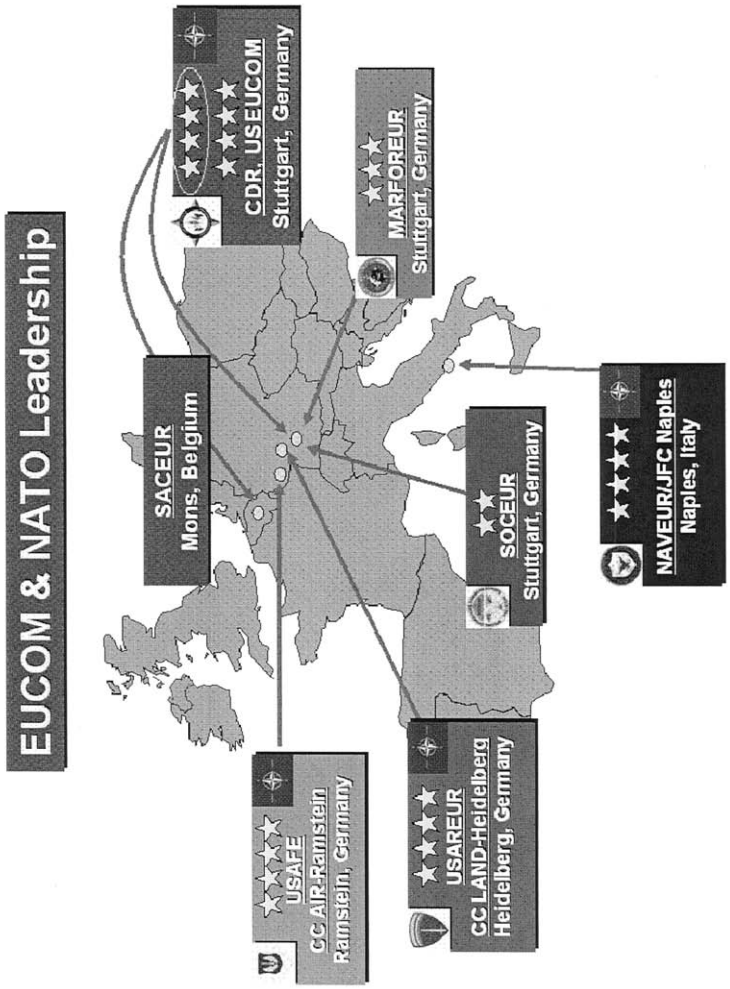
EUCOM AND NATO

Since the Prague Summit in 2002 when the Alliance signaled its recognition of the changing security landscape, it has made major shifts in its organization membership and capabilities. NATO is in the process of "reinventing" itself to meet the new challenges of the 21st century. It is making significant progress and is in the midst of the most fundamental physical and philosophical transformations in its history. While operational structures have been transformed, the political and military decision making procedures of the Alliance, as well as resourcing and funding mechanisms are similarly being addressed. Reforms in these critical areas must be achieved in order to ensure that the Alliance can adequately align its political will to take on new missions with its ability and flexibility to resource them.

Across the NATO command structure, U.S. military leaders are privileged to hold key positions of influence shaping the direction of the Alliance (See Enclosure 6). The combined U.S. and European military experience helps in promoting new solutions to today's security challenges. Such solutions have resulted in NATO's in-

creased flexibility and agility and have resulted in increased deployments NATO's forces around the globe.

Enclosure 6: EUCOM and NATO Command Structure



Operational Trends In the Alliance

NATO recognizes the interdependent instability of the current strategic environment. As such it has assumed a more active leadership role in ongoing operations. These include: ISAF in Afghanistan, NATO Training Mission-Iraq, NATO assistance to the AU in Darfur, Operation Active Endeavor, Balkan operations, and humanitarian operations in response to the Katrina and Pakistan disasters. EUCOM works closely with the Alliance to ensure the seamless execution and successful conduct of these operations.

- International Security Assistance Force. ISAF is NATO's primary operation and is currently responsible for the security and stability of half of the territorial landmass of Afghanistan and is in the process of expanding its operations to the south and east. As NATO assumes this increased re-

sponsibility, its force levels will surpass those of the coalition, and will constitute the largest ground operation in Alliance history. It is envisioned that the United States will continue to contribute significantly to this mission. U.S. leadership in both the ISAF command structure and the adjacent counterterrorist operations of the coalition will be offered to NATO. NATO has built on the coalition concept of Provincial Reconstruction Teams and successfully supported the Government of Afghanistan in its Presidential, National Assembly, and Provincial Council elections.

• NATO Training Mission-Iraq (NMT–I) In Iraq, NATO has deployed a successful training mission to Baghdad to assist the government's efforts to establish security and stability. Its "in country" mission complements the work of the U.S.-led Multi-National Security Transition Command-Iraq (MNSTC–I) in training Iraqi security forces. NATO focuses on the military strategic and operational levels, strengthening the Iraqi Training and Doctrine Command and providing command and staff training for mid- to senior-level officers. In September 2005, with support from the NATO Training Mission, Iraq opened its National Defense University. The Alliance has also provided numerous training opportunities for Iraqi officers and civilian leaders in educational facilities across Europe and coordinated the acquisition and delivery of donated military equipment from NATO nations.

• African Mission in Sudan (AMIS). In Africa, NATO and the European Union jointly responded to an AU request to airlift its forces. NATO generated and coordinated the majority of airlift, provided personnel to assist with staff capacity building activities in key AU headquarters and deployed training teams to work with their AU counterparts. Currently NATO's support is committed until May 2006; however, strategic partnerships are developing, and extensions or expansion of NATO support is possible if requested by the AU. NATO's capacity building approach to increase stability and security on the continent complements EUCOM's efforts to deliver considerable long-term reward with minimal, focused, and appropriate effort.

• Operation Active Endeavor (OAE). Closer to Europe, NATO's only Article V operation, OAE, continues to counter terrorism and illegal activities in the Mediterranean. Additionally, it provides an opportunity for non-NATO "Partnership for Peace" and "Mediterranean Dialogue" nations to enhance their involvement and interoperability. In 2006, Russian vessels will join OAE, with Ukrainian vessels anticipated participation in 2007. Formal discussions have commenced on the possible involvement of Algerian, Israeli, Moroccan, and Georgian participation as well.

• Balkan Operations (Kosovo Force). The Balkans were arguably NATO's first test in addressing the dangers associated with interdependent instability. Showcasing NATO's enduring commitment to its neighbors, and by using security sector reform initiatives, the Alliance has successfully set the conditions in the region for the peaceful transition to democratic institutions and is making progress toward government controlled and reformed militaries. Political and institutional incentives linked to standards of behavior have encouraged Balkan states to recognize the benefits of closer integration with the EU and NATO. This has resulted in considerable progress in the capture of persons indicted for war crimes, though two "most wanted" remain at large.

An example of NATO's successful operations in the Balkans to date is Kosovo Force (KFOR) which continues to provide critical security to this region in support of the international community. NATO's persistence in Kosovo has enabled the international community to establish the Kosovo status talks. As these talks develop over the coming months and consensus is reached between ethnic Kosovar Albanian and Serbian communities, NATO will be postured to restructure force levels significantly in the province and in the Balkans.

Evolving Operational Capabilities

NATO's quick response to Hurricane Katrina and the devastating earthquake in Pakistan demonstrates that not all stability operations emanate from armed conflict. Through its primary transformational vehicle—the NATO Response Force (NRF)—the Alliance has prepared itself to respond to future crises across the full spectrum of military missions. Due to its agility, adaptability, and expeditionary nature, the NRF proved ideally suited to assist in the relief efforts and to stabilize the affected region. These two disasters highlighted the NRF's ability to operate at a strategic distance, outside NATO's boundaries, and in the most challenging of environments.

Upon reaching full operational capability (FOC), planned for October 1, 2006, the NRF will be supported by five capability "pillars" of strategic lift, advanced planning and intelligence fusion, integrated logistics, deployable communications and information systems, and full force generation. Failure to meet the full Combined Joint Statement of Requirements (CJSOR) is a current obstacle to achieving FOC. Its future viability will depend on member nations' willingness to resource the necessary forces and commit to a structure of common Alliance funding.

Additionally, NATO is dedicated to establishing a SOF capability, recognizing a gap during recent operations. Recent NATO transformation initiatives, especially in the NRF, have provided a real focus for establishing NATO SOF capabilities, co-operation, and cohesion. EUCOM's SOCEUR actively leads an effort to establish the Alliance's special operation capabilities by the end of this year. Like their U.S. counterparts, NATO SOF will be specially selected, trained, equipped and organized. This new capability will strengthen NATO's out-of-area crisis prevention and ensure a rapid deployment capability.

Common Values for Common Security

NATO's commitment to ongoing operations demonstrates it has turned the corner from common defense and begun the journey towards common security. As the Alliance continues to redefine its role in the 21st century, it anticipates further opportunities to promote stabilization and security.

The Alliance was formerly anchored to a need for common defense in order to deter the enormous conventional military threat posed by the Soviet Union. With the end of the Cold War, however, the anchor point stabilizing the Alliance in turbulent seas was removed and to date the Alliance has not successfully articulated its new course. Economic interdependence, the nexus of WMD and terrorism, vulnerable energy infrastructure, disenfranchised people and ethnic minorities, abject poverty and natural disasters have created a new security mosaic and demand new "anchor points."

Potential "anchor points" include expanding NATO operations in support of combating terrorism; enhancing security, stability, and reconstruction activities; increasing involvement in critical infrastructure security; ensuring the flow of energy to markets and consumers by assuring safe and secure access to sources; and engaging in a more active role in preventing the proliferation of WMD and corresponding consequence management actions. This mosaic of asymmetric security challenges will define the contribution NATO will make towards our common security. A key component of such an effort would be clearly articulating to member nations' populations the Alliances new "raison d'etre." There is an opportunity during the Heads of State NATO Summit in November 2006 to identify the new "anchor points" that could secure the Alliance's direction for the foreseeable future.

While NATO was critical to preserving peace and stability in Europe throughout the Cold War, it is becoming increasingly apparent its future will be even more dynamic. As the Alliance endeavors to overcome new challenges, it recognizes that the security landscape requires a more far-reaching strategy to protect its interests and a different methodology by which it resources its evolving missions. Over the course of the past few years, NATO has brought the benefits of strategic security of the trans-Atlantic relationship to new locations throughout the world. Through its actions, NATO has enhanced the concept of common security, which supports the Alliance's traditional objective of providing for the common defense.

NATO is a great alliance which remains destined to do great things. As we look to the future, it is possible to conclude that NATO's most important days and most significant contributions still lie in the certainty of a challenging future.

CONCLUSION

The EUCOM is fully and actively engaged in a diverse and expansive area of responsibility while simultaneously transforming its posture to better meet the new and evolving security environment. As we further refine the nature and scope of our efforts to implement an effective security strategy, we would do well to reflect and appreciate the value of our leadership role in global affairs. We should redouble our efforts to remain a shining example of the principles of freedom which stand as a beacon of hope for so many in our unsettled world. The indispensable benefits of our forward-deployed presence will continue to be a hallmark of our efforts as we expand our rotational influence and enhance the framework of our Theater Security Cooperation programs. Success in the years ahead will require institutional innovations, increasingly cohesive and comprehensive national approaches to the challenges and greater coordination throughout the interagency and within the framework of the international community.

There has been debate with regard to the relevance of NATO in the post-Cold War era. I am among those who passionately believe in the relevance and importance of NATO in this still new century The vitality of this organization lies in its ability to find solutions through dialogue. Those who fail to understand the value of democratic dialogue perceive occasional political differences and associated animated discussions as divisions that undermine the viability of the organization. In truth, our so-called differences are the pillars that uphold the institution and strengthen its character. Many have predicted the demise of the Alliance; yet it has demonstrated astounding resiliency by transforming itself in ways no one would have thought possible in 2000. Unquestionably, NATO remains the preeminent security organization in the world. Its future viability and its built-in ability to recognize the interdependency of our world, as well as the threats that challenge our common interests will fuel a continuing transformation process for years to come. The changes underway clearly demonstrate that NATO member nations have understood the need for reform in order to be relevant on the world stage. Challenges remain, but they are visible and are being addressed. Our leadership contributions to the Alliance are more critical than at any other time in the Alliance's history.

We look forward to working with the members of this committee as we assist in the development of effective security structures that are essential to our theater, our Nation, and to our allies. The next 2 years will be critically important in this regard. The EUCOM looks forward to making important contributions to the achievement of our national goals and objectives.

Chairman WARNER. Thank you very much, General, for a very excellent statement covering a lot of responsibilities that you have.

Given that we will have a classified session following this and the need for each of us to attend various functions in the middle of the day, I would suggest we try an 8-minute round and hopefully we can conclude our questions in one round for each member. So we will proceed on that basis.

First, General Jones, we awakened this morning with the distressing news that a very prominent senior officer in the Iraqi forces lost his life in Baghdad. It draws our attention then to what NATO is doing by way of training and equipping those security forces so they can fully provide for their own security.

First, did you know that officer in conjunction with the work that you are doing over there?

General JONES. No, sir, I did not know him.

Chairman WARNER. The type of training that you are doing, how does that bear on what is now the immediate concern, namely insurgency—a variety of terms have been applied to it, but insurgency, real operations, terrorists—and the need to rapidly train the security forces in Iraq to take on that responsibility?

At the present time—I am speaking for myself—I do not believe that the term "civil war" applies to the overall situation there, even though it is gravely serious, and there is all too much secular interest in fighting at the very time that we are trying to urge this country to bring together its diverse political structures into a unified new government and for that government to quickly, and I underline "quickly," take over the full responsibilities of administering to a sovereign nation.

Could you elaborate on the type of training and the success that you feel that has been achieved to date by NATO and the extent to which there is serious participation in other nations, members of NATO of course, in contributing to these goals?

General JONES. Mr. Chairman, the NATO mission in Iraq is relatively straightforward. It consists of three elements. One is to train approximately 1,000 junior officers a year for service in the Iraqi army. We do this at a training base called Arustemaya, which

is on the outskirts of Baghdad. This operation is fully resourced and functioning. I was in Baghdad a month ago and I attended the first graduating class of these young officers. They are trained along the Sandhurst model. The lead nation is Great Britain. I was very impressed by the training I saw.

Chairman WARNER. How soon do you anticipate that some will be graduating and available for immediate assignments?

General JONES. This graduating class after graduation went right to the field and took over units.

Chairman WARNER. How long ago was that?

General JONES. A month ago, sir.

Chairman WARNER. Good.

Have you had an opportunity to really assess in some depth the capability of these young men to become good professionals and to establish a solid loyalty to the government of Iraq, as opposed to their understandable loyalties to their own origins, namely the tribal situation which is very dominant throughout that region?

General JONES. Mr. Chairman, the class that I saw and the training that I saw—and I am responsible for, along with the Allied Command for Transformation, for developing the syllabus and the manning, the instructors, and I have spoken to the trainers, and they believe that the product that they are delivering is in fact a very, very good product.

I attended the swearing-in ceremony of these young officers as they took the oath of alliance to the government of Iraq, to the constitution of Iraq. It was—one can never be completely sure, but it was certainly—there was a lot of passion in that room. You could see it on their faces, that they believed in what they were doing.

Chairman WARNER. The ultimate question is, should the conditions continue to deteriorate where a civil war in fact is taking place and this new government is struggling to continue, it is dependent on these forces that you have trained and that we and other coalition partners have trained to fight to support that new government, because, speaking again for myself, I strongly urge that we have plans whereby we do not commit the coalition forces and principally the U.S. forces into a civil war situation and subject our young men and women to that type of risk.

We fought bravely side-by-side with the Iraqis to free their nation. It is a sovereign nation. They have a government elected by the people, and it is time that they took charge and took that full responsibility.

Do you feel that these young men that have been trained under your command will keep the allegiance to that new government in the time of civil strife and fight to preserve it, rather than revert to their own constituent interests back in the tribes? I do not have any disrespect for the tribes. It is just that they have a very powerful influence.

General JONES. They do, Mr. Chairman. I was impressed by the seriousness of purpose as they took the oath. I am confident that they were put through a rigorous program and I believe they will do their job.

Now, far more important than my observation is, of course, General Abizaid's and General Casey's——

Chairman WARNER. We are going to have that opportunity very shortly.

General JONES.—who are deeply involved. They also are very high on these young people.

I might just, to complete my answer to your question, say there are two other aspects to NATO's training mission. The first one is the training of the 1,000 officers. The second is NATO has invited Iraqis to come out of country to go to various countries for more specialized training. So we are doing that as well. The third part is we are providing equipment for the emerging Iraqi army. Most recently, we shipped over 170 T–72 tanks from Hungary to the new army.

Chairman WARNER. Let me quickly go on and touch on the Afghanistan situation. Your own views as to whether or not the security situation is not improving—as a matter of fact, it is becoming more serious and the ability of ISAF to continue its goals, given those changes in the security situation?

General JONES. Mr. Chairman, I am very optimistic that the NATO force that is going to take over more of Afghanistan in the next few months, that they will be a force of very great capability and will be able to withstand any challenges that it faces.

I would like to comment on the security situation because I think it is important to understand that violence in Afghanistan is of a disparate nature. It is at least composed of a group of five different sectors of the society: the criminal element, some Taliban, some al Qaeda, the narcotics traffickers, remnants of warlord organizations. These are people that are operating in the fringes between where the Karzai government can reach and the higher level of the people's expectations.

I think that we should be very careful not to fall into the easy trap of saying that every act of violence means that there is an insurgency coming back. Of far more importance to me in Afghanistan for the long-term reconstruction of Afghanistan is the narcotics problem and the percentage of the GDP that is dependent on the narcotics trade. It is not to say that I do not recognize the fact that there are upticks in violence, but they are generally tied to specific events: a parliamentary election, a presidential election, a local election.

What I see in Afghanistan is an inability of an insurgency to mass. I will see—we will see more instances of improvised explosive devices (IEDs) and things like that because they are going to copycat what they see elsewhere. But I think we would be wrong at this point in thinking that this is a trend in terms of an insurgency.

I think the Karzai government deserves our support. We should continue to bolster the five pillars of reconstruction that the G–8 nations have agreed to. We should make sure that this year we particularly add reinforcements to the developing of a police, which needs to be paid and needs to be honest and free of corruption. We should continue to lend our efforts to the reform of the judicial process.

Chairman WARNER. General, I am going to have to ask you to finish that for the record.

General JONES. I understand.

Chairman WARNER. I want to finish my last question to both Admiral Fallon and General Bell. You commented, General, on the half century we have had a very significant part of our military there securing the southern part of that Korean peninsula. It has been an important mission and a successful mission.

But I pause to reflect on, the Korean War was a coalition war. I am not able to recall from memory, even though I had a minor role there during the winter of 1951–1952 in the Marines, but it seems to me there were at least seven or eight nations that had forces aligned to secure that peninsula. Since then we have seen through the evolution of NATO, the Balkans operations, all multinational, Gulf One, Gulf Two, multinational, Afghanistan multinational.

Has anyone given some thought as to whether or not we should rethink this very heavy commitment of the United States and begin to internationalize that additional support that the South Korean government and our government think is necessary? Because if, Admiral, a conflict burst out on the Korean peninsula it would have serious adverse effects on other nations in that region. Consequently, it seems to me some thought ought to be given to having them, not only members of the Six-Party Talks, but also other nations bearing some of the heavy costs and burden of maintaining the current posture on that peninsula.

Has any thought ever been given to that, in light of all the other operations that have taken place in the half century since that conflict?

General BELL. Thanks, Senator. I think I can take a pretty good stab at that. There are two factors at play here with respect to our commitment or the international community's commitment. One is the bilateral security treaty that we have, and I know you are fully familiar with that, with the ROK, which is really the basis for our commitment today and that commitment that we have had over the last decades.

Secondarily, there still remains the United Nations Command, very much viable but admittedly not with troop contributions. That U.N. command consists of 15 nation representatives which are at hand today and prepared, at least in theory, should war break out to recommit to military operations.

Now, I am also the U.N. commander as well as the bilateral treaty commander under the auspices of what we call the CFC. So while I cannot speak for all those nations certainly in terms of what they might or might not commit, what I can inform you of is that the framework to discuss a potential broader commitment is resident and that could certainly be undertaken.

But meanwhile, the ROK continues to progress——

Chairman WARNER. Well, that is all fine, but I'm trying to think about the very heavy commitment. We have a force today, our United States military, spread throughout the world, and it is placing severe burdens on the members of the Armed Forces and their families. We continue for over a half century with one concept, against experience in all the other conflicts of significance where there has been multinational participation.

If that conflict were to erupt over there, you and I know it is probably going to be decided within days or weeks. It is not going to be a prolonged one.

General BELL. No, sir, it is not.

Chairman WARNER. Therefore they should have people there, and if they had them there I think they would be more serious about trying to deal with North Korea because they would have some exposure and risk that they do not have now.

Do you have any comments, Admiral?

Admiral FALLON. Mr. Chairman, I would point out that, regarding our force levels in Korea, we are in the process of coming down about 20 percent of that structure over the past year and I think that drawdown to 28,000 or so should be completed this year, and going down to 25,000 as a goal for the year beyond that.

General Bell knows the details of this, but the ROK government is clearly interested in picking up more of the responsibility for particularly the land operations on the peninsula. I see that as this desire develops into actionable plans, which we are going to have to work with, and General Bell has the lead on this, I would expect to see that our force levels might continue to decline.

Chairman WARNER. All right. I gave you the option to comment on something innovative in the future. So be it.

Senator Levin.

Senator LEVIN. Thank you, Mr. Chairman.

I'd like to pick up on Senator Warner's first questions, General Jones, relative to the training and equipping of Iraqi officers, what is the goal in terms of total number of officers to be trained under the NATO program that you described? What is that number?

General JONES. That number is 1,000 per year, sir.

Senator LEVIN. For how many years? How many do we need totally?

General JONES. I think it complements General Abizaid's program, so I think it's 1,000 a year, and of course there will be——

Senator LEVIN. Indefinitely?

General JONES. Indefinitely, to feed the requirements, the spaces.

Senator LEVIN. Do we know whether or not there is a balance of Shiite, Sunni, and Kurd in the officer corps that you are training?

General JONES. In this, in the NATO mission, they are integrated. There is no Shiite class or Kurd class.

Senator LEVIN. Is there a significant number of all three groups?

General JONES. Yes, sir.

Senator LEVIN. On another NATO issue, is the NATO Response Force or the NRF expected to become operational in October?

General JONES. By October 1, the goal is to declare the force fully operationally capable.

Senator LEVIN. All right. Relative to Africa, is NATO prepared to take on a larger role in support of the AU mission in Darfur?

General JONES. NATO's role is to provide some airlift into the Sudan for participating battalions, which we have done and are doing, provide capacity-building for the AU forces in the way of helping them get ready for expeditionary operations, command and control, logistics, and the like. But it is a modest number of people involved in this and that is the extent of the mission at present.

Senator LEVIN. According to an article in the Washington Post last Friday, the U.N. Secretary General has requested that U.N. members consider providing close air support to AU mission forces in combat situations. Is it your opinion, judgment, prediction, that our NATO allies would be prepared to provide close air support to those forces in combat situations?

General JONES. Senator, I think that I have no—I have received no guidance and no instructions from the NATO to prepare for that kind of mission, and as a matter of fact NATO has not received any communication from either the U.N. or the AU that would lead me to believe that there is—there is no request on the table for an extension of the mission.

Senator LEVIN. If there were a request, what do you think the response would be?

General JONES. I think it is quite possible that nations would consider expanding the capacity-building and doing those things that would help the African battalions be more successful as they have deploy into Darfur. Whether they would extend to close air operations and the like would be very speculative on my part and I would just as soon not comment.

Senator LEVIN. Okay, thank you.

General Bell, you mentioned to me when we met in my office that for the first time in 2 years North and South Korean military officials at the general officer level have now met to discuss issues of common interest. Would you tell us what you believe the significance of that meeting is and whether you regard this as a development as favorable or unfavorable?

General BELL. Thank you, Senator. You are right, they have just concluded a series of meetings over 2 days last week. There were no substantive outcomes from the meeting, however. Their purpose in this meeting—and there was an agenda which they put forward initially—was to talk about the fishing zone in the western sea area, which has been an area of contest over the last several years. You may recall back in 2002 the gunboat incident.

Nonetheless, what they were hoping to do is come to an arrangement during the upcoming fishing season, which starts in May and goes through June, to lower tensions in the area. So we supported that and we were encouraged by the fact that the North agreed to discussions with the South.

Regrettably, the North's position during these talks was to eliminate the very demarcation regimen that we have that keeps forces separated over there, to eliminate that and create some kind of free zone of movement. This was not satisfactory to the ROK and so the talks did not produce substantive outcome.

Having said that, the fact that at the two-star level the two nations met to discuss mutual issues of this nature I think is positive. We should encourage this. These kinds of confidence-building opportunities and confidence-building measures, engagement strategies, can be beneficial. So I would continue to encourage it. As I meet with ROK military, I will encourage them to continue these kind of engagements, and hopefully we can see some progress in the near future.

Senator LEVIN. Thank you, General.

Admiral Fallon, the QDR identifies China as a likely competitor. China has announced recently that its defense budget is going to increase by 15 percent this year. Is it a foregone conclusion that China and the United States are going to be at odds over security in the Pacific or even globally?

Admiral FALLON. No, sir, I do not think that is necessarily the case at all. There is a tremendous potential for good here in this relationship between the two countries. We have many, many common interests. It has been our desire to try to work with China to find areas in which we might move forward on a constructive relationship.

That said, of course we are going to have to be cautious and careful because there is still activity ongoing with the Chinese that makes it challenging for us to engage with this country. The defense budget increases which apparently are continuing and certainly at a rate, near as we can tell, that is higher than their GDP growth, which has been pretty spectacular in the past decade, and the lack of transparency with the Chinese is a cause for concern.

We have asked for a significantly increased engagement program this year. The Secretary of Defense has agreed to that. We have had a negotiation with the Chinese and that is on the table to take place this year. I think that we need to continue to press on in this area because the absence of any engagement whatsoever would put us back where we were in the last couple of years, where we virtually have gone down parallel paths with no interaction.

I think this gives us an opportunity to by example try to get them into the kinds of behaviors that we enjoy with other countries in the region.

Senator LEVIN. Do you in the DOD want increased military-to-military cooperation and contact with China?

Admiral FALLON. Yes, sir, we do.

Senator LEVIN. Finally, Admiral, what impact, if any, do you believe that the U.S.-India civilian nuclear cooperation agreement, assuming that Congress supports it and allows it to come into force, would have on relations between India and Pakistan?

Admiral FALLON. Senator, I think there are several opportunities here for positive impact. First of all, the relationship we have with India. This is a very, very large country, huge population, that has been not particularly working with us until very recently. We are trying to form a new strategic alliance with this country. Certainly in the military-to-military area we have opportunities and we would like to see continuing engagement, because we think that this country not only has an existing huge influence over South Asia, but its strategic position in the world with its huge population, very advanced technological and educational know-how, is a major factor in the world.

The situation regarding Pakistan in the past year has been getting considerably better in my opinion. De-tensioning along the lines of friction in Kashmir through active engagement by both Pakistan and India have moved us forward in this area.

The fact that the President went to visit both countries, the proposal for a very significant arrangement with India, then going to Pakistan, I think that the potential for continued de-tensioning and for an improving situation between these two countries is, I would

hope, likely. We have had a close relationship with Pakistan. They have been cooperating very well with us in the war on terror and I think that the outreach to India in the last year or so is significant. I think both countries see that we are reaching out to both in parallel, and it would be my expectation that we actually make progress in our relationship with both.

Senator LEVIN. Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much.

Colleagues, I am advised that we will be having a vote in a matter of a few minutes, and it is my hope that we can continue this hearing. Senator Inhofe has left to go vote early and he will return and chair. But right now, Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman. I want to thank the witnesses for being here today and thank them for their great service, as well as the members of the Armed Forces who were brought with them today.

General Jones, it has been about 3 years since we expanded NATO. There was some controversy surrounding this rather significant enlargement. How are these new members doing?

General JONES. Senator, in 2004 we did in fact admit seven new members, and in my judgment they are bringing not only value but also renewed energy and spirit to the alliance. New members, especially former Warsaw Pact countries, are still basking in the glow of freedom and they bring that energy to the alliance. They are trying hard to align their military capabilities with what the alliance needs. Some of the economies are not quite as strong as we would like, but we have this pledge of 2 percent of GDP for national security and they are trying hard to meet those goals.

So my report would be that they are bringing value and capability and spirit to the alliance and it has been a good thing.

Senator MCCAIN. Thank you.

I would like to go back to Darfur a second with you. In the last 2 years the United States has provided $150 million in support to the African mission in Sudan. In the same period, it is estimated that 300,000 to 400,000 Sudanese have been killed and almost 2 million refugees created. It was I believe 2 or 3 years ago that then-Secretary of State Colin Powell declared that genocide was taking place in Darfur. The latest reports are that it has now spilled over into Chad.

General, I know you do not make policy and I know that this is a tough question. But this trend seems to me that we are just going to see continued needless deaths and dislocation and, as was determined by our Secretary of State a couple years ago, was genocide in Darfur. Do you have a recipe or an idea of what we need to do from a pure military standpoint, or is it not a military solution?

General JONES. Senator, I think obviously when you have chaos and the types of events that are going on in a place like Darfur, there is an application for military forces. The problem has been that there has been an insufficient number of AU peacekeeping forces in terms of the problem.

Senator MCCAIN. In terms of numbers or capability?

General JONES. In terms of numbers and perhaps capabilities, but certainly numbers, to stem the violence against the humani-

tarian operations, which puts a couple of million refugees at risk as well as—I just met with the International Committee of the Red Cross in Geneva 2 weeks ago and they have a big program on the ground, and one of the things that they are hoping for is that we do not have this displacement of upwards of 3 million people towards the cities. They are trying to get out to keep people in their homes in order to try to keep some management of this crisis.

But it is a serious problem. It has a military solution set, but it takes the will of the nations. It takes the U.N. to task us to do things, and we are waiting for that political process to come together as to what it is the international community wishes to do.

Senator MCCAIN. I thank you, General. Again, I know it is not your job, but it is frustrating for us to keep saying never again, and it is very clear that the situation, the status quo, is not going to have a measurable effect. I would like to say that I was pleased that the President of the United States made a very strong statement concerning this issue recently.

I am afraid we are going to have to at least come clean and say there is nothing we can do about it, there are going to be some millions of people that are going to die, and that is the way things happen in Africa, which I would deeply regret, or we have to develop some kind of plan to attack this situation. I understand it is not purely military. It is political, divisions within the country.

But we may be asking you and NATO, since you are already very involved, at least in northern Africa, in a very beneficial way in the war on terror, to come up with some ideas as to how we can address the issue. So it is very disturbing and I hope that you can give us the kind of advice we need, or at least the President, as to what would be necessary to bring this genocide under control.

I would like to just mention to you, the State of Israel now is under direct threat, according to the President of Iran, who has called for on numerous occasions the eradication of the State of Israel. How are NATO's relations with Israel? Are there any?

General JONES. Israel is part of a group of seven nations called Mediterranean Dialogue nations and that is a formal relationship with NATO, to include military-to-military relationships. We have recently this year revitalized that Mediterranean Dialogue to include five countries of North Africa and Israel and Jordan on the northern rim of the Mediterranean.

We have had NATO Airborne Warning and Control System (AWACS) deployed to do some demonstrations in Israel and we do have an active dialogue with the Israeli Defense Force in terms of interoperability, and particularly as it regards the security of the Mediterranean Basin at sea.

Senator MCCAIN. Clearly, if there were an attack on Israel by Iran—it is not inconceivable, given their public statements—this could destabilize the whole region.

General JONES. Absolutely. If that happened that would certainly do that.

Senator MCCAIN. Thank you, Mr. Chairman. I thank the witnesses.

Chairman WARNER. Thank you very much, Senator McCain.

Senator Akaka.

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

Admiral Fallon, it is good to welcome you here to Washington, DC.

Admiral, the QDR released last month stated that it is the DOD's intention to increase the Navy's presence in the Pacific. According to the QDR, the Navy will adjust its force posture to provide at least six operationally available and sustainable carriers and 60 percent of its submarines in the Pacific.

I believe basing an aircraft carrier in Hawaii, co-located with our nuclear-capable shipyard, will prove the best option from an economic and quality of life standpoint, in addition to its strategic benefits. Admiral, when will the Navy plan to move forward on implementing the QDR's decisions and when will the specifics on the forward basing of an additional aircraft carrier in the Pacific be determined?

Admiral FALLON. Aloha, Senator. Thank you very much for the question and for your suggestion.

The Navy is working closely with us as we look at the overall force posture laydown in the Pacific to try to optimize our force structure. Several submarines have already had their home ports moved to Pacific bases. We are studying particularly the intricacies of forward basing on Guam as we absorb the negotiations, the DPRI negotiations with Japan and what that means. I am leading from my staff a study of each of the components, the Navy, Army, Air Force, and Marine Corps' changing plans in the Pacific, so that we can have one comprehensive look at this.

The Navy is taking steps to try to increase the availability of aircraft carriers in particular in the region. There has not been any decision to go forward on a new permanent home basing for one of those carriers yet. We are still looking at this and, sir, we will advise you. The Navy and we together will come forward when we have what we think is the recommended position here.

Senator AKAKA. In addition, Admiral, please comment on the increased capability and flexibility that an additional aircraft carrier in the Pacific would provide?

Admiral FALLON. Sir, the striking power and flexibility of having these ships have certainly been demonstrated many times in the past. We will be looking at this to ensure that we have enough capability to meet our response requirements under existing contingency plans and as we try to forecast the future requirements.

We are also mindful that there are other demands on these forces in other parts of the world, and that the Nimitz-class carriers are going through a cyclic refueling cycle, so that at any period of time now for the next couple of decades we are going to have one of these ships off the line. So I believe that the commitment the Navy is making to the Pacific is as we go through this restructuring and the refueling that the Navy is going to make every effort to make sure that there are six actually available in the Pacific. Exactly how we do that is still under study and it is going to have to be closely coordinated with these refueling schedulings that are ongoing.

Senator AKAKA. Admiral, at a recent Homeland Security and Government Affairs Committee hearing on Hurricane Katrina the Secretary of Homeland Security, Michael Chertoff, was unaware of the relationship between PACOM and NORTHCOM as it relates to

homeland security. Given what appears to be some confusion regarding the appropriate delegation of authority, what assurances are you able to give me that Hawaii's needs will be able to be met in an emergency situation? Also, what plans do you have to make sure that lines of authority and lines of communication are more visible in the future?

Admiral FALLON. Yes, sir. No confusion here in the military between NORTHCOM and PACOM. We know that I have responsibility for Hawaii and the Pacific islands. We have been working this with NORTHCOM in an ongoing series of dialogues and exercises to ensure that we have seamless coverage in this area. We recently had a session with Governor Lingall and our people to discuss emergency responses to cover Hawaii. I feel very confident that we have this well in hand and we will continue to work with NORTHCOM to solidify the lines of responsibility to make sure we are well covered here, sir.

Senator AKAKA. Since 1997, Admiral, the avian flu has spread to more than a dozen countries in Asia and Eastern Europe. Just recently, the first fatalities outside of Asia were reported in Turkey and Iraq. Although there have been no documented cases of avian flu in Hawaii, I am concerned about its potential spread to the State due to its position as an important Pacific entry port.

Please tell me what plans PACOM has made in case of an outbreak and what role you would play in relation to other Federal and State agencies in this?

Admiral FALLON. Yes, sir, Senator. It is a high interest item. We have had a lot of discussion, a lot of research. Marine Forces Pacific Commander is my designated lead for this project. I have reviewed several in-progress reports from him and his staff. In fact, I believe that we are in the lead—if not in the lead, we are certainly close to it—in this Nation's study and understanding of this particular problem.

We have provided material back here to Washington to both the DOD and to the DHS. We have had ongoing discussions with our allies in the region. In fact, just several months ago in Hawaii we hosted a chiefs of defense conference at which we invited commanders from throughout the Pacific area and we specifically took up this issue of the pandemic flu potential.

It was very enlightening for us to see that there is a lot of work being done by other countries in this area, too. We exchanged ideas and in fact I think we are poised to continue to develop our responsive plan. We talked to the governor about this as well. It is certainly an area of high interest and as we continue to see cases develop we are working hard to refine exactly how we can respond.

We have a very good template based on the tsunami response last year. There is an ongoing series of meetings in which we have continued to share lessons, not only among U.S. staffs and organizations, but with our allies as well. We are going to pay very, very close attention to this in concert with each of the organs of government here in the U.S. as we go forward.

Senator AKAKA. Thank you very much, Admiral, for your responses.

Thank you very much, Mr. Chairman.

Chairman WARNER. Senator Reed.

Senator REED. Admiral Fallon, if I may, India is in PACOM and Pakistan is in CENTCOM, so you have a potential unity of command issue at a critical border. How do you handle this on an operational basis, not only with respect to those two countries, but with respect to CENTCOM?

Admiral FALLON. Yes, sir. So far not an issue and I aim to keep it that way. We have very good relationships with CENTCOM in this area. Each of my component commanders works very closely with his counterpart in CENTCOM. In fact, we can talk about this maybe in the closed session, but I just had a communication from one of the CENTCOM commanders on an issue asking for help. We have had several recent events involving forces and exercises that have been very well-handled across the border.

So I think we are pretty well-poised to make this a non-issue. We pay close attention to it and the people that actually operate out in that area are very attuned to it.

Senator REED. Do you have a formal India-Pakistan cell, a staff section?

Admiral FALLON. No, I do not have a specific cell that works those two issues in concert. Of course, we stay very close to the Indian military and from CENTCOM I understand that they also stay close to Pakistan.

Senator REED. In your statement, Admiral Fallon, you say that PACOM forces require ready, available, and properly maintained prepo stocks. You go on to say we still have an immediate need for replenishment of these stocks and other preferred munitions. What is the status of your prepo? What percent is there at the moment?

Admiral FALLON. I cannot give you an exact percent, but I will tell you that we looked at this very closely because last year I was concerned about the status of some of these supplies because of the material that had been taken out and sent to CENTCOM. I am satisfied that we are on track to replenish these supplies in a manner that makes sense. Recognize that there are several factors at work here. Certainly there is an absence of material that was intended to be dedicated to the Pacific. But I also realize that there are equipment changes and weapons changes that are in progress and it would not make a lot of sense to me from an economic standpoint to go ahead and build up these supplies with material that we know is in the process of changing out, such as armored vehicles and precision weapons and Navy Tomahawk missiles.

So I think the plans are sound. I have drilled into this pretty heavily and my chief of logistics is the point man for it. I think we are on the right track, sir.

Senator REED. Does this budget that has been sent to us make you whole, give you 100 percent of your prepositioned stocks?

Admiral FALLON. It is moving us in the right direction, sir. It is not going to happen in 1 year.

Senator REED. Do you have any idea how many years?

Admiral FALLON. I will get back to you with the specifics on it, sir.

[The information referred to follows:]

The equipment is still being tested with no conclusive results at this time. Results will be forthcoming.

Senator REED. General Bell, could you make a comment on the same issue, your prepositioned stocks, what percentage do you have and how fast will it take you to get whole?

General BELL. Thank you, Senator, I sure can. The principal nature of the prepositioned stocks on the peninsula in Korea surrounds a heavy brigade combat team, Army—M–1 tanks, Bradley fighting vehicles, et cetera. That is the essence of it. The readiness of that heavy brigade combat team has been an area of great focus for the last year. What we found about a year ago was that the amount of money that we were spending to maintain the equipment, repair parts, just maintenance by mechanics, hours on the job—and it is mostly by civilian mechanics—was inadequate and consequently some of that equipment was not as ready as it should have been.

We have done an enormous amount of work. The amount of money that we are spending to buy repair parts and to hire people has been tripled just in the last year. The Army Materiel Command has hired an additional 160 mechanics to work on the equipment and the latest numbers are very positive on the readiness of the equipment, 96 percent readiness. All the combat equipment is present.

So it is very encouraging and very positive. I will tell you that we are still missing some equipment, and obviously if it is missing it is not ready. While most of this equipment is in the area of combat service support—trucks, Humvees, which went to Iraq, deuce and a half trucks—these are very important and necessary to make this combat team operate effectively. We do need that equipment, but it is not a show-stopper.

So my report to you, Senator, would be that a lot of energy has been put into that forward prepositioned heavy brigade combat team, which is right on the cusp of potential combat, and the results are positive. The budget accounts for a continuing focus on that equipment, although I would tell you there is about one-third again more money that I believe we should put into the maintenance of it to really give me the satisfaction that I would prefer. But it is a very positive story and a lot of great work has gone on, sir. Thank you.

Senator REED. I appreciate the progress that is made, but how does that translate into readiness? Because one of the key aspects of the strategy is if hostilities ensued folks would have to fall in on that equipment, and without trucks you have a problem.

General BELL. It is vital. As you are aware, we redeployed a heavy brigade combat team from Korea to Iraq, where they performed magnificently for a year in combat, and then back to Fort Carson, Colorado. So the ability of a heavy brigade from the United States Army to come and fall in on that equipment and have that confidence that it is ready is necessary.

So the first thing we have to do is make sure the stuff is ready. The second thing we have to do is exercise it. We have to draw it, at least a good sample of it, and take it to the ranges, put it out on the roads, et cetera, to make certain that what we are seeing in the warehouses is translated into capability where it counts. We are doing that in various exercises. We are beginning this exercise called Reception, Staging, Onward-Movement, and Integration. I

will not go into the details, but we will sample this equipment and I will get back to you on how well it is performing. I think it is going to be pretty good.

[The information referred to follows:]

[Deleted.]

Senator REED. Thank you.

General Jones, just to be consistent, can you comment on your command's prepositioned stocks?

General JONES. Yes, Senator. I will be brief. With regard to the Army, about 88 percent of the Army's European prepositioned stocks were deployed in support of OEF and OIF. This equates to roughly 11 out of the 12 battalions prepositioned in Europe. The cost to reset these 11 battalions will be approximately $144 million. Of the 11 battalions, EUCOM has refitted one battalion to date.

The Navy has approximately 30 percent of prepositioned ordnance that was used to support OIF. The Marines, approximately 40 percent of the prepositioned items in Norway were used to support OIF-OEF. The Air Force has a wide variety of equipment that was used in both missions and is still being used in both missions. It is estimated that their reconstitution cost is about $2.9 million. If you add the Harvest Eagle replacement, it would be about $3.9 million.

Senator REED. Are these funds identified in the budget that has been sent up to us?

General JONES. They are identified. Some of this equipment, for instance the Marines' equipment, will go right back to Norway. But some of it will have to be—and I might say that the Army's reconstruction will have to be done very carefully because with the departure of the First Armored Division and the First Infantry Division, their prepo stocks of the future will look considerably different than what they did with a larger footprint. So we are adjusting that.

Senator REED. Thank you very much, General. Thank you for your service.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much, Senator Reed.

Senator Clinton.

Senator CLINTON. Thank you, Mr. Chairman, and thank you, gentlemen, for being here and for your service. Thank you, too, General Bell, for coming and giving me an excellent briefing about the Korean peninsula.

I want to start with you, General Bell. Last week Lieutenant General Maples, Director of DIA, responded in a public hearing to a question about North Korea's efforts to develop a long-range missile that could reach the United States. He stated that North Korea is, "in the process of developing an intercontinental ballistic missile that would be capable of delivering a nuclear warhead, but they have not done so yet nor have they tested it."

Do you agree with General Maples' assessment and, furthermore, how far do you believe they are from developing and testing, and how best can we deter that?

General BELL. Thank you, Senator Clinton. I have looked at this in some detail. The Taepodong 2 and 3 missiles, as we call them,

are of the kind that, at least in theory, could produce intercontinental capability. Up through the late 1990s, there was a fairly active program in North Korea to develop that missile technology and potentially to test it. In the years since the late 1990s, the last 6, 7 years, we have seen very little activity by the North Koreans to actively continue to develop and test long-range missile systems.

There is no doubt in my mind that they have the capability to begin more technological investigation and to begin a regimen to lead to testing and potentially to lead to fielding. But there is no evidence of it right now. The evidence that we see is in short-range missiles, most useful, quite frankly, in a conflict on the peninsula. I would be more than happy to discuss that in some detail with you in a closed session.

But I do agree with General Maples and I think his assessment is accurate.

Senator CLINTON. General Bell, do you think that the Chinese have the same interest as we do in putting an end to North Korea's nuclear efforts?

General BELL. We are taking a good look at the Chinese relationship first with North Korea to see what kind of partner or ally they are with North Korea and try to make some assessment with regard to that. Now, Admiral Fallon would also be able to address this in some detail. First and foremost, the relationship between the People's Republic of China and North Korea is not as active as one might think. The exercising that you would expect between the ROK—I am sorry—the North Koreans and the Chinese, is very low and essentially not extant. The supply of military hardware, et cetera, et cetera, is very low and non-extant.

So these are all positive things. My sense would be if North Korea wanted to confront the United States with respect to nukes that it would be more engaged in a conventional sense at the baseline, but they are not. Does North Korea have—do the Chinese share our interests in the Six-Party Talks to see these talks conclude positively? It is not in the interest of China in my view to see the Six-Party Talks fail. I am not certain that they are as excited about the conclusion at an early point as we are, but they have been good hosts. They hold the talks in Beijing. They have been positive in their comments with respect to North Korea and their desire to see this resolved peacefully.

So all the members of the Six-Party Talks in my view have their own agendas and their own perspectives, but they have repeatedly said in open session that they are committed to the same objectives, and that is a de-nuclearization of North Korea, the return of North Korea to the peaceful community of nations. My assessment at this point is that China is helping us in that regard as opposed to hurting us.

I would be glad to let Admiral Fallon continue, ma'am, if you would like.

Senator CLINTON. I would, thank you.

Admiral FALLON. Thanks, Senator. I concur with what General Bell said; maybe just add a couple of additional comments. It seems to me that the Chinese put a premium on stability, certainly within their own country, and the potential for having instability along that border with North Korea, either instigated because of actions

that Korea might provoke with its neighbors over nuclear weapons or any other issue, seems to me to be motivation for the Chinese to stay engaged in this process.

In my discussions with Ambassador Hill, who is our chief negotiator——

Chairman WARNER. Would you speak more directly into the microphone? Thank you, Admiral.

Admiral FALLON. Sorry, sir.

In my discussion with Ambassador Hill, our negotiator in the Six-Party Talks, he indicates that the Chinese have been helpful, particularly in the last session, in trying to move forward in this area. So it seems to me it is tough to get into their heads and see exactly what the calculus might be that they are using, but by all appearances it is in their interest and they appear to be working in this area with us.

Senator CLINTON. Admiral Fallon, what military assistance do you plan to provide to the Philippine government over the next year or so?

Admiral FALLON. Senator, we have been engaged for some time with the Philippine government in a number of areas. We are trying to help them to build the capacity to deal with the terrorist problem in the southern Philippines. We have been working with them in a significant effort called Philippine defense reform. It has been undertaken by the government of the Philippines, led by their Secretary of National Defense, the Honorable Secretary Cruz, in which they are looking at a far-reaching overhaul of their entire structure, which I think would be in their best interest and ours as well.

We are helping them on the ground with advisers in Mindanao and the Sulu Archipelago and we are working a number of military assistance cases to try to help them in the material condition to build up their capability, particularly airlift and in other areas that would be helpful to them in gaining a better military that might be more useful for them and for the region.

Senator CLINTON. Your predecessor, Admiral Fargo, agreed to inform this committee in advance of any changes in our involvement with the Philippines and particularly with respect to conditions under U.S. servicemembers would be involved in combat activities. Will you honor that agreement so that we would have advance knowledge of any changes?

Admiral FALLON. Yes, ma'am, I certainly will.

Senator CLINTON. Thank you.

General Jones, I just want to go back to a point that Senator McCain was asking you with respect to Darfur. You may remember that a year ago February we talked in Munich about the potential of NATO providing airlift, and I note that from personal conversations with you in the months since that there was a great effort undertaken to get the appropriate permission and then to find the necessary resources.

Could you just enlighten me at least on what the process was and what actually came out of that process, because I know you worked it and pushed it. It was difficult and we did not really provide all that much airlift in retrospect. I do not know what the spe-

cifics are, but I know that it has not been adequate, and now we are looking to see what else we can do.

What is the problem? Is the problem it is an out-of-area commitment? Is the problem that our other allies in NATO are not committed to it? Can you just briefly describe, what is the obstacle to doing something even as limited as airlift to the extent necessary?

General JONES. Senator, thank you for that. With regard to the airlift, actually it turned out to be successful. NATO did lift six out of the seven African battalions into Darfur and has committed to doing the same for the ongoing rotation. So we are—at present we are doing our second round of airlift. So I think NATO has the capacity and the will to do this, as well as the capacity-building that we have been doing with the AU.

The problem, the fact is that both of those mandates run out. One I think runs out in March and the other one in May. In order to continue a NATO mission, either the AU or the U.N. or both need to come and make a request to the NATO for a continuation or for an expansion or whatever it is they wish.

Absent that, the NATO does not have the mandate to respond, and that is generally what the state of play is right now. There is a lot of discussion. There are a lot of telephone calls, but the official letter that comes from the organizations that would be able to trigger the process of a decision by the North Atlantic Council, that has not happened yet.

Senator INHOFE [presiding]. Thank you, Senator Clinton.

Senator Thune, I have already voted. I know you have not. Why don't you go next and then I will wait until after you are through.

Senator Thune.

Senator THUNE. Thank you, Mr. Chairman. I think we have 4 minutes left on the vote, so I will not have a lot of time to ask questions here.

But I appreciate, General and Admiral—thank you so much for your very distinguished service to our country and for the extraordinary work of those under your command. Please extend our deepest appreciation and support for the troops.

We have an interest, the Senator from Oklahoma and I both, in making sure that Congress is responding appropriately in terms of the funding and the resources that we need to deal with the many threats that exist around the world today. We have been involved in an effort to increase the top line funding for our readiness. So that is an effort, a debate that we will have around this place ongoing for some time, every budget year. But we want to make sure that we are taking the steps that are necessary so that the troops are able to complete their mission and fulfill the responsibilities that you ask of them and that we ask of you.

I just—we have, many of us, I think, our National Guard in town. I will be meeting tomorrow with the Adjutant General from South Dakota. I guess I am curious as to what sort of update you can give us about the role the National Guard is playing, about the types of—there is concern when you talk to Guard members and their families about the deployments and bringing greater predictability and as we talk about modernization and all these other things associated with that. There are concerns about funding levels for the National Guard, what the future entails.

So I am wondering if you could give me, in a nutshell, your assessment of things and how they play in, how they integrate into the overall objectives that you have to achieve.

General JONES. Senator, thank you for that question. The National Guard plays a very important role in the European and African theaters. Currently the National Guard and Reserve in EUCOM are composed of about 3,300 members on duty. Most of them are in Kosovo doing very good work, very important work in that mission in the Balkans.

The Navy has a very modest, a couple of people. The Air Force has 197. Marines have 49, for a total of about 3,500 National Guard and Reserve on duty in Europe and Africa.

I should comment that one of the most critical programs that we have, that I value almost above all others, is the State partnership program, where Air and Army Guard units have relationships directly from the State to a particular country. Three years ago in Africa we had no programs and now we have I think eight, with as many as four or five more getting ready to be established. In Europe, in Western and Eastern Europe, we have considerably more because we have had longer time to get them going.

But these are very intensive relationships between a sovereign country and one of our States, and the interaction between our members of the National Guard, both Air and Army Guard, really has a lot to do with the transformation and the ongoing military-to-military relationships that build long-term relationships between the State—and not just at the military level, but at the economic level, the political level, and so on and so forth. A very important element of our theater engagement plan.

So I hope that answers your question, Senator.

General BELL. Thank you, Senator. I would like to come at it from just a bit of a different perspective and talk specifically about the United States Army and what we in the Army as a Service have tried to do since the breakout of OIF and OEF. I think you are aware that for years, decades literally, since the end of World War II, the National Guard in many respects, in this case Army Guard, was the victim of a tiered readiness process that said fundamentally that, while these units in theory would be late deployers in a general conventional war, it was okay to not organize them and equip them and man them at the same level as an Active-Duty division or an Active-Duty unit might be.

That approach over the years resulted in many of our magnificent Guard units not being trained and not being as ready as they ought to be, principally because we did not focus on them. The Chief of Staff of the Army and the Army as an institution for the last 3 to 5 years for certain has attempted to reverse that and I think done a masterful job. I have had the distinct pleasure of going to Afghanistan many times, Iraq many times, all over Europe, the Balkans, both Kosovo and in Bosnia, and now in Korea, and I have had a chance to look at these units in their current configuration and talk to them.

Two quick examples, and I will not take too long. First the Tennessee National Guard. I am from Tennessee and I am proud of it, sir. I am sorry you are not from Tennessee, but it is okay. [Laughter.]

The Tennessee 278th Armored Cavalry Regiment went to Iraq a little bit north of Baghdad and took over a very difficult area. They were trained, they were ready, they were proud. They brought their traditions of service over a century of commitment and they pridefully and effectively made a huge and lasting difference in a large segment of Iraq.

This is a radically different outcome than what we could refer to back during the Operation Desert Storm days, when in attempting to get some of our National Guard brigades—and the 278th is a regiment—ready, we learned that they were not ready and they were not capable. That has been changed.

While the National Guard is under stress—and I will tell you that they are working awfully hard—what they are bringing to the global war on terror, this long war, is a perspective of magnificent service to their Nation, something like I have not seen, at least in reading history, since World War II.

So that the issue for all of us now is what do we do from here as we go forward. I would argue that, one, we need to continue to resource our National Guard units effectively. We need to man them at the highest levels. We need to recognize that they are not going to be latecomers; they are going to be firstcomers in many cases. We need to finally recognize that as a cultural institution that they represent the very best and brightest of the United States of America. They are citizen soldiers. They represent the Nation perhaps better than anybody and they deserve the best training, best equipping, and best consideration by the Active-Duty Forces.

I think we are getting it today and I would hope that as we go into the future that we would all, both the administration side and the congressional side, keep them in the forefront of our readiness paradigm and make certain that they continue to be as ready in the future as in my view they are today.

Thank you, sir.

Senator THUNE. Thank you, General.

Admiral FALLON. Senator, just to pile on a little bit, in the Pacific theater, as you are well aware, we are particularly dependent on air and maritime forces to be able to execute our responsibilities. This would not be possible without a significant contribution from the National Guard and Reserve. I will give you a couple of examples.

We are in the process of introducing the C–17 to the Pacific both in Alaska and Hawaii, a very, very much needed capability increase, and the units in both States are going to be mixed units of National Guard, Reserve, and Active Forces, and this integration is well underway. In fact, the first aircraft have cast their shadows over the ramp there at Hickham.

I get to see on a regular basis particularly the Air Guard coming through, stopping at Hickham mid-Pacific. Most of the tanker fleet as well as a big chunk of the airlift support is a mixture of Active and Reserve Forces.

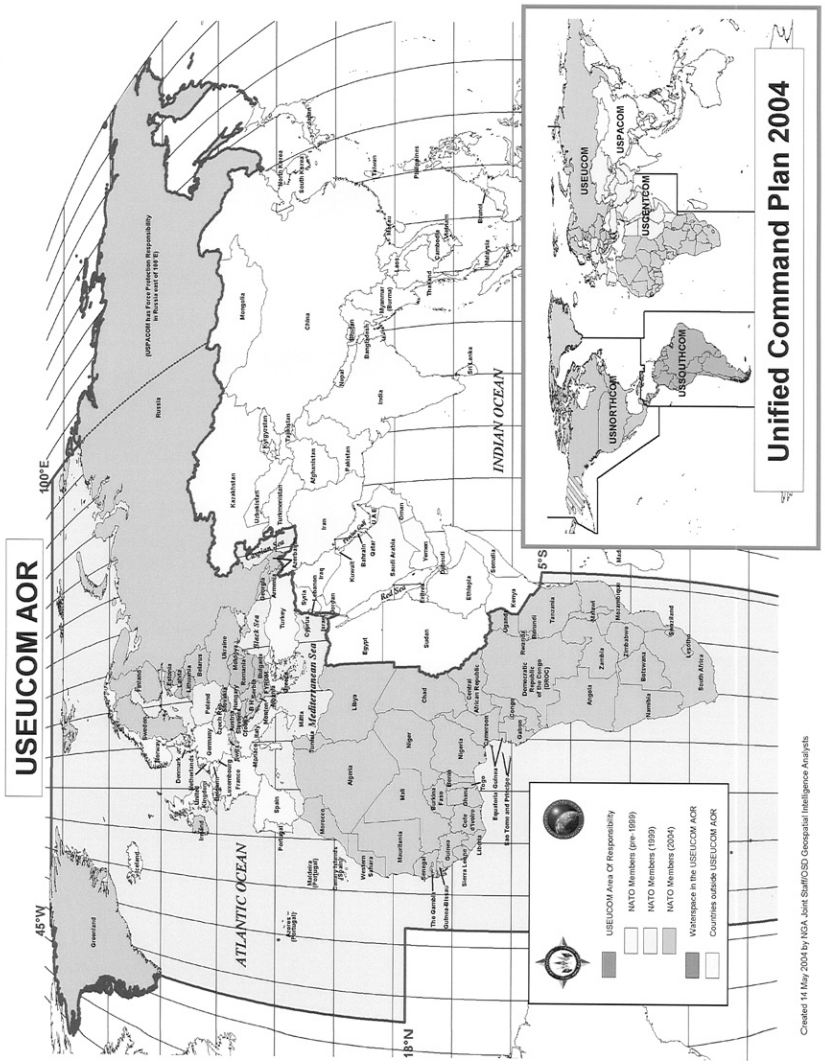
I might also highlight that there is a major contribution being played by ground forces, particularly Army Guard and Reserve, in the war effort in CENTCOM, and many of these forces are being

taken from Pacific-based units. So we get to see their phenomenal contribution and their sacrifices on a daily basis.

Thank you, sir.

Senator THUNE. Thank you all very much, and thank you, Mr. Chairman.

[The information referred to follows:]



Senator INHOFE. Thank you, Senator Thune. Frankly, I am glad you are from South Dakota for a lot of reasons, one being very obvious.

Let me just ask you a question, General Jones. I told you I was going to ask it. Am I the only one who is disturbed by this map

[indicating], the way our commands are divided up? I have been very active for 10 years now in Africa and you have Africa under the EUCOM except for Sudan, Ethiopia, Somalia, Kenya, and Eritrea. But right now, in the case of Ethiopia that is the location of the AU. It would just seem to me it just seems real cumbersome, because I will be going again next week and I will be in two different commands but in one continent. So again, I just thought I would throw that out there and hopefully you will have a meeting some time and bring it up and see if I am the only one who is disturbed by it.

General JONES. Sir, the unified command plan is always a document that gets a lot of attention and where you draw the lines is important. I would just simply say that I think this is something that we need to take a constant look at. The relations between the EUCOM and the CENTCOM in this case, where the lines intersect separating one from the other in Africa, have become increasingly blurred. In other words, I want to reassure you that, although the lines are there, the crosstalk between CENTCOM and EUCOM is——

Senator INHOFE. Yes, I know that is true. I know what is going on.

Several have talked about Darfur. It seems as if that is getting an awful lot of attention from members, a lot of members who are not all that familiar with Africa or not perhaps as familiar as I am. Consequently, I have not really been spending a lot of time on that, but I am very much concerned about the Lord's Resistance Army, about what is happening in northern Uganda. To me—and nobody ever talks about that and here we have one guy up there, Joseph Koni. He has been there for 30 years, beating up and killing and maiming kids, and nothing seems to be done about it.

The other day I was up in Gulu and we saw the product of his efforts there. Our intelligence knows where he is most of the time. President Museveni in Uganda just went through having to change the constitution and was then elected. I guess it is the first real election they have had in some 25 years.

Now, when you look and you see these horrible atrocities—and they are all little kids—and that there is an easy solution to it—and I do not want to get into something you would have to go into a closed session to talk about, but with those dynamics, with Museveni now back re-elected and having come from a military background, I might add, do you think that—do you have any light at the end of that tunnel? What statement could you make publicly as to any progress you see down the road in getting rid of this Joseph Koni?

General JONES. Senator, I think that this should be an achievable goal and I think that, with the elections over with and the refocus, I think that I am in accord with you that generally speaking the area that he operates in is relatively known, although it is a large issue. There is the issue of the borders that people hide behind quite a bit. But I think we need to continue to put pressure on the regional governments to bring this thing to a close.

It is not going to be NATO or anybody else. They are going to have to get this guy themselves and they are going to have to be

encouraged and supported in any way we can to make sure that he is brought to justice, because it is outrageous what he is doing.

Senator INHOFE. If you see it and you see it first-hand, it is really, really, really disturbing.

The New York Times had a report that 25 percent of the nearly 400 foreign fighters—this has been about 6 months ago—captured in Iraq were from Africa. I was not aware of this. Do you think that is accurate today? Do you think—because my experience has been that the Africans are very anxious to help us and they have joined us, many of the countries, in our war against terrorism. They recognize that Africa through the Horn and down through Djibouti, that as the squeeze goes on the Middle East that they are coming their way, and we are preparing and helping them prepare for that.

Do you see that there is that big of a presence there of Africans within the insurgents?

General JONES. I do not know what the percentage is, Senator. But one of the things we guard against is the obvious ease with which recruiters can come into regions in Africa, particularly the poor regions, and marshal the passions of people who do not have much hope. We are worried about people going to and from the conflict areas, fighting for a while, then coming back to Africa and bringing back what they have learned and generating and fomenting similar groups to cause problems in Africa.

I do not know what the size is, but I do know that it is going on. We do have a general sense of the highways that they use to get to and from the conflict and we are doing our best to stay engaged with the theater security cooperation plans that we have to mitigate against that.

Senator INHOFE. One last question about Africa. Not too long ago, the President announced this Trans-Sahara Counterterrorism Initiative. Then for quite some number of years now we have been working with the five African brigades. We know that they are very proud that they are the ones who are putting that together and we are just trying to assist where our assistance is requested, and we are doing a very good job with them.

Can you give us any kind of an update as to where we are now with these African brigades? Because I think it is going to become increasingly important as the squeeze continues in the Middle East.

General JONES. Sir, I think, looking at Africa the same way that the Africans look at Africa, based on the five regions, is an important thing to do. They are obviously, the ones that are deploying into Darfur, the ones in the highest state of readiness. But it is coming along. I believe that there is a lot more capacity-building that we could bring, not only the United States but the family of nations could bring, to accelerate the process of the emerging capabilities of the AU peacekeeping battalions. I think this is a good way to help the Africans help themselves. To do it in the right way and to do it over a protracted period of time would be very beneficial.

Senator INHOFE. I think that is right. You had mentioned the area, the Sea of Guinea, and the serious problems there. I just came back from there. They asked me a lot of questions that I cannot answer in terms of the locations of the various regional oper-

ations and what they can get. One thing that they need more than anything else seems to be lift capacity and that comes up almost every time that we are there.

Admiral, I want to just mention one thing. I wrote down three words from your opening statement, where you said that the tension has been significantly reduced, referring to China and Taiwan. Only this morning, in USA Today talk about—well, I will just read it. It says: "Symbols are everything when it comes to the prickly relationship between China and Taiwan, and recent moves by both countries could signal the potential tightening of tensions between China and Taiwan," referring to President Chen's recent action to scrap this council that they have had, which has not met in 5 years, so I can understand why they would scrap it.

But they go on to talk about how serious the tension is. The vice chairman of the central military commission in China, Guo Boxiong, talked about how serious that was, that it is something they are now going to be able, that China—I got the impression, anyway, is going to be able to use that in order to try to escalate the hostilities, and the fact that they have some 700 missiles aimed at Taiwan right now.

So do you have any further evidence that the tensions are lessening there? Because I was glad to hear it.

Admiral FALLON. I guess I would like to go back and review the year's history. A year ago things were indeed tense. There was not only—there was a lot of rhetoric being thrown back and forth by both sides, but in fact there was significant activity going on on the ground.

That has subsided significantly during the year. This recent announcement by Chen, not particularly helpful, I think, in the situation. But I guess the absence of any significant activity from the Chinese, from the PRC, other than the statements which have indicated that this particular move was not helpful—but there have not been the types of activity we have seen in the past, such as riots and loud protests involving large numbers of people. So I think that to me, at least so far, is indicative of taking this more in stride than just reacting. We have certainly, to the best of my knowledge, not seen any military movements.

Senator INHOFE. If it is all right, Mr. Chairman, I would like to pursue just one more question along that line.

Something that has bothered me for a long time, starting back in the 1990s when the drawdown, the military drawdown, was taking place in this country, and it happened during that decade of the 1990s the military procurement in China increased by 1,000 percent. So we are not looking at just something, a potential nuclear power. We are looking at great conventional assets and opportunities.

This has been really troublesome for me for quite some time. I look also and I see that China is doing a lot of smart things that we ought to be doing and we are not, such as cornering the market of energy all around. Getting back to Africa, everyplace down there around the Sea of Guinea you see the presence of China trying to do their thing. We know that they had their $70 billion deal with Iran and now they are getting 13 percent of their energy from Iran.

But I look at it just from the military might that they have and the fact that most Americans believe that we in America have the best equipment out there and that we give our kids the best equipment, when it is just not true. We suffered mightily during the 1990s. I was very proud of General John Jumper when in 1998 he stood up and he said that now the Russians are making with their SU series, SU–27, SU–30s, SU–35s, a better strike vehicle than the best that we have, which was the F–15 and the F–16. That was borne out again in the trials in India.

So with that, what is your level of comfort with the direction that China is going with the massive buildups that they are in the middle of right now?

Admiral FALLON. Senator, I think I would break this down into a couple of different areas. One, they have a massive sized force, but I do not believe that the majority of that force is particularly well-equipped. I believe that they are a legacy force of the past and I think that the Chinese—the PLA leadership knows this and they would like to see this changed.

Certainly from my visit there and discussion with their leaders, they make this a high priority. They made it a high priority with me to point out that they really need to overhaul. They would love to transform their military probably in a way that we have been doing.

The second point is that the new equipment, the hardware that they are acquiring, they are buying most of this stuff off the shelf and most of it from the Russians. Some of the stuff is high end relative to certainly what they have had in the past, and the numbers are increasing on a percentage basis because they are starting from a pretty low, low beginning. So the types of equipment are troubling because the capabilities are new and modern. The numbers are not yet anywhere near the kinds of numbers that I believe truly threaten this country.

Regarding the raw materials, it is pretty obvious that they are heavily dependent on the outside world to sustain their economic development and they are obviously very active in trying to get materials from any place they can in the world to keep this economic engine going.

Senator INHOFE. Thank you, Admiral.

Admiral FALLON. Thank you, sir.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much, Senator.

I was quite interested in your colloquy with Senator Clinton and indeed others about China's depth of sincerity to try and bring to closure and hopefully a positive outcome of the talks with North Korea. One man's opinion, it is just mine: I think they are trying to play it both ways. How vividly I do recall in the Korean War how it was their support in the military decision which turned the tide in that conflict and ended up with this rather heavy burden on the United States to remain there all these many years.

But on the other side, you say there is an enhancement of the military-to-military relationship, and I think that is a good positive one. I come back to again a chapter in our military history, which I think from time to time has been examined in the context of China. That is the tragic situation we had with the shootdown of

one of our aircraft, as you will recall, the patrol aircraft years ago, and the question of whether or not we could work out the executive agreement, commonly referred to as an incident at sea agreement, that we once had with the Soviet Union, and it continues to this day with Russia, as a means by which to lessen tensions between the interoperability of—well, maybe not the interoperability, but the parallel missions that our forces and the Chinese seem to be running in part of the AOR for which you are responsible.

Admiral FALLON. Thank you, Senator. I share your interest in moving forward in this area. In fact, the talks, "MMCA" is the designated term, Military Maritime Consultative Arrangements. We have made a little progress on this this year. I think it is critical that we move this ball forward because the Chinese do things in a very structured manner, particularly military-to-military. I mentioned earlier the challenge we have in actually getting things accomplished with them. A very rigid bureaucracy. Just about everything is funneled through their foreign affairs office in the PLA and it makes life challenging for us.

So their inclination is to want to do things in a very structured manner. We have tried to use these talks to actually move this from an overarching policy discussion to very concrete measures, so that when our forces are operating in close proximity we will have a framework for action, something that we can give our commanders and hopefully they give their commanders to lessen the likelihood that we are going to have an untoward incident.

Maybe by working this agreement to actually take steps to move forward, we might be able to move the military relationship as well. But I share your concern and your interest in doing this.

Chairman WARNER. I would hope that you would refer to that chapter of history between the United States and the Soviet Union. It took place basically from 1970 to 1972. In 1972 the agreement was executed in Moscow, as a matter of fact at the occasion of President Nixon going over. It was an historic moment in our history.

But the tensions between the United States and Russia, the tensions between NATO and Russia, were at a high pitch in those days and yet they suddenly decided that they did not want to see an accident between our military forces as they operated in the open seas and it came about, and it has been very positive.

So I hope that you might blow off the dust and try it a little bit.

Admiral FALLON. Yes, sir. That said, I will tell you that the instances in which our forces have been in close proximity certainly in the past year appear to have been conducted quite reasonably and quite professionally, and we watch this very closely.

Chairman WARNER. But for them to enter into an agreement would be a signal in the region that they want to try and do business in a positive way.

Admiral FALLON. I agree, yes, sir. I certainly agree.

Chairman WARNER. General Jones, to you the question of your opinion regarding the relationship between NATO and Russia. As your posture statement indicates, NATO-Russia cooperation appears to have deepened significantly over the past few years and is based on acting and exercising jointly, not just talking. That seems to be a positive development.

Now, I ask this question because I think it is within days that the Russian foreign minister is here, is it not? As a matter of fact, I am going to be meeting today with the foreign minister. I would like to have your assessment as to NATO's long-term objectives with respect to this cooperative engagement with Russia.

General JONES. Mr. Chairman, thank you very much for that question. I am happy to be able to report that the relationship between NATO and Russia, as overseen by the NATO-Russia Council, which is a standing body, is very positive. I guess that is the word I would use. It is consistent over the last several years, where the Russians have shown a willingness to work with NATO to achieve measures of interoperability that are probably of the highest order that we have ever had between the two.

Just a few weeks ago, two Russian warships joined Operation Active Endeavor, which is an ongoing article 5 mission, Mediterranean mission, counterterrorist mission. They are now fully interoperable with the maritime mission being directed by Admiral Ulrich. Those kinds of relationships have gone on now for the past several years.

In my headquarters I have a Russian general officer and a staff full-time as a partner nation, and I have visited in my NATO capacity Moscow and the chief of defense of the Russian forces has also visited me in his official capacity at SHAPE.

So I characterize it just the way I wrote it in the posture statement. It is positive, it is ongoing, and it is substantive.

Chairman WARNER. To what extent is the deliberation within NATO about new membership revolving around the Ukraine and their desire to become a NATO member, and how would that affect the cooperation that you perceive today between Russia and NATO?

General JONES. The idea of expansion, of course, is something that is on many aspiring nations' minds. The Ukraine is one of them. The issue of expansion will be taken up I would imagine at the Riga summit in November of this year. I do not think that they will announce an expansion this year, but I think the subject matter will be discussed.

Chairman WARNER. What candidates do you anticipate will be the subject of that discussion?

General JONES. In the open press the nations that have expressed the desire to become members of NATO include virtually every nation in the Balkans, the Ukraine. Generally speaking, it is that group.

I think that obviously these will be sensitive discussions. I think Russia will make its voice known when and if the time comes that NATO does decide to enlarge, which it has not yet. I think we have to be careful about too much alienation and some unintended consequences that may or may not come as a result of those kinds of discussions.

But new members are not on the table at present and that is for work in the future.

Chairman WARNER. I would like to return to Afghanistan, General Jones. Last Friday an article appeared in the Washington Post suggesting that the State Department was unable to get the Pentagon to agree to have U.S. troops provide force protection for pro-

vincial reconstruction teams, PRTs, that the United States would like to deploy throughout Iraq, similar to what ISAF is doing in Afghanistan.

Are you in a position to comment on the veracity of this article and the conclusions?

General JONES. Mr. Chairman, I am not. That is new to me.

Chairman WARNER. All right. Would you agree with me that providing security to the PRTs is an appropriate role for our troops in Iraq and that expanding the use of the PRTs in Iraq with adequate force protection would further our objective of helping reconstruct Iraq and enhancing long-term stability there?

General JONES. Mr. Chairman, PRTs in Afghanistan have proven to be really the coin of the realm for reconstruction. They are the most visible manifestation that help is on the way while the government of Afghanistan develops its reach into the hinterlands. Obviously, if you are going to establish PRTs, you have to have some measure of adequate security. It has to be done by somebody. You cannot put these small units out there and leave them by themselves, especially in a hostile environment. So whether it is Afghanistan or Iraq, to me the principles remain the same.

Chairman WARNER. Thank you.

Lastly, Admiral Fallon, the question again, China and Taiwan. Describe this latest incident which caused a problem? It seems to me that in our opening statement my recollection is you felt it was not a serious one, but it is nevertheless one of those unfortunate incidents that seem to continue to arise.

Admiral FALLON. Senator, this is a political issue. I believe you are referring to President Chen's——

Chairman WARNER. Right.

Admiral FALLON.—whatever the actual characterization is, and this is debatable. I have seen a number of interpretations of what actually transpired in Taipei. But by certainly diminishing the importance of this Unification Council, which, as somebody indicated, had not really done much in recent times, it just to my way of thinking exacerbates the challenge we have here, where rhetoric goes back and forth.

I guess—again, I will look for other indicators. If it is just rhetoric and it is reasonably moderate in tone, I think that is unfortunate, but probably not particularly damaging. If other steps are taken, other military, some military actions or other indications that people are being agitated or stirred up to take other actions, then I think this would be a real concern.

So we are in an interesting position here. We are trying to do what we can to see China come in to play a major constructive role in the world and at the same time to honor our obligations to an emerging democracy in Taiwan and not get ourselves wrapped around the axle here where we end up with another major engagement. So we are trying to walk a thin line.

Chairman WARNER. You say another major engagement. I will just give you again my own view. I think if that conflict were precipitated by just inappropriate and wrongful politics generated by the Taiwanese elected officials, I am not entirely sure that this Nation would come full force to their rescue if they created that problem. I just give you my own view.

If you look at the history of our engagement with Asian nations in terms of conflict, it has not been one that encourages us to go further into military actions of that type, particularly if they are brought on in such a way that it just shows totally injudicious judgment in politics. One thing for Taiwan—and I have been supportive—to build up their military capacity, but at the same time they build that up they ought to build down the heated politics.

We will now recess and resume this hearing in 222 Russell, the committee spaces, for such period of time as may be required.

Thank you very much, gentlemen. We are adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JOHN WARNER

U.S.-CHINA MILITARY-TO-MILITARY RELATIONS

1. Senator WARNER. Admiral Fallon, under your leadership, U.S. Pacific Command (PACOM) has recently initiated an exchange of military officers with China to enhance mutual understanding and reduce the chances of miscalculation leading to hostilities. Do you believe there is an opportunity for expanded U.S.-China military-to-military engagement over the next few years?

Admiral FALLON. I think we can do more with the PLA. PACOM strongly advocates a reinvigorated military-to-military relationship, focused in the near-term on mid-level officer exchanges, dialogue on humanitarian assistance and disaster relief experiences, and expanded educational interaction at the Asia-Pacific Center for Security Studies. At the same time, we have emphasized to the PLA that forward progress should be guided by principles of transparency and reciprocity—areas where improvement is necessary. I believe that these activities contribute to the overall U.S. efforts to shape the U.S.-China relationship and promote a peaceful resolution of the cross-strait conflict. However, the extent to which we are successful in encouraging more effective military-to-military engagement with the PLA over the next few years will be largely determined by the Chinese response.

2. Senator WARNER. Admiral Fallon, what are the benefits of increased military-to-military contacts, in your view?

Admiral FALLON. Military-to-military interaction enhances mutual understanding of each other's military capabilities and intention, reducing the potential for miscalculation. Increased contact also encourages responsible Chinese participation in regional and international fora. We have encouraged Chinese engagement in areas of common interest, including counterterrorism and pandemic influenza. Through increased military-to-military activities, PACOM contributes to U.S. efforts to shape the broader U.S.-China relationship and promote a peaceful resolution of the cross-strait conflict.

Importantly, as we move forward in the military-to-military arena, we continue to emphasize to PLA leaders the need for transparency and reciprocity—areas where PLA improvement is necessary to promote mutual understanding.

3. Senator WARNER. Admiral Fallon, do you recommend any changes in current legislated authorities or restrictions governing U.S.-China military-to-military exchanges in order to carry out a program of exchanges that you believe will be beneficial to the United States?

Admiral FALLON. [Deleted.]

NORTHERN ATLANTIC TREATY ORGANIZATION (NATO) FINANCING AND ACQUISITION

4. Senator WARNER. General Jones, you have been an advocate of changing the manner in which NATO peacekeeping missions are financed. As I understand it, your concept would require an increase in the NATO-common funded budgets so that the cost of operations would be shared more equitably, regardless of which members were actually contributing forces for a particular effort. How is this idea being received by your counterparts and colleagues at NATO?

General JONES. The idea is receiving mixed reviews among the nations. While some newer members (such as Bulgaria and Romania) appear favorably disposed, some older members (such as France) are not.

There is a concern that common funding could create disincentives that would not be good for the Alliance. For example, the United Kingdom is worried that expanding common funding might encourage nations to delay developing their own capabilities in the false belief that NATO would pay Belgium is concerned that common funding would make it too easy for the U.S. to push NATO into operations without gaining sufficient political consensus within the Alliance.

At the same time, newer members with relatively small budgets and a relatively large willingness to deploy, would welcome the opportunities that increased common funding would bring.

NATO's mission is changing from one of near static defense to one of collective security. In my view, the Alliance needs to transform its Cold War institutional processes such as funding so that they more effectively and efficiently support NATO's expeditionary operations in remote locations at strategic distances from the Euro-Atlantic region.

5. Senator WARNER. General Jones, you have also indicated that NATO should consider acquiring more defense equipment of its own, similar to the AWACs planes NATO currently owns and operates. What are your thoughts regarding whether NATO should acquire its own assets, such as lift capability?

General JONES. NATO strategic lift capability covers sea and airlift. NATO is continuing to support long-term solutions to reduce strategic sealift shortfalls and encouraging nations to declare some of their capacities to be available to NATO. NATO is also examining the possibility of warning contractors through an early "Warning Notice" that could improve shipping companies' response time.

As NATO roles and missions continue to expand beyond the traditional area of responsibility (AOR), the Alliance will most certainly have an increasing need for airlift to support those far-reaching operations. However, with few exceptions, NATO funding does not cover the procurement of military forces or of physical military assets such as ships, submarines, aircraft, tanks, artillery, or weapon systems. Military manpower and materiel are assigned to the Alliance by member countries, which remain financially responsible for their provision.

An important exception is the NATO Airborne Early Warning and Control Force, a fleet of radar-bearing aircraft jointly procured, owned, maintained, and operated by member countries and placed under the operational command and control of a NATO Force Commander responsible to the NATO Strategic Commanders. NATO also finances investments directed towards collective requirements, such as air defense, command and control systems, or Alliance-wide communications systems which cannot be designated as being within the responsibility of any single nation to provide. Such investments are subject to maintenance, renewal, and ultimately replacement in accordance with changing requirements and technological developments and the expenditures this requires also represent a significant portion of NATO funding.

National and multinational programs such as Strategic Airlift Interim Solution (SALIS) contribute to overall NATO airlift capabilities, however the SALIS program relies on a fixed number of airframes, not in the possession of NATO. Nations must continue to acquire a modern and capable means by which to deploy forces in support of alliance/national operations. The A–400M program is absolutely essential to improving NATO's deployment posture and nations must see it through. In addition, NATO is examining securing it own strategic airlift capability over which it would operational control. Military advice has been provided on this specific initiative and currently sits with NATO HQ.

6. Senator WARNER. General Jones, if NATO were to acquire large and costly defense items, do you think NATO should use a competitive bidding process to acquire such assets? How would such a process work?

Admiral FALLON. In the vast majority of cases, yes, the acquisition process should be by competitive bid. There are rare occasions due to expediency or supply that could make the competitive bid process cumbersome.

U.S. industry may use a number of avenues in seeking business opportunities associated with NATO. These include pursuing International Competitive Bidding (ICB) opportunities through the U.S. Department of Commerce as well as non-ICB opportunities directly with the NATO Maintenance and Supply Agency; the NATO Consultation, Command, and Control Agency (NC^3A); the Supreme Headquarters Allied Powers Europe; and the Supreme Allied Commander Transformation.

There is already an established precedent concerning NATO's acquisition processes for large costly defense items. Under the NATO Infrastructure Committee the NATO Security Investment Program has managed common funded programs that

support the Alliance. Here are three examples of competitively bid program efforts active in NATO.

The NATO ACCS Level of Operational Capability 1 (LOC1) program is a NATO-funded command and control program being implemented in NATO Europe. The system will provide both static and deployable assets as part of the NATO Reaction Forces.

NATO also has joined the Radar System Improvement Program (RSIP), a multinational cooperative effort. RSIP will improve the E–3's radar by increasing the sensitivity of the pulse Doppler radar so the aircraft can detect and track smaller stealthy targets over a longer range.

Air Command Systems International, a joint venture equally owned by Raytheon Company and Thomson-CSF, has been awarded four additional NATO Air Command and Control Level of Capability 1 (ACCS LOC1) contracts for work associated with validation sites in Belgium, France, Germany, and Italy.

FUNDING FOR THE JOINT POW/MIA ACCOUNTING COMMAND

7. Senator WARNER. Admiral Fallon, the Joint POW/MIA Accounting Command (JPAC)—which is subordinate to the PACOM—performs the crucial and sensitive job of recovery and identification of the remains of U.S. servicemembers from past wars, including World War II, Korea, Vietnam, and more recent conflicts. Funding for JPAC operations in fiscal year 2006 has been reduced significantly and, even though some actions have been taken to restore some of the funding, JPAC's level of effort in Southeast Asia—including in Vietnam and Laos—will be reduced by 22 percent and the world-wide level of effort will be down about 50 percent. What is the current status of funding for JPAC?

Admiral FALLON. After applying a proportional share of fiscal year 2006 congressional marks, POM taxes, and program review adjustments, the JPAC operating budget for fiscal year 2006 was $44,004,000. Of note, to offset expenses and permit increased mission activity, Navy provided an additional $2,500,000.

The JPAC annual operating plan strives to meet the following objectives: 10 Joint Field Activities (JFAs) in Southeast Asia (SEA), 5 JFAs in North Korea, and 10 JFAs worldwide. In fiscal year 2006, JPAC expects to complete 10 of 10 JFAs in SEA and 8 of 10 planned JFAs worldwide. The U.S. suspension of operations in North Korea prevents JFAs in that country.

Finally the Department of Defense (DOD) is working with the Navy, PACOM, and JPAC to identify the appropriate operational tempo and the budget to support it for both fiscal year 2007 and beyond.

8. Senator WARNER. Admiral Fallon, what is the rationale for reducing funding for JPAC?

Admiral FALLON. Throughout JPAC existence, the only reductions applied to its funding have been a proportionate share of congressional, OSD, and Navy marks that were levied against PACOM baseline resources. The JPAC baseline represents approximately 30 percent of the total PACOM BA–1 (O&M, N) baseline. When taxes/marks are levied against PACOM, JPAC funds are part of the base against which those taxes are calculated.

9. Senator WARNER. Admiral Fallon, what is the status of recovery operations in North Korea?

Admiral FALLON. The U.S. suspended JPAC operations in May 2005, at the conclusion of the first joint field activity, in response to aggressive DPRK actions regarding nuclear weapons and belligerent rhetoric against the United States.

HOST NATION BURDENSHARING

10. Senator WARNER. General Jones, in your written statement describing United States European Command's (EUCOM) Strategic Theater Transformation (STT) plan, you state that almost a billion dollars of new construction is required in fiscal year 2007 to enhance existing infrastructure as well as establish new bases for rotational forces. Citing the need for continued investment, you specifically mention "shifting our focus to improving the ability of our new allies and partners to be able to deploy rapidly and operate with our forces." In your plan, have you considered the desire and ability of host nations or NATO to share the investment burden and to contribute towards the construction of new facilities and housing?

Admiral FALLON. As a preliminary matter, every project is examined first for NATO funding eligibility as part of a prefinancing agreement. NATO Security In-

vestment Program (NSIP) provides the funding for NATO facilities investment. NSIP funding can only be used to construct NATO operational facilities that meet NATO identified minimum military requirements.

At each step of EUCOM's transformation, we have aggressively sought to have allies and partners pay their fair share of the burden in material, operations, and manpower costs. For example, at new Forward Operating Sites (FOS) in Eastern Europe, EUCOM forces are basing troops at host nation bases, and using host nation training ranges. EUCOM is not paying for these bases or ranges; rather we are only paying for use of facilities for EUCOM forces and any new structures that are specifically needed to carry out our missions. Our NATO allies stand behind our transformation efforts, and we have been able to direct NATO funding away from legacy bases, and have the resources directed towards enduring facilities. Additionally, EUCOM is closing bases that don't fit into our strategy to combat current and future threats. In the long run, changes EUCOM makes today will save U.S. taxpayers millions, and at the same time put EUCOM in a position to best meet evolving security challenges.

11. Senator WARNER. General Jones, can some of this construction, which also supports the host nation's military and NATO forces, be funded by NATO?

General JONES. The operational facilities and family housing projects requested in the fiscal year 2007 presidential budget request are for U.S. only facilities and NSIP or host nation military funding is not authorized.

Only United States military families reside in United States funded family housing. Additionally, it is the responsibility of the host nation to fund quality-of-life for their military personnel.

12. Senator WARNER. General Jones, I recently met with local German Government officials who expressed the most sincere desire to build new housing for our military personnel at Ramstein Airbase. Are you aware of this offer and have you had the chance to evaluate it?

General JONES. Yes, EUCOM is aware of the offer and U.S. Air Forces Europe is actively exploring cooperative ventures with the State Minister Karl-Peter Bruch of Rheinland-Pfalz (R–P). The State Minister has proposed a plan for cooperation but we cannot fully evaluate it until the German Government establishes the details and specific timelines of their plan. R–P officials are concerned the local economy cannot satisfy the combined housing demand of both U.S. military and local German families, and this must be considered in their plan. They view their housing construction plans and incentives as a necessary supplement to the U.S. family housing construction program on base, not as a substitute. Recent dialogue with R–P officials suggests their initiative may gain momentum and eventually help support the Kaiserslautern Military Community's overall housing needs. We continue to aggressively work with Minister Bruch's staff to coordinate our efforts that provide a satisfactory housing solution for our military families and will keep you apprised of developments as they occur.

MILITARY CONSTRUCTION (MILCON) INVESTMENT IN ROMANIA

13. Senator WARNER. General Jones, the fiscal year 2007 budget includes a request for the first phase of military construction funds to support the rotational basing of U.S. forces in Romania. The United States recently signed a base support agreement with the Romanian government to allow access to their military bases and training ranges, and is currently negotiating with the Government of Bulgaria for the same purpose. How may U.S. personnel do you envision will maintain in Romania and Bulgaria?

General JONES. U.S. Army Europe is spearheading the establishment of the Eastern European Task Force (EETAF) split-based between Romania and Bulgaria. EETAF command and control will be a Seventh Army command post at Mihail Kogalniceanu (MK) Airbase, Constanta, Romania, manned by approximately 100 personnel. Rotational Brigade sized units deploying to EETAF will be "split-based" in Novo Selo, Bulgaria (up to 2,500 servicemembers) and Babadag, Romania (up to 1,700 servicemembers). Also at MK, U.S. Air Forces Europe is looking to establish a small support unit (20–60 airmen) to support fighter aircraft training deployments to the region. The daily presence (rotational brigade and EETAF Command Post) between Romania and Bulgaria locations would range from 1,500–4,000 personnel based on the types and size of units participating.

In addition, Special Operations Forces (SOF) in Romania and Bulgaria will be limited to short duration deployments to conduct training. Approximate personnel

during these deployments will range from 10 to 300 personnel, depending on the type of training event.

14. Senator WARNER. General Jones, what type of training will these forces undertake?

General JONES. Training will center on theater security cooperation events that support the global war on terrorism—i.e., measures which we believe deliver very high value for a relatively small investment. These would include:

- EUCOM or Joint Staff-directed exercises;
- enhance interoperability and contribute to future coalitions;
- combined/partnership training with host nation or other NATO/regional partner armies; and
- individual soldier or unit level collective training opportunities in host nations.

In addition, time will be available for bilateral training with host nation forces to enhance their ability to support the global war on terrorism, and expose them—and particularly their noncommissioned officers—to U.S. Army soldiers.

Units will also have time to conduct unit training which is key to maintaining individual and collective proficiency.

15. Senator WARNER. General Jones, will the training syllabus be unique to these two countries?

General JONES. All land and air forces that deploy to Romania and Bulgaria will be fully trained to conduct operations throughout the spectrum of warfare. This allows U.S. forces to focus on improving NATO and eastern European partner nations capability during training evolutions. Training objectives for each country will require a tailored approach to bring units at different proficiency levels operating with equipment that may not yet meet NATO Standardization Agreement interoperability.

Operational land and air forces that will deploy for up to 6-month deployments to FOS in Romania and Bulgaria will conduct interoperability training exercises on a bilateral and multilateral basis. U.S. objectives are to develop and enhance military capability of former eastern bloc nations making these nations more interoperable with NATO. The overarching goal is to anchor the eastern expansion of the NATO Alliance through FOSs and training ranges in Romania and Bulgaria and promote cooperative security relationships that will advance our national interests.

16. Senator WARNER. General Jones, will the bases in these two countries serve strictly as training locations or power projection platforms?

General JONES. The EETAF will be a credible expeditionary land force that will serve as a powerful instrument for building military-to-military relationships and partnership capabilities that will enhance U.S. interests in the Black Sea Region. The move to Romania and Bulgaria will be beneficial in helping these former eastern bloc countries transform their militaries into vital assets for inclusion into NATO missions. Romania and Bulgaria offer greatly improved training opportunities over legacy bases in Central Europe, providing access to ranges without encroachment issues.

Land and air forces will deploy from the U.S. and Europe to FOS installations in Romania and Bulgaria for multi-month deployments. The DOD and EUCOM envision deployments will be up to 6 months in duration. Along with training at ranges in Romania, Bulgaria, and Germany, EETAF forces will deploy for shorter periods from the EETAF FOSs to training facilities in Eastern Europe and Southwest Asia to conduct NATO, bilateral, and multi-national training. In the case of contingencies that require deployment of the forces deployed to Bulgaria and Romania, the EETAF FOS installations will serve as a staging and departure base to the region of conflict. U.S. presence in EETAF will provide strategic reassurance of an enduring U.S. commitment to Central and Eastern Europe.

17. Senator WARNER. General Jones, has EUCOM developed base master plans for each location in these countries that can provide this committee an idea of the total expected investment in facilities and infrastructure required to support U.S. operations?

General JONES. The fiscal year 2007 EUCOM Master Plan contains primary facilities at FOS in Romania and Bulgaria. The President's fiscal year 2007 budget request includes facility costs of $34.8 million in military construction to achieve initial operating capability for 1,000 servicemembers in Babadag, Romania. The Phase II funding will support an additional 700 servicemembers in Babadag, Romania and

will achieve Full Operating Capability for 2,500 soldiers in Bulgaria and 100 servicemembers at MK Airbase, Romania.

The facilities at FOSs in Romania and Bulgaria will include container or prefabricated/panel type structures to serve as expeditionary-type billets, operational, and maintenance facilities. These structures will be simple, lightweight, and modular to support the requirements of rotational training units.

The one-time costs associated with establishing the FOSs for EETAF are as follows:

[In millions of dollars]

	Fiscal Year 2007 (Phase I)	Fiscal Years 2008–2013 (Phase II)
MILCON	34.8	73.3
OMA	6.1	11.9
OPA	6.9	15.5
Total (one-time)	47.8	100.7

The facility support operations costs associated with the FOSs for EETAF are as follows:

[In millions of dollars]

	Fiscal Year 2007	Future Years
OMA	5.0	12.4 million per year

The operations costs include only those fixed costs to operate and maintain the facilities regardless of troop presence.

Other variable costs, such as transportation, sustainment of soldiers and equipment, and training support, will be incurred when units rotate through EETAF. These costs will vary according to the type and size of the unit, length of their rotation, and location of training or Theater Security Cooperation engagements. In addition, the availability of units will be dependent on other global commitments. The initial rotations will be at the combined arms task force level (BCT-) for "proof of principal" and subsequent rotations for planning purposes will be full brigades. The following are notional costs for a 6-month rotation for a full brigade:

[In millions of dollars]

25.7	Transportation of a brigade from Continental United States (CONUS) (fiscal year 2008 at the earliest).
7.3	Transportation of brigade to/from exercises.
9.8	Sustainment (e.g., sup services personnel, AT/FP, food, laundry).
0.8	Training Support from Joint Multi-National Training Center.
3.9	Facility Support including utilities and guards.
39.0	Unit (BDE) OPTEMPO (includes maintenance of aircraft, tactical and non-tactical vehicles). [1]

[1] Unit OPTEMPO is not an incremental cost and will be incurred regardless of whether the unit is in garrison or deployed.

In addition, the United States Air Forces in Europe (USAFE) is planning to establish a small unit of approximately 30 personnel at MK Airbase, Romania beginning in 2007 to facilitate Weapons Training Deployments. To prepare for this, USAFE in fiscal year 2006 is executing repairs to the MK Airbase runway and taxiways and is constructing a new fire station and a combined maintenance and logistics facility using modular construction. The estimated cost for these fiscal year 2006 projects is $1.2 million for the runway and taxiway repairs and $750,000 for the two buildings (from Operation and Maintenance funds). USAFE has not yet established the budget for this facility beyond 2006.

18. Senator WARNER. General Jones, are you also planning to construct the infrastructure required to support the mobility requirements of U.S. forces in these countries? If not, how will EUCOM address these strategic mobility requirements?

General JONES. No new or additional Air Point of Debarkation (APOD) or Reception, Staging, Onward-Movement, and Integration (RSOI) facilities will be required to move land, sea, and air forces in and out of Bulgaria and Romania. EUCOM's intent is to utilize host nation infrastructure in existing commercial and military facilities.

Sea: All equipment is loaded on railcars at the point of origination (assuming the unit is not stationed in a port city) and railed to the port of embarkation. At the port all equipment is loaded onto one or two vessels (dependent upon size of vessels and type of Brigade Combat Team (BCT) and travels to the port of debarkation

(SPOD) which is Burgas, Bulgaria and Constanta, Romania. At the port of Burgas and Constanta the equipment is discharged and road marched to the FOS. Tracks, containers and NMC equipment will be line hauled (tractor/trailer) to the FOS. Travel time from the port to the FOS is approximately 60 to 90 minutes.

Rail: All equipment is loaded on rail cars at the point of origination and moved to rail heads in Romania and Bulgaria. Equipment is offloaded at the rail head and road marched to the FOS. Tracks, containers, and NMC equipment will be line hauled (tractor/trailer) to the FOSs. The travel time from the rail head to the FOS is approximately 15 to 45 minutes.

Personnel: All BCT personnel are embarked on hired wide body aircraft at the nearest air port of embarkation and transported to the APOD, which is either Bezmer, Bulgaria or MK Airbase (Constanta), Romania. Personnel are then transported by bus to the FOS. Travel time from the APOD to the FOS is approximately 30 to 60 minutes.

Facilities infrastructure (sea ports, air ports, rail heads) is adequate for land, air, and sea rotational deployed forces. Overall RSOI operations (logistical portions) will be planned and managed by the logistics staff of the EETAF headquarters (14 military and 17 civilians). The intent is maximize the use of personnel from the rotating BCT to assist with all RSOI functions (each BCT has movement control and deployment cells) from road marching vehicles to planning redeployment. As required, host country military and local national contractors will be used to augment U.S. forces at the APOD/SPOD or railheads.

TRAINING OF U.S. FORCES IN KOREA

19. Senator WARNER. General Bell, as we draw down our forces on the Korean Peninsula and consolidate their garrisons in three areas south of the Han River, the only large training area for U.S. ground forces will be located, in a reduced footprint, approximately 150 kilometers to the north. Meanwhile, U.S. air forces stationed on the peninsula have lost a key air to ground training area and are currently sharing a range with the host nation. What is your assessment of how the consolidation of U.S. forces on the Peninsula will affect their training?

General BELL. The consolidation of U.S. forces into enduring hubs will have a net positive impact on training. The consolidation of our units also results in the consolidation of our training support resources resulting in more efficient home station training. Our installation master plans for the enduring hubs provide for adequate training facilities to sustain individual, crew, and staff skills utilizing the live, virtual, and constructive training domains.

Units will deploy to our enduring major training facilities north of Seoul for gunnery and large scale maneuvers on joint use ROKA training areas and ranges. The master plans for our enduring training facilities at Rodriguez and Story Live Fire Complexes have addressed adequate training and life support facilities to support unit training. Aircraft from every Service will use combined ranges and select off peninsula training opportunities to maintain at least minimum readiness requirement in the near-term, with the ability to meet training requirements upon the completion of improvements to Chik-do Range this fall. All units, regardless of which Service, will continue to deploy to these facilities to train in much the same way they do today. Additionally, the USFK Battle Simulation Center and the Warrior Training Center (supporting 2d Infantry Division) will be replaced with a newly constructed modem state-of-the-art simulation center capable of meeting all virtual and construction simulation requirements. As U.S. forces are consolidated in Korea, they will remain well-trained and fully-prepared to execute their wartime mission.

20. Senator WARNER. General Bell, what are the training requirements for our forces stationed in Korea, and what is being done to ensure they will be adequately trained?

General BELL. All Service components in Korea train to the same standard of readiness as required by their respective Service, with their mission set being tailored to support their wartime mission.

In order to meet our future training requirements, we must continue to ensure the proper training environment exists. With the consolidation of forces on the Korean peninsula, we have secured the best possible state of land training capabilities available to meet both current training requirements and those of future force modernization as driven by transformation. Conditions are set for added training capacity, the elimination of encroachment and infringement, the ability to secure our remaining land acquisitions towards the future, and the provision of land areas within which we can train our weapon systems that have large training area requirements.

Our master planning efforts for our enduring training facilities have been focused to ensure that units in Korea will have the training enablers they need, in the locations they need them, to ensure that our forces remain trained and ready.

With the completion of Chik-do Range this fall, we will be able to meet the Services' requirements for air to ground training. U.S. naval aviation coordinates with the U.S. Air Force and ROK Air Force to gain valuable Korean Theater Operations air to ground training when U.S. Navy Carrier Strike Groups deploy in support of exercise Foal Eagle.

Additionally, U.S. and ROK Marine Forces are developing a Combined Expeditionary Warfare Training Capability that will significantly increase training opportunities within the Korean peninsula. U.S. Marine Forces are also expanding training facilities and life support areas in key locations on the peninsula which will facilitate increased training.

SOF terminal guidance operations and close air support training opportunities were reduced through training range closures. With the reallocation of ranges on the peninsula and the modifications to Chick-do Range, SOF training opportunities will increase.

For every Service, the training programs in Korea are effective at all levels and ensure our forces are combat ready at all times. Your continued support to our joint and combined training programs and theater exercises are critical to our readiness.

LAND PARTNERSHIP PLAN IN KOREA

21. Senator WARNER. General Bell, the Land Partnership Plan developed by the ROK and the U.S. will result in the consolidation of U.S. personnel at Camp Humphreys and Osan Airbase, and the closure of 59 installations formerly used by U.S. forces. Another basing initiative will close our main headquarters in Seoul at Yongson and relocate it to Camp Humphreys. Can you provide an update on the progress of these two initiatives. What challenges are you currently facing?

General BELL. We are well into execution of the Concept Plan briefed in 2003. To date, we have reduced the troops assigned to Korea by 8,000, closed 31 installations, and transferred 7 missions that had been performed by U.S. forces to ROK forces. The Republic of Korea has already invested over $1.8 billion to support the plan, and has completed the purchase of over 2,800 acres of land to expand our enduring installations. This fall, we will complete master planning and implement a bilateral program management organization.

22. Senator WARNER. General Bell, how are these two initiatives being funded and what is the current estimate for the total U.S. investment?

General BELL. The relocation is funded by a combination of Korean government funds, private investment under a build-to-lease program, and U.S. MILCON funding. Of these funding sources, U.S. MILCON is less than 10 percent of the total estimated cost of $8 billion. Since fiscal year 2003, we have focused $580.5 million of U.S. MILCON into our enduring installations to support the plan. In fiscal year 2007, we have asked for $137.8 million, and plan to ask for another $89.5 million in fiscal year 2008 to complete the MILCON portion of the relocation. Most of these MILCON investments are to provide barracks and dorms for our servicemembers at our enduring installations.

23. Senator WARNER. General Bell, you mentioned in your comments that an opportunity exists for further reductions of U.S. ground forces in Korea. How would this opportunity affect investment plans at Camp Humphreys?

General BELL. Our current and planned investments, to include the DOD MILCON proposed for fiscal year 2007 at Camp Humphreys, are prudent and necessary under all the possible scenarios I currently envision for USFK. I can assure the committee that we will only request congressional support and funding for capital investments where we are certain that the improvement is located at an enduring installation and will have the desired positive impact on the force—regardless of potential future reductions. I will review carefully every requested project and only send forward those projects in which I am convinced the investment is necessary, and in the best interests of our readiness, our servicemembers, their families, and the United States.

CONSTRUCTION IN GUAM

24. Senator WARNER. Admiral Fallon, the fiscal year 2007 budget request includes over $180 million for new construction and housing improvements on the island of

Guam. This follows last year's authorization of over $190 million for the same purpose. The Departments of the Navy and Air Force plan another $886 million in construction over the next 4 years. Also, the United States is currently in negotiation with the government of Japan to relocate 7,000 marines from Okinawa, which will result in additional construction on Guam totaling well over a billion dollars. Has PACOM assessed whether the utility infrastructure on Guam, specifically electricity, water, and waste water, can sustain the additional military requirements?

Admiral FALLON. PACOM has taken the lead role in coordinating various Service planning and infrastructure expansion initiatives in Guam. This joint planning process has been underway since March 2005 and received additional emphasis since the recently announced plan to transfer significant USMC personnel and capabilities from Japan to Guam. This joint effort has been examining infrastructure, facilities, support requirements, and environmental considerations and will provide DOD leadership detailed data to make informed decisions regarding Guam and Commonwealth of Northern Marianas. A final report is expected by July 2006.

Planning activities in Guam are closely linked with each of the Service initiatives as well as regional planning efforts.

At the recently concluded U.S.-Japan negotiations, the Government of Japan agreed to provide $6.09 billion of the currently estimated $10.27 billion required for the Marine Corps relocation from Okinawa to Guam. The U.S. will fund the remainder of the required infrastructure improvements. PACOM is working closely with the Services and DOD to ensure resources are programmed for the MILCON needed to support these force posture changes.

25. Senator WARNER. Admiral Fallon, do masterplans exist for our bases on Guam to coordinate the requirements of all the new missions and functions?

Admiral FALLON. We are currently developing a Guam master plan that will establish infrastructure, facilities, and support requirements as well as develop costs and identify environmental issues for future basing on Guam.

The existing Service (Navy and Air Force) base master plans served as starting points for the PACOM-led planning effort, which we expect to conclude in July 2006.

26. Senator WARNER. Admiral Fallon, what types of training will be available for our forces stationed on Guam? Will this training be sufficient to meet requirements? If not, how does the Department plan to address this issue?

Admiral FALLON. As U.S. force capabilities are adjusted, training facilities and capabilities on Guam and the Northern Marianas will need to be expanded and improved.

Currently available training airspace and target ranges on Guam will not adequately support the robust aircraft/aircrew training or the next generation of aircraft being envisioned for Guam. Farallon De Medinilla (FDM), the only live ordnance range in the area, is not compatible with current or future advanced weapons capabilities. The small land footprint, lack of scoring instrumentation, and encroachment issues at FDM severely restrict the types and quantities of training munitions that can be used. FDM lacks radar coverage and air controllers as well as telemetry devices for scoring accuracy and feedback to aircrews. The Joint Guam Military Master Plan Working Group is studying these challenges and will recommend appropriate solutions/mitigations.

Navy training facilities available on Guam are not at desired levels. Simulators available to CONUS units, for example, do not exist on Guam. The Guam Distance Learning Center is being upgraded to provide training to Guam homeported submarines (SSN). The Center can currently provide 23 of the required 101 courses for SSN training and is upgrading the number of courses available. Forward Deployed Naval Forces units have historically relied on actual operations and U.S./coalition field exercises to provide training and experience.

ENVIRONMENTAL ISSUES IN KOREA

27. Senator WARNER. General Bell, the United States is in the process of closing and returning to the ROK over 59 installations used by U.S. forces as we draw down our presence and consolidate remaining forces south of the Han River. The Korean press has recently reported that U.S. and Korean negotiators are discussing responsibility for environmental restoration at these sites prior to their return to our hosts. What responsibilities and liabilities does the United States have for environmental issues at bases being returned to South Korea under our current agreements with the South Korean government?

General BELL. Under our current agreements with the Korean government, the United States has committed to implement the DOD policy of remedying any known, imminent, and substantial endangerment to human health and safety caused by U.S. forces. The United States is not obligated to restore facilities and areas, and in return the Korean government is not obligated to pay the United States any compensation for residual value.

28. Senator WARNER. General Bell, what is the position of the United States on paying for environmental restoration costs at these sites?

Admiral FALLON. The United States is responsible for the costs associated with remedying any known, imminent, and substantial endangerment to human health and safety caused by U.S. forces at the sites. In the best interests of the alliance, and in our role as good stewards of the land, the DOD is sharing with our Korean ally the specific actions we will take in fulfilling this responsibility. Additional restoration measures may be taken by the host nation at their own expense. We will begin returning vacated camps to the ROK government in the very near-term.

29. Senator WARNER. General Bell, what cleanup standards will apply?

General BELL. Cleanup standards for U.S. forces in Korea are determined by the Commander USFK, based on DOD policy and guidance, the best interests of the alliance, and our commitment to act as good stewards of the land. In this regard, the DOD is continuing to share with our Korean ally actions we will take regarding land return issues. We will begin returning vacated base camps to the ROK government in the very near-term.

30. General Bell, what is the estimated cost and time to complete any required cleanup?

General BELL. We will complete all of our required actions within 6 months of closing each base. Our current estimate of the cost is less than $20 million.

31. General Bell, how will this issue impact turnover of the bases to South Korea?

General BELL. The Korean government has asked the United States to perform environmental remediation substantially beyond what is required by our agreements. The discussion of this request has delayed the return of the facilities and areas that have been closed over the last year and a half. Both governments have committed to resolving this dispute over the next few months, which will allow us to quickly turn over the bases we have closed. We expect to begin turning over base camps in the very near-term.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

EUCOM/SECURITY ISSUES

32. Senator MCCAIN. General Jones, how successful have you been in implementing your STT plan?

General JONES. STT continues in Europe and is an ongoing process that is being continuously evaluated in the context of the Secretary of Defense's Global Defense Posture. The next 2 years represent a critical phase of the EUCOM STT as we restructure land forces for the 21st century. This will enable EUCOM to more appropriately orient our forces south and east towards the "Arc of Instability" thereby increasing our strategic effectiveness throughout a greater proportion of our AOR.

In the areas of command and control, USAFE, Marine Forces, Europe (MARFOREUR), and Navy, Europe have streamlined and consolidated their staffs, developing Joint Task Force capable command and control structures that can deal with day-to-day command issues, and also seamlessly transition to deal with contingencies.

United States Army, Europe's (USAREUR) transformation efforts are much broader in scope than the other EUCOM components. Nevertheless, following the establishment of the EETAF and reorganization of the Southern European Task Force in Vicenza, Italy—in approximately 2010—we expect a consolidation of USAREUR and V Corps into 7th Army. Department of State (DOS) negotiations are complete for Romania and Bulgaria. In July 2007, elements of the Germany-based Stryker Brigade Combat Team will rotate to EETAF for two 6-month deployments. In spring 2008, the EETAF command post will be established at Mihail Kogalniceanu Airbase, Romania. In July 2008, the first full Brigade Combat Team will rotate to EETAF from the United States, "split-based" between Babadag, Romania, and Novo Selo, Bulgaria. Pending resource availability, new Brigade Combat

Teams will rotate in every 6 months or as exercise employment timelines dictate. Troops will train not only with Bulgarian and Romanian forces, but will also conduct security cooperation missions with other allies and partners.

33. Senator MCCAIN. General Jones, what, if any, difficulties or shortfalls have you incurred while striving to obtain your goals?

General JONES. Our biggest single obstacle has been obtaining a consolidation base for Special Operations Command, Europe (SOCEUR) in a geographically advantageous location south and/or east of the Alps. SOCEUR has looked diligently for a suitable location to consolidate its forces, but has run into numerous problems with training area accessibility and with freedom of action, i.e., the ability to perform tasks and deploy to locations that comply with local laws. Currently, the U.S. Special Operations Command (SOCOM) is reviewing its worldwide basing structure—it remains to be seen what its recommendations will be with regard to keeping SOFs assigned in EUCOM.

Our main goal goes beyond preparing for the next war—rather we seek to prevent the next war in our AOR. Investments in our newest NATO allies and Partnership for Peace nations will allow us to engage these democracies and set the infrastructure needed to prevent problems. If we are faced with a contingency, U.S. engagement south and east in the AOR will have set the stage to build coalitions with these allies and partners to meet the threat.

Our Theater Security Cooperation programs remain the centerpiece of our efforts to promote common security to strengthen the transatlantic link and provide a means to building partnership capacity. Our aim is to enable emerging democracies to defend their homelands, defeat terrorist extremists, develop common economic and security interests, and respond to health crises, such as pandemic influenza outbreaks. As we transform EUCOM it is imperative that we retain the necessary force structure that will more effectively enable this capacity building with our security partner nations. Therefore, it is very important that we have a continuous presence in EETAF in order to have a cadre for our security cooperation activities, and that we keep special forces units in EUCOM to further enhance NATO's capability.

34. Senator MCCAIN. General Jones, where are the areas we can begin to develop a common understanding of, and agreement on, a security architecture that is viable in the 21st century?

General JONES. Perhaps the greatest alliance in history, NATO remains the key institutional link to our allies across the Atlantic. It is upon NATO that we might be able to frame a new understanding and agreement on a viable security architecture for the 21st century. However, in order to agree on the architecture to provide for common security, we need to first agree on the threats that require it.

NATO's Cold War success in deterring a conventional military attack on the west depended on an embrace of a unifying concept of common defense deterrence of the Soviet threat. During this period, there was little doubt about the Alliance's "raison d'etren," either with policymakers or with the general public. In the same spirit of identifying those unifying concepts where threats require preparations for common defense, it would be appropriate for nations at the upcoming 2006 NATO Summit to reaffirm NATO's role in providing transatlantic security and the Alliance's impact on global strategic security. Making this reaffirmation in this high-visibility forum would also begin the process of educating the publics of NATO member nations about the Alliance's role, importance, and commitment to providing the common security benefits of the transatlantic link to other nations and regions throughout the world.

A key feature of this new construct of strategic stability is interdependent instability, that is, instability within one region creates instability for the entire global economic, security, and political system. Global security in the 21st century is threatened not only by the enemies of stability and security who want to attack the current international security system to weaken, disrupt, and split it, but also by the instability resulting from natural disasters, non-governance in regions throughout the world, proliferation of weapons of mass destruction (WMD), and the global narcotics trade. NATO's success in both realms leads to a critical question: in what other areas might NATO engage, from a strategic standpoint, to help provide for common security?

In naval terms, NATO's deterrent purpose during the Cold War was the "anchor point" upon which the stability of the Alliance rested. With the end of the Cold War, however, the anchor point stabilizing the Alliance in turbulent seas was removed and the nations have not yet agreed upon a replacement.

Tomorrow's NATO could assume even greater significance in international affairs as the Alliance strives to confront new threats that not only endanger member na-

tions, but arguably global strategic stability. A key component of such an effort would be the clear articulation to member nations' populations of the Alliance's new raison d'etre for helping to enhance common security, regardless of the means through which member nations might choose to do so. There are as many as five anchor points in which the Alliance could contribute to common security.

1. Global War on Terrorism—After the attacks on New York City and Washington, DC, on September 11, 2001, there were many who believed NATO's new anchor point would be the global war on terror. This belief was supported by NATO's actions when the NATO Military Committee subsequently approved MC 472, NATO Military Concept for Defence Against Terrorism. But the global war on terrorism did not resonate with some nations to the same degree as the Cold War anchor point did during the 20th century. Global war on terrorism is an anchor point, but it is not the only one, due primarily to the different philosophical and cultural outlooks on both sides of the Atlantic. On the one hand, the September 11 attacks inflicted as deep a wound on the United States as anything that has ever been perpetrated on the Nation, to include the attack on Pearl Harbor in 1941. On the other hand, European nations have had more history and experience with terror attacks in recent decades, perhaps leading to a greater ability to recover quickly psychologically from such events. Neither the November 2003 Istanbul attacks, nor the March 2004 Madrid bombings, nor the July 2005 London assaults led these nations to ask NATO to invoke Article V in response. NATO itself, through the approval of MC 472 in December 2002, approved a concept for combating terrorism, yet no further steps have been taken to develop or enhance the procedures outlined in the document.

2. NATO and Stability, Security, and Reconstruction in the 21st Century—A second potential enduring anchor point might be stability, security, and reconstruction operations, an area where NATO already has extensive experience. The Alliance has been engaged on the ground in the Balkans for a decade, first in Bosnia and now in Kosovo. The Alliance's success in fulfilling many of the military tasks set out by the Dayton Accords has allowed Bosnia and Herzegovina to reach the point where starting the process of integration in to trans-Atlantic security organizations is conceivable. NATO also experienced success in Afghanistan, where it has led the International Security Assistance Force (ISAF) since August 2003. Such efforts are the most concrete and publicly visible missions that NATO performs.

3. Critical Infrastructure Security—A third potential area NATO could consider for enhancing common security is its possible role in the future protection of critical infrastructure. As with terrorism, the "point defense" of infrastructure is a national sovereignty issue. However, could not the Alliance, on a strategic basis, provide a better capability to defend critical infrastructures, such as air, land, and sea communications?

4. Energy Security—A fourth potential area where NATO could take steps to enhance common security could be "energy security:" ensuring the flow of energy to markets and consumers by assuring safe and secure access to its sources. The recent dispute between Russia and Ukraine over natural gas, and the spectre of a far-reaching impact of a lengthy disruption, demonstrates the importance of a diversified set of energy sources. Companies are developing new sources of oil and natural gas in an effort to diversify and to keep up with the rising demand.

5. Weapons of Mass Destruction and Consequence Management—A fifth potential area—where the Alliance could provide common security is centered on WMD and the corresponding consequence management actions. In the very near future the international community could face, as during the Cold War, the possibility of the use of a WMD. This time, however, such a weapon would most likely not be delivered by an individual nation state, but by a non-state actor traveling through the seams of our political boundaries and acting on the perceived weaknesses in our willingness, our desire, our ability, and our organization to prevent such an event from occurring. The challenges and dangers the international community faces with the proliferation of WMD increase every day—the recent experience of A.Q. Khan, the father of the Pakistani nuclear program, serves as a sobering reminder of this threat.

NATO has been, and needs to remain, a great Alliance; and great Alliances do great things. It is possible, even probable, that NATO's most important days and most important missions lie ahead in the future.

35. Senator MCCAIN. General Jones, in light of the changing security landscape that has emerged since the post-Cold War era, what are the changes that are taking place in both the NATO Alliance and the EUCOM to address present and future challenges?

General JONES. NATO's ongoing expansion has moved the Alliance's influence eastward and EUCOM's focus mirrors this move.

While NATO welcomes these eastern European nations, their military capabilities are not yet completely interoperable with other NATO forces. EUCOM transformation efforts will improve new member interoperability, but will require significant focus on security cooperation and considerable time and resources invested by EUCOM and other allies.

NATO is also likely to discuss global partnerships with like-minded, highly developed countries such Australia and Japan at the NATO Summit in Riga, Latvia, this November. This will enhance future contributions to NATO and provide the Alliance with additional momentum for its transformation toward a more efficient expeditionary and global capability. Additionally, with our transformation strategy, EUCOM forces will be in a position to exercise and maintain a leadership role in the NATO command structure and also help develop our constructive influence within new NATO countries.

36. Senator MCCAIN. General Jones, explain how a EUCOM migration toward the south and east will more aptly address the threats to U.S. national security interests?

General JONES. Our history of bringing stability to areas plagued by ethnic and cultural conflict has prepared us to extend our focus to the east and south. Our goal is to assist nations in building and sustaining effective and responsive governments and to develop security structures responsive to emerging democratic governments. As EUCOM moves its operations south and east, we will achieve economies of effort and higher training and readiness levels, while simultaneously achieving security cooperation objectives. It will also provide the training foundation to help lead the transformation of NATO and our allies to better address threats to our interests. Power projection platforms and operating bases must optimize the limited U.S. strategic air and sealift available, leverage existing and viable enduring bases, and maintain the ability to preposition equipment.

Our success depends on maintaining relevant, focused, and complementary security cooperation programs that are tailored to the social, economic, and military realities in both the southeastern regions of Europe and Africa. The new security menace is transnational and characterized by enemies without territory, borders, or fixed bases. Threats include the export and franchising of terrorism, proliferation of WMD, narco-trafficking, uncontrolled refugee flow, illegal immigration, and piracy on the seas. Many of these threats are nurtured in undergoverned regions where terrorists and extremist organizations seek new havens from which to recruit and to operate. We are evolving our strategic posture to reflect the new security reality.

37. Senator MCCAIN. General Jones, Theater Security Cooperation initiatives include Foreign Military Financing (FMF), International Military Education and Training (IMET), Foreign Military Sales (FMS), and direct commercial sales; what is the value to the United States and NATO of such activities?

General JONES. The value to the United States and NATO falls primarily in two areas—influence and interoperability.

Sales of American equipment—whether financed through FMF or paid for by the purchasing country through FMS or Direct Commercial Sales—improves interoperability because the equipment provided is either identical or similar to U.S. equipment, as are the tactics, techniques, and procedures associated with the equipment. At the same time, purchasing U.S. equipment usually means purchasing U.S. training, which transmits not only American business practices but also American values. Being interoperable with the U.S. essentially results in interoperability with NATO. Unfortunately, legislative restrictions often impinge on our efforts to develop relationships with partner nations. These unintended consequences undermine regional and military-to-military relationships in the short- and long-term.

Ideally these sales would be targeted toward countries which would effect EUCOM theater security cooperation objectives.

IMET more directly increases influence for the U.S. Students usually come to the U.S. for their training or education. While they learn American practices and thinking directly through such training, they also learn American values by living in American society. This has a profound impact on these students, who in large part are already marked as future leaders in their countries. They return with not just new skills, but also a positive view of the U.S., which usually results in increased U.S. influence as they assume leadership positions.

Examples of direct results of these programs include (but is certainly not limited to):

- Poland's acquisition of 48 F–16 through FMS, leading to U.S./NATO interoperability and increased NATO commitments;

- the various train and equip programs in Georgia, using IMET, FMF, and FMS, leading to support for both Operation Iraqi Freedom (OIF) and for NATO;
- building capabilities in Ukraine into NATO interoperable Joint Rapid Reaction Force (JRRF); using IMET and FMF; and JRRF; NATO and OIF support; and
- building capabilities in Senegal for peacekeeping operations through FMF and IMET.

38. Senator MCCAIN. General Jones, a common theme throughout your statement is the need for proactive vice reactive engagement throughout your AOR, including the increased utilization of SOF or SOF-like forces in your theater. What is the current status of your efforts to consolidate SOF assets in the theater?

General JONES. Proactive engagement is key to success in the global war on terrorism and in supporting U.S. interests across the changing security landscape. SOF are an integral part of this engagement strategy. As a part of our STT plan, we determined that the consolidation of SOF assets would substantially improve SOF's joint warfighting capabilities as well as its ability to respond to crises. Our initial assessments identified Naval Air Station Sigonella, Italy, as the best location; however, further analysis led us to conclude that this site was no longer suitable. The EUCOM continues to conduct prudent military planning and is examining various SOF consolidation options.

The Secretary of Defense, in consultation with SOCOM, is conducting a thorough review of SOF assets in the context of the Global Defense Posture in order to determine their future basing. EUCOM is working closely with SOCOM, the Joint Staff, and the Office of the Secretary of Defense to achieve the best solution. In this process, EUCOM has emphasized that our ability to maintain relationships with both our traditional and future partners underscores the importance of sustaining SOF's capabilities within our theater. Coincident with that effort is the position that the consolidation of SOF remains an important part of our STT plan. We have also highlighted U.S. SOF's relevance within EUCOM as a potential model for NATO's own transformation and development of a robust SOF capability within the Alliance. Therefore, I do not support any withdrawal of U.S. SOF from this theater.

39. Senator MCCAIN. General Jones, do you have a sufficient number of available SOF assets to conduct the level of operations you require for this proactive approach?

General JONES. SOF is a critical tool for our Theater Security Cooperation (TSC) strategy within the EUCOM AOR. Our TSC engagement strategy places a particular emphasis on Phase Zero operations that help "shape" the environment with the goal of preventing or mitigating the conditions that give rise to crises.

Within the framework of our Phase Zero efforts in the EUCOM AOR, U.S. SOCEUR pursues two types of engagement. First, they conduct bilateral expeditionary capacity building operations to enable partner nations to deploy to needed areas worldwide. Second, SOCEUR helps build partner nation capacity to deny terrorists sanctuary and prevent recruitment and travel of terrorists to the Middle East. A prime example of this effort can be found in the DOS-led, interagency effort called Trans-Sahara Counterterrorism Initiative (TSCTI). EUCOM participates in TSCTI through its military component, Operation Enduring Freedom-TransSahara (OEF–TS).

These engagements offer considerable returns in the form of new partner nation SOF which can undertake special operation activities traditionally undertaken by SOCEUR forces. The ISAF, under NATO leadership in Afghanistan, is a prime example of partner nations assuming traditional U.S. SOF missions. This permits high-demand, low-density U.S. forces to undertake operations elsewhere. Over the past 2 years approximately one-third of EUCOM's assigned SOF remain engaged in Operations Iraqi Freedom and Enduring Freedom.

We are now working closely with SOCOM, the Joint Staff, and OSD to ensure SOF levels are available to maintain ongoing and emerging theater requirements. The framework eventually established will serve as the foundation for the continued effectiveness of SOF now and into the future. Forward-based forces have proven to be the best capability to respond to crises and execute our global theater security cooperation activities, which in turn, help prevent future crises. It is my hope that we will retain these forces in theater in order to continue our success in engagement with new partners, as well as continued commitment to and support of the greatest partnership we have known in NATO.

40. Senator MCCAIN. General Jones, what sort of measures or reforms should be undertaken to increase your ability as a combatant commander to perform your mission as it relates to theater security?

General JONES. In a resource constrained environment, it essential to create greater efficiencies to ensure Security Cooperation (SC) success in a Geographic Combatant Commander's (GCC) AOR. Frictions exist between what a GCC is responsible for and authorized to do in his AOR (Unified Command Plan (UCP) responsibilities) versus the resources available. There are several funding and policy issues that need to be addressed to create efficiencies and achieve needed success for "Phase 0" operations in the global war on terror.

The GCC lacks the capability to effectively shape the AOR in "Phase 0" global war on terrorism operations due to a variety of laws and policy restrictions placed on SC programs and activities. As the supported commander for SC in his AOR, the GCC needs the authority as well as the resources to plan and execute SC operations, and to coordinate with other U.S. Government (USG) agencies. Reforming the SC system would serve to promote not only greater efficiencies, but would expand U.S. influence and strategic agility.

Improve coordination of SC strategies and plans. GCCs are responsible for policies and priorities in their AOR. Besides DOD, a variety of USG agencies have authorities in a GCC's AOR, each with their own agenda and priorities, many of which complement the GCC's SC objectives. The Joint Interagency Coordination Group (JIACG) is an entity which we could do much more to develop to support USG activities in the GCC's AOR. More coordination needs to take place, not just between the Departments of Defense and State, but throughout the interagency, to decrease redundancies, and to ensure scarce resources are used most efficiently to benefit SC objectives. A vibrant JIACG would be an excellent vehicle to coordinate the various programs and SC initiatives of the myriad agencies in the GCC AOR.

Synchronize the activities of the Departments of Defense and State. Whenever possible, the activities of these Departments should be combined, servicing multiple objectives with minimal effort, in our resource-constrained environment.

Coordinate FMS with Theater priorities. GCCs require visibility and oversight of FMS in their AOR, not only for situational awareness, but to target sales toward SC objectives. Currently, the Services negotiate and coordinate FMS with industry, country teams, DOS, Office of Secretary of Defense (OSD), and Congress. The GCC finds out about FMS through a bottom-up approach through our Office of Defense Cooperation (ODC) and Defense Attaches (DATT), but that is often too late to influence decisions.

Consider impact of legislative restrictions on SC policies. Existing legislative restrictions should be re-examined, and proposed restrictions should be carefully considered, to determine the overall affect on the SC program. For example, the American Servicemember Protection Act's so-called "Article 98 restrictions" often hamper SC objectives and may unintentionally prove counterproductive to advancing U.S. security interests by stalling development of democratic principles, common ideals, and defense reform of potential coalition and SC partners. The unintended cost of many well-intentioned restrictions is often a diminished influence in our AOR, opening a window of opportunity for competing nations to fill the void.

There are short-, mid-, and long-term reforms that should be pursued, as follows:

- SC country funding levels. Country funding levels should be targeted toward regional objectives and initiatives. EUCOM is developing regional strategies using the effects based, deliberate planning process with concrete measures of effectiveness. SC funding should be directed to countries which reflect regional objectives.
- Multiyear budget approach. FMF and IMET budgets should follow a logical consistency that preserves the gains made through previous year efforts. With increased GCC budgetary influence, and emphasis on regional objectives, this should be easier to accomplish.
- Reduce administrative inefficiencies. Coordination of all SC funding resources is required to ensure the right resource is directed at a particular activity, preventing redundancies and disconnects which tend to hinder implementation and execution of SC activities. The full spectrum GCC JIACG model would be beneficial in coordinating SC activities.
- Link resources with GCC implementation. Funding of SC activities is diverse and uncoordinated. GCCs should have more authority over funding issues associated with major initiatives. In fiscal year 2005, the DOS controlled 70 percent of SC funding in the EUCOM AOR, whereas the GCC, who is accountable for SC execution in his AOR, controlled only 3 percent of discretionary SC funding.

Mid-Term

- Increase GCC influence in budget development process. Increased GCC budgeting influence and authority would allow greater flexibility in SC execution, both in the near-term for emergent circumstances and for long-term regional consistency. The GCC should be given expanded funding authority to create efficiencies and synergies to more effectively accomplish the SC mission.
- Establish an Emerging Requirement Fund. This fund would allow the GCC to immediately affect the direction of nations which experience an unforeseen significant change within a budget cycle (e.g., Ukraine's Orange Revolution). Expansion (both in funding and scope) of the Combatant Commander Initiative Fund may be an acceptable alternative.

Long-Term

- Legislative changes to resolve "title 10" and "title 22" inefficiencies. Generally, the DOD—which operates under title 10 of the U.S. Code—cannot fund training, while the DOS—operating under title 22—cannot fund operations. This affects efficient execution of counterterrorism and peacekeeping operations and delays or curtails mission accomplishment, affecting U.S. credibility amongst partner nations and hampers realization of SC objectives.
- Amend title 10 to fund training and equipping of foreign forces to conduct counterterrorism operations on a permanent basis. We are grateful for Congress's faith in the Department by enacting section 1206 of the National Defense Authorization Act for Fiscal Year 2006 (Pub. L. No. 109–163), which permits, for 2 years, a limited use of DOD funds for training and equipping.
- Amend title 22 to permit the DOS to fund operations, and Active-Duty and Reserve personnel, to facilitate programs such as Africa Contingency Operations Training and Assistance, and Global Peace Operations Initiative.
- Authorize FMF and IMET funds to be used to train and support security sector units outside of the Ministry of Defense (such as Ministry of Interior or gendarmerie) in nations that conduct antiterrorism and counterterrorism operations.

The Geographic Combatant Commander requires control over resources commensurate with assigned Unified Command Plan responsibilities to execute his SC mission efficiently. If enacted, the funding and policy reforms highlighted in this paper would create efficiencies and promote effective SC programs. A concerted effort on the part of each USG agency involved will be required to ensure the synergy necessary to reform the SC system to achieve greater efficiencies and win the global war on terrorism.

41. Senator MCCAIN. General Jones, if provided additional funding, where would you invest and why?

General JAMES. The changing security landscape that has emerged since the end of the Cold War continues to evolve in ways that were largely unforeseen just a few years ago. An increasingly interconnected world is shaping our economic, political, and social realities in a manner that is in stark contrast to the previous century. This reality, in combination with an increasingly strained budget, compels us to develop strategies that harmonize the full spectrum of national power and a broad interagency approach—not only to ensure a fully coordinated effort, but to minimize redundancy and maximize efficiencies.

Traditionally, our Armed Forces focus on fighting and winning wars. While we need to be prepared to operate across the full spectrum of conflict, in the new security landscape we conclude that early engagement, often requiring modest investment, can yield significant long-term dividends. In many cases, early actions can minimize or eliminate future engagements. Our approach to "proactive versus reactive" engagement highlights TSC as a cost effective and very important capability. Reforms to our existing national TSC authorization are necessary to promote greater efficiencies, and to more effectively expand U.S. influence in accordance with National Military Strategy and OSD Security Cooperation.

Efforts by EUCOM to engage in regions using a full spectrum, regional strategy means fighting the war on terror by focusing on terrorism's long-term underlying conditions. This deliberate strategy of engagement has come to be called "Phase Zero," but in truth it is much more than just a new phase of systematic campaign planning. It is a new form of campaign in and of itself.

In my view, our TSC programs and the methodologies by which they are financed (resourced) need to be overhauled/modernized in order to ensure that the United States is able to be competitive and influential in this still new century. Currently, the combatant commanders have a "responsibility to authority" mismatch which makes it difficult to have the agility and flexibility required for future success.

Having said that, given additional funding there are several areas that could provide substantial enhancement to EUCOM's current TSC efforts, including:

- Operation Enduring Freedom-Trans Sahara: Additional funding would expand current initiatives to build counterterrorism capabilities in nine countries throughout the Sahel region of North Africa.
- Joint Intelligence Operations Center/Intelligence Mission Operations Center (JIOC/IMOC): Additional funding would better prioritize, synchronize, and integrate intelligence activities.
- Operation Assured Voice: Information operations for planning and execution of theater information/shaping initiatives.

Although the Unified Command Plan establishes the authority of the GCC to plan and conduct security cooperation activities within an assigned AOR, there are insufficient resources available to the combatant commander to adequately respond to unanticipated challenges and crises that threaten regional stability. Increasing the resources and enhancing the responsiveness of these programs to fund unanticipated contingencies will enable combatant commanders to effectively meet the evolving threats of the 21st century.

EUCOM/REBASING ISSUES

42. Senator MCCAIN. General Jones, given your assessment on the benefits associated with forward stationed forces and bases, have we moved too quickly and cut too deeply in the number of forces we intend to return to the United States?

General JONES. There is no substitute for forces in theater to maintain a security cooperation event schedule that will preclude repercussions in the form of increased instability and the spread of radical Islam. Having said that, STT is a plan in which we have spent considerable time and investment studying the best ways and means to achieve greater strategic effectiveness to meet the challenges of the 21st century. Thus far, I do not believe we have moved too quickly or cut too deeply. Our transformation plan is constantly being reviewed, updated, and refined within the context of our overarching U.S. strategic objectives—to include OSD's global defense posture and available resources.

For example, by shifting our focus to the south and east, Cold War legacy naval bases and single function bases will be eliminated. The remaining bases across the Mediterranean are ideally located and manned, trained, and equipped in line with our new focus. The remaining bases support multiple functions; air and seaport operations, joint operations, and weapons and fuel storage.

Similarly, throughout the 1990s, the USAFE executed a significant post-Cold War reduction in forward-based forces, closing 80 percent of main operating bases, reducing aircraft more than 70 percent, and reducing personnel by 60 percent. We assess that our current Air Force force structure in Europe is about the right amount required for Theater Security Cooperation, global air mobility throughput, and forward-based deterrence.

The most ambitious and challenging aspect of EUCOM's transformation involves the realignment of forces and bases for USAREUR. The goal is to establish a more agile strategically positioned land force that has a greater capability to shape the security environment and to respond to crises throughout the theater. As we tailor the existing force structure, the combination of permanent forces in the AOR and rotational forces from CONUS will satisfy the full spectrum of operational requirements. The primary combat forces will include a fully structured Airborne Infantry Brigade Combat Team stationed in Italy, a Stryker brigade stationed in Germany, and a rotational brigade combat team to form the EETAF.

EUCOM's ability to implement a robust TSC strategy is predicated on having sufficiently forward stationed forces. These forces will enable EUCOM to achieve the following objectives: allow the U.S. to deepen and strengthen relations with allied and partner nations; assist our allies in developing capabilities to deploy rapidly and to be interoperable with U.S. forces; encourage our allies in developing a robust SOF's capability; facilitate an alignment of our forces in a manner that enables a more rapid deployment to areas of instability; and permit an increase in U.S. influence with new NATO members. Due to competing global needs the ability to provide a continuous rotational force presence at EETAF may not be tenable because of

global force management pool requirements levied against both those forces within, and those outside the EUCOM AOR.

We must also retain our Special Forces in theater. EUCOM has emphasized that our ability to maintain relationships with both our traditional and future partners underscores the importance of sustaining SOF's capabilities within our theater. We have also highlighted U.S. SOF's relevance within EUCOM as a potential model for NATO's own transformation and development of a robust SOF capability within the Alliance.

43. Senator MCCAIN. General Jones, what will be the impact on our allies and partner nations regarding these planned adjustments?

General JONES. A transformed EUCOM will have forces that are more agile, flexible, and expeditionary, capable of rapid deployment within the AOR or in support of another combatant command.

The success of EUCOM's STT is measured by the increase in the strategic effectiveness of U.S. military forces in theater, as well that of our NATO allies to meet the challenges of the 21st century. Our adjustments will serve to strengthen our overall relationships in the EUCOM AOR.

With greater strategic effectiveness than exists today, EUCOM will be better able to achieve the vision contained in the National Security Strategy and ensure the United States remains a nation of great influence with our allies and around the world.

44. Senator MCCAIN. General Jones, can we be sure that these reductions will not have a detrimental impact on our capability to conduct operations, and ensure that Europe remains engaged in a collaborative effort to counter common security challenges now and in the future?

General JONES. The Global Defense Posture changes EUCOM is implementing, will still have the requisite forces based in Europe to engage allies and partners. These forces living and operating from Europe are necessary elements of the EUCOM strategy, which involves building strong, capable, contributing military members of NATO. One of the principle tenets of EUCOM's transformation is to provide a visible model for NATO's own transformation. The focus is not a reduction in forces, but rather an effort to achieve a posture and force capability that ensures greater strategic effect, both within our AOR and with other combatant commands within the framework of the U.S. National Security Strategy and the National Defense Strategy. The simultaneous transformations of EUCOM and NATO are central to our ability to meet both the challenges and enormous opportunities of the 21st century. As we implement this transformation we must ensure that we possess the capabilities and force structure in the theater that will serve to enhance NATO's development.

Transformation initiatives being implemented by USAREUR include moving two heavy divisions back to the U.S. while accepting one Stryker BCT in Germany, consolidating a light infantry BCT (airborne) in Italy, and a rotational deployed brigade sized force to Romania and Bulgaria. These land forces in Europe will provide the right number and capabilities to engage our allies and partners. Units up to Brigade size will conduct training with our NATO and partner forces to build the capacities of European, African, and Asian militaries. Air forces stationed in Europe will continue to provide critical air operations in the theater, including the global mobility airlift flow, along with engaging with current and emerging military partnership in East Europe, Africa, and Southwest Asia. Such partnerships will improve U.S. access to critical regions, as well as our efforts to counter common security challenges. Naval forces assigned to EUCOM will continue to be deployed through the DOD Global Force Management program that provides forces from CONUS when required.

45. Senator MCCAIN. General Jones, do these transatlantic partnerships truly enhance regional and global security?

General JONES. Western Europe has now benefited from 60 years of peace and stability. Our strategic goal is to expand similar peace and prosperity to Eastern Europe and Africa. Our ability to maintain this prolonged period of stability is attributable to our shared recognition of the threat once posed by the Soviet Union and the common desire to establish an alliance that would seek to safeguard the freedom and security of its members. Today, in the absence of a discernible, predictable, and traditional threat, we are faced with a more menacing adversary; one that is multi-dimensional, nontraditional, and continually evolving from region to region.

Progress toward a more peaceful and prosperous world in this century is predicated on recognizing the new array of challenges that clearly threaten our common

interests, strengthening NATO as the centerpiece of our regional security framework, and implementing a comprehensive strategy that can effectively address our concerns. As a global community we struggle to come to agreement on what truly threatens our common security.

The United States partnership with Georgia is a great example of how partnerships pay dividends. Programs such as the Georgia Train and Equip Program and the Sustainment and Stabilization Operations Program have improved capability to the extent that Georgia is now a force/security provider on the international scene. Georgia provides almost two brigades of troops to OIF. Indeed, per capita Georgia is one of the top coalition providers in the world. Regionally, the nation now holds a more respected position and can enhance security with the forces trained and equipped by the U.S. These forces have also given Georgia a position of strength from which to negotiate regarding its breakaway regions and, more importantly, made it a more viable candidate for NATO accession in the near-term.

U.S. partnership with Georgia is a model of successful capability building, whose synergistic effects have made it a key partner in the global war on terrorism.

46. Senator MCCAIN. General Jones, is the Global Posture Review adequately linked to an overarching strategic framework agreed upon by all key government parties in the National Security Strategy process?

General JONES. In 2001, the Secretary of Defense directed all combatant commands to evaluate their structure, organization, and processes in order to gain transformational efficiencies and develop new capabilities to meet the emerging requirements of the international security environment. President Bush endorsed the decisions made during that evaluation in August 2004, saying "The new plan will help us fight and win the wars of the 21st century." The transformation we are undertaking supports the U.S. National Security Strategy and maximizes our ability to meet the objectives of our National Defense Strategy, namely:

- We are putting ourselves in a better position to secure the U.S. from direct attack by creating forces with greater operational flexibility to contend with uncertainty by emphasizing agility and not overly concentrating military forces in a few locations for particular scenarios.
- A critical component of our global defense posture changes are the legal arrangements pertaining to our military presence, access, and activities in other countries. We are negotiating Status of Forces Agreements and access arrangements with new allies and friends, enabling the necessary flexibility and freedom of action to meet 21st century security challenges, and directly support the strategic objective to strengthen alliances and partnerships.
- We are strengthening alliances and partnerships by seeking to expand allied roles, build new partnerships, and encourage transformation both in allied military forces' capabilities and in allies' ability to assume broader global roles and responsibilities. We are setting an example of efficiency and modernization for our allies and friends. At the same time, we are seeking to tailor the physical U.S. "footprint" to suit local conditions.

In sum, our global posture initiatives are linked directly to the National Security Strategy via the Defense Strategy and work to establish favorable security conditions throughout the world.

47. Senator MCCAIN. General Jones, are the DOD's projected costs for overseas realignment accurate? Will projected savings outweigh the cost of realignment and associate systems procurement?

General JONES. Although cost estimates for realignment of EUCOM facilities, military units, and relocations of personnel to the U.S. are continually being refined as we implement Global Defense Posture changes within the EUCOM AOR, we are finding that our initial estimates were accurate.

We currently estimate costs of approximately $1.3 billion through 2010. Beginning in 2011, we will begin realizing cost avoidance of about $400 million per year.

48. Senator MCCAIN. General Jones, is it feasible to conduct basing realignment moves given the deployment tempo driven by ongoing military operations in Iraq and Afghanistan?

General JONES. The EUCOM STT plan includes moving two USAREUR divisions from Germany back to the U.S. This plan is on schedule and has been coordinated through the DOD's Global Force Management (GFM) program for Iraq/Afghanistan deployments. In addition to operational requirements, quality of service for servicemembers and their families remains a pivotal factor in developing Iraq/Afghanistan deployments, as well as moving the divisions back to the U.S.

Army leadership continues to refine the plans to best fit global war on terrorism requirements. One example of a midcourse adjustment was delaying the return of the 1st Armored Division to Fort Bliss, Texas for 1 year. This will allow servicemembers who return from Iraq to move to the U.S. with their families in an orderly manner. In conjunction with the U.S. Army, EUCOM will continue to keep a close watch on units that have deployed and that are scheduled to deploy to Iraq and Afghanistan.

Certainly, there are a number of variables that we must be cognizant of as we prosecute the global war on terrorism and realign our forces to more effectively address 21st century threats. We must execute a plan that is well synchronized with the Services and the Secretary of Defenses GFM program. This interlocking plan also underscores the importance of our fiscal year 2007 MILCON that is linked to our theater transformation. EUCOM will continue its efforts to close legacy bases, streamline headquarters command and control, and return operational units back to the U.S., where they are being assimilated into stateside organizations.

The initial deployment of the EETAF will be executed with EUCOM's assigned forces to minimize the impact on Iraq/Afghanistan forces deployed through GFM. Beginning in 2008, future deployments will involve a U.S. based brigade sized force of Army soldiers, marines, or Special Forces.

49. Senator MCCAIN. General Jones, what will be the effect of the rebasing on the relationship with long-term U.S. allies, such as Germany, where a drawdown is proposed?

General JONES. Relocation of U.S. forces presently stationed in Europe will affect bilateral relationships with many of our host countries. Germany will experience by far the largest loss in U.S. forces presence, but well understands the changing strategic security environment and our global defense transformation activities. The German military is also undergoing its own long-term transformation, which involves closing around 400 military facilities throughout Germany.

By the time our total Global Defense Posture program in EUCOM is fully implemented, a total of over 84,000 U.S. soldiers, sailors, airmen, civilian employees, and family members will have departed Germany since 2000. We have worked very closely with the German Federal Government to ensure they have a thorough understanding of the planning processes and proposed timelines for unit movements and community closures; to coordinate public announcements of such moves; and to properly implement many other important considerations such as the compensation and relocation of German civilian employees and the disposition of transferred U.S. forces, facilities, and installations.

The effects of closing down six major U.S. military communities will have some negative economic effects at the local level; but the gradual departure of U.S. personnel from these locations, phased over several years, will help to minimize the impact on local communities, especially in smaller towns where U.S. presence makes up a larger percentage of the community's economic base. The installation closure announcements and the proposed timelines have been coordinated with the German government and publicized as far in advance as possible.

The removal of large U.S. combat formations from German soil may well alter the perceptions of some Germans regarding our commitment to NATO and long-term security and stability in the greater European area. In actuality, U.S. commitment remains as strong as it's always been. German military and civilian leadership understand the nature of our commitment, and our overall purpose for realigning our military forces.

A reduction in U.S. forces stationed in Germany is also likely to increase European concerns on a range of security issues, to include long-term stability in the Balkans and global war on terror-related security threats from outside the region. In no way should the change in our posture be interpreted as a reduced commitment to the region. It is, rather, a shift to better methods of promoting our interests in today's international security environment. As we move forward with our global defense transformation activities, it will be necessary to reassure Germany and all of our allies and partners of our long-term commitment to security and stability in the entire EUCOM area.

50. Senator MCCAIN. General Jones, I would imagine that the Romanian rail lines compare poorly to the BundesRail. Is infrastructure in Romania and Poland capable of supporting U.S. bases?

General JONES. The Romanian rail infrastructure is currently capable of supporting the planned FOSs that are part of the EETF.

The rail infrastructure in Romania and Poland is not in the condition of and cannot be compared to that currently found in Germany (Deutsche Bahn). We cannot expect the same support that we have in Germany.

In general, the existing poor condition of the rail lines and the limited number of rail cars must be taken into account during operational and support planning. Plans for infrastructure improvement in Romania and Poland are being worked; process is slow since infrastructure has been neglected for years, cost is high, and funding is a problem.

That said, however, we have focused our efforts on enhancing railhead capabilities in the vicinity of the FOSs, and believe that as former Warsaw Pact nations expand their trade with European Union nations (and become European Union members themselves), the economic impetus to improve their rail infrastructure will move them forward.

EUCOM/AFRICA ISSUES

51. Senator MCCAIN. General Jones, you have continuously emphasized the increasing importance of Africa—from both a security concern as well as the enormous potential the continent possesses. What measures is EUCOM taking to ensure that Africa does not become the next front in the war on terrorism?

General JONES. Africa is a dynamic area that requires continuous reassessment. It is geographically, culturally, politically, and economically diverse. International terrorists will continue to target ongoing political-economic reform efforts throughout the region, thus threatening the stability and security of U.S. friends and allies. Ungoverned areas throughout Maghreb and Trans-Saharan Africa will continue to provide a haven for terrorists and insurgent groups. The terrorist threat in Northern Africa will increase as operations in Iraq and Afghanistan are most successful and foreign fighters flee those battlefields and/or return to their homelands.

Continued EUCOM and USG involvement in the region remains the key to enhancing regional security and promoting reform.

Morocco, Algeria, and Tunisia will remain key partners in the war on terror and important to regional security. The U.S. remains committed to long-term relationships with these countries. Transforming our relations with Algeria and Libya presents a vital opportunity to improve stability in Northern Africa and increase strategic partnerships in the region.

The Trans-Sahara Counterterrorism Initiative (TSCTI)—and more specifically OEF–TS—enables our African partner nations to build their own capacity to fight terrorism within their borders and deny the enemy safe haven throughout the Trans-Sahara region. Additionally, the African Contingency Operations Training and Assistance (ACOTA) and Global Peace Operations Initiative (GPOI) programs are providing peacekeeping training and building capacity for many African countries and the African Union.

52. Senator MCCAIN. General Jones, what hurdles can you identify which will adversely affect your ability to carry out a security strategy in Africa?

General JONES. Although we factor it into our strategy, EUCOM chief hurdle in Africa relates to resources. Most African countries have poor infrastructure, inadequate training and equipment, and rely on donor assistance for most of our engagement. Additionally, our ability to directly influence African militaries and enhance their capabilities remains problematic due to our global troop commitments, as well as various theater security cooperation restrictions imposed on key countries prohibiting the use of IMET and FMF—two key outreach tools for EUCOM.

53. Senator MCCAIN. General Jones, what are your most effective tools or resources with regard to achieving your goals in the various regions of Africa?

General JONES. IMET, FMF, and FMS make up the bulk of the security cooperation funding that is vital to providing education and resources to African countries. ACOTA and GPOI programs are providing peacekeeping training and building capacity for many African countries, as well as the African Union.

54. Senator MCCAIN. General Jones, what are DOD's plans with regard to U.S. troop disposition in Africa?

General JONES. Presently, Africa is divided among three combatant commanders: EUCOM, which has 46 countries in its AOR, U.S. Central Command, which has 7 (including ongoing operations in the Horn of Africa), and PACOM, which has jurisdiction over the Madagascar, Seychelles, Mauritius, and Comoros Islands groups.

Currently, EUCOM's presence on the Africa continent remains small—as of May 2, 2006, EUCOM had a total of 251 military personnel in Africa, including 32 deployed personnel. The U.S. Central Command had a total of 1,525 personnel in Africa, including 1,504 deployed personnel (1,302 in Djibouti as part of Joint Task Force Horn of Africa (JTF–HOA)). PACOM had no personnel stationed or deployed in Africa.

In the EUCOM AOR, we have worked to take a more engaged approach to achieving long-term stability through proactive, preventive measures. Consequences for inaction may include continued and repeated U.S. intervention in conflicts and humanitarian crises, disruption of economic trade vital to the development of Africa's nascent economies, and increased presence of radical fundamentalism, especially in Africa's vast ungoverned spaces. We continue to provide military training and assistance teams to enable our African partner nations to better develop their militaries and to build their own capacity to fight terrorism and improve security within their borders. These efforts and others like them will be able to rely on the use of Cooperative Security Locations (CSLs) located throughout Africa. CSLs are a critical part of EUCOM's basing plan in host nations and will require little or no permanent U.S. presence.

The majority of our operations are "peace support" operations, ranging from peace enforcement, to stability operations, to training missions and exercises. Proactive peacetime engagement activities reassure allies and partners, promote stability, and mitigate the conditions that lead to conflict. We base our strategies on the principle that it is much more cost effective to prevent conflict than it is to stop one once it has started.

EUCOM's engagement through programs such as the GPOI, the ACOTA, and providing support to the African Union (AU) are intended to diminish the requirement for U.S. forces sent to the continent in response to a crisis/conflict. These efforts provide much needed support to meet the world's growing need for well-trained peace operations forces, as well as to assist current peacekeeping efforts such as those in Darfur. In Africa, the U.S. will continue its work through existing programs and expand its activities aimed at enhancing African capacity to conduct peace support operations.

There are a number of important Security Cooperation Activities that greatly assist our efforts and strategy in the theater. Key among these tools are Combined/Multinational Training and Exercises, FMF, Humanitarian Assistance (HA), Joint Contact Team Program (JCTP), Military-to-Military Program, IMET, FMS, and direct commercial sales. These programs provide access and influence, help build professional, capable militaries in allied and friendly nations, and promote interoperability. We execute the larger security assistance programs using our Offices of Defense Cooperation in concert with U.S. Embassy Country Teams, while smaller programs are executed by Defense Attachés and Embassy Offices. In essence, EUCOM is and will continue to leverage existing programs, while utilizing a broad interagency approach, to achieve U.S. foreign policy objectives in Africa. Our intent is to have a well-managed comprehensive strategy that doesn't require large U.S. forces or bases.

55. Senator MCCAIN. General Jones, what agreements have we reached with regard to basing in the region?

General JONES. We have no "basing" agreements that allow for a permanent military presence per se in Africa. There is a signed agreement providing for the use of a small amount of land, permission to construct some buildings, and arrangements as to their maintenance and use with Ghana (signed in 2005). We are currently in negotiations with Uganda, Gabon, and Senegal for similar agreements with them.

56. Senator MCCAIN. General Jones, should Africa remain part of EUCOM? Should DOD stand up a separate African Command?

General JONES. With the assumption that USG commitment and resources would support the establishment of a new headquarters for Africa, I believe that the Department should consider establishing a separate command for Africa during future Unified Command Plan (UCP) reviews.

Africa is of growing interest to the United States due to compelling humanitarian needs, natural resources, and potential terrorist safe havens and operations within its ungoverned areas. From a unity of command and unity of effort perspective, a change in U.S. command arrangements in Africa has merit and should be considered during future UCP discussions.

Numerous studies have proposed unifying Africa under a different command structure. The 1993 Committee on Roles and Missions proposed transferring sub-

Sahara Africa from EUCOM to CENTCOM and the recent UCP 2004 slate considered a possible EUCOM/CENTCOM merger in which the establishment of a sub-unified command for Africa was considered.

Until a thorough, cross-agency review of all courses of action can be conducted, however, Africa should remain part of EUCOM. In the meantime, as Africa's relationship with the U.S. military grows incrementally, so too should our treatment of Africa vis-a-vis the UCP. First, we might consider changing the name of the EUCOM to incorporate Africa. Another subsequent incremental change might include creating a sub-unified command for Africa. Finally, as we progress toward further development we should consider creating a separate unified command for Africa.

A separate command for Africa would provide better focus and increased synergy in support of U.S. engagement in Africa, but would also require a commitment of significant resources. A new staff presupposes that the USG would provide the resources required to establish a new headquarters and support increased engagement in Africa. Despite increased USG interest in Africa, without a significant change in U.S. national policy towards Africa, any new command would most likely have inadequate resources (budget, available forces, manpower, and infrastructure) available to justify establishing a separate command.

While most of Africa is assigned to EUCOM, future UCP country assignments should be reviewed and consideration given to assigning all African countries to one Geographic Combatant Command. As a result of established mature relationships with European partners, EUCOM is able to effectively leverage European partners to promote U.S. policy goals in Africa. A review of the feasibility of establishing a separate command for Africa should also weigh the advantages and disadvantages of maintaining responsibility for Africa under EUCOM. Should Africa eventually become a separate Unified Command, I strongly recommend that such a headquarters be located in Africa.

SUDAN

57. Senator MCCAIN. General Jones, are you satisfied with NATO's role in helping restore peace in Sudan? Specifically, do you favor deploying NATO troops to Darfur?

General JONES. Any activity undertaken by NATO in support of the African Union Mission in Sudan (AMIS) must be designed around the "African solutions to African problems" principle and an aim of increasing the effectiveness of AMIS and through it the African Union. NATO has deployed troops to Darfur (El Fashir) already in support of capacity building missions for the African Union and will continue to do so in line with tasking from the North Atlantic Council.

58. Senator MCCAIN. General Jones, how well do you think AU troops are doing? If they aren't effective, should NATO keep ferrying them in and out?

General JONES. African Union troops are made up of battalions from several African nations. The quality of the battalions ranges, though overall, these troops are up to the task they face. They lack the numbers and mobility capabilities to cover the significant distance and tasks required as and rapidly as needed. However, where they are deployed as balanced forces, they are executing their mission successfully. The presence African Union troops in Darfur has contributed to the conditions for recently brokered peace agreement.

Based on military advise, NATO is authorized to continue supporting the African Union mission, including airlift of troops in and out of theater, until September 30, 2006.

59. Senator MCCAIN. General Jones, the United States has provided over $150 million in support to the AMIS over the past 2 years. In that same time period, it is estimated that 300,000 to 400,000 Sudanese have been killed and almost 2 million refugees created. From your perspective, how might we better execute resources to prevent further genocide in Sudan?

General JONES. The crisis in Darfur requires a political solution. It was unrealistic to expect the AMIS to end the violence and create secure conditions in the region. They entered Darfur with a mandate to monitor a ceasefire that no side has honored. However, as the mission matured and their leadership adjusted to the realities of the situation on the ground, AMIS did contribute somewhat to improving security in Darfur.

The recent signing by one of the rebel factions of the Darfur Peace Agreement (DPA) is a positive first step in ending the crisis in Darfur. This is the beginning

of the political solution that is required. The role of AMIS is important as conditions of the DPA are implemented.

When asked by the African Union and the U.N., NATO stands prepared to work with AMIS to increase their capacity to not only monitor the DPA, but also report and respond to violations. Increasing the capability of AMIS in preparation for subsequent transition to a U.N. mission is an important aspect of improving security in Darfur. Our continued support to the AMIS, financially, and militarily through NATO, will effectively bridge the gap until the U.N. assumes responsibility for the mission in Darfur.

AFGHANISTAN

60. Senator MCCAIN. General Jones, what is NATO's overall goal in Afghanistan? Is the ISAF sufficiently manned to accomplish the mission, particularly when an emergency response is necessary?

General JONES. NATO's political objective in Afghanistan is to a self-sustaining, moderate, and democratic Afghan government able to exercise its sovereign authority, independently, throughout Afghanistan.

As ISAF expands and its authority extends over the Southern and Eastern regions, we anticipate its deployed numbers being greater than Operation Enduring Freedom (OEF) had deployed at its peak. ISAF's forces will bring with them considerable capability for the task they have been given, including the ability to respond rapidly and appropriately when required.

61. Senator MCCAIN. General Jones, what arrangement has NATO made to ensure that OEF and ISAF may act in concert, if the forces and capabilities of one operation are needed by another?

General JONES. The Commander of OEF is dual-hatted with his second hat being that of Deputy Commander Security for ISAF. This will ensure operations involving OEF and ISAF troops in concert are coordinated and controlled at the highest levels. In addition, in the areas we anticipate the majority of OEF operations, ISAF troops have already been operating alongside coalition OEF forces for some time in an effective manner.

62. Senator MCCAIN. General Jones, in the past NATO has had difficulty raising forces at force-generation conferences for ISAF. Is there still difficulty in persuading governments to send appropriate forces and equipment?

General JONES. Currently 36 nations provide forces for ISAF. By the end of this year, we anticipate that number increasing to 39 nations. As ISAF's roles and responsibilities increase, nations' willingness to provide the capabilities required have correspondingly increased. There remain small areas of the Combined Joint Statement of Requirement (CJSOR) unfilled but they are not mission critical issues at present.

63. Senator MCCAIN. General Jones, U.S. officials on the ground report that some Provincial Reconstruction Teams (PRT) are effective and some are not. They contend that the Germans, for example, are reluctant to engage local leaders beyond the PRT perimeter, and that little is accomplished. Others note that the Lithuanians have volunteered to lead a PRT, but must rely heavily on U.S. logistics and expertise to manage operations. Are there different models for a PRT? What is the difference in the way a U.S. PRT and a German PRT is funded and run?

General JONES. The reports by U.S. officials on this issue are misleading and in the case of the German PRT, wrong.

Nations volunteering to lead PRTs deploy a PRT model appropriate for their area and task based upon their assessment of both. NATO has provided in its recent operations plan revision a set of minimum standards required to ensure a consistency of approach in our PRTs. Based on this information, nations are then able to build on that guidance and our PRTs more standard in their organizational structure and methods of operation. Many of the ideas on best practice come from the PRTs deployed in the northern region of Afghanistan and in particular the German model. These PRTs are civilian-led (unlike PRTs) but include military personnel. Together they deliver a coherent multiagency approach to long-term reconstruction and development in Afghanistan. How these NATO PRTs are funded is a national decision.

64. Senator MCCAIN. General Jones, what is the effect of national caveats on NATO's ability to carry out its missions in Afghanistan? Please describe the attack

on the Norwegian-Finnish PRT at Meymaneh in mid-February 2006. Did caveats play a role in the ability of the Norwegians and Finns to defend themselves?

General JONES. No. Both the Norwegian and Finnish personnel demonstrated considerable and appropriate military restraint during that incident given the tactical circumstances they found themselves in. The PRTs had appropriate rules of engagement in place for the situation encountered. In this instance, the local commander's actions were proportional and prudent given the actual threat faced by the PRT.

65. Senator MCCAIN. General Jones, does the narcotics trade endanger the future of the Afghan state?

General JONES. The extension of the Afghanistan government authority, the maintenance of long-term stability, and the economic reconstruction of Afghanistan are inextricably linked to the successful tackling by the Afghan government of the illicit opium trade. This may be the Karzai Government's biggest challenge.

66. Senator MCCAIN. General Jones, in May or June 2006, NATO-led forces will move into southern Afghanistan. What are ISAF's rules of engagement when it confronts a drug lab?

General JONES. If a drug lab is discovered in the course of routine operations, ISAF can seize and secure drugs, associated equipment, and traffickers before handing them over to the appropriate Afghan authorities. ISAF can also gather information and provide area security for counternarcotics operations.

67. Senator MCCAIN. General Jones, what does ISAF do if it finds a poppy field? Are there viable alternatives to poppy production for Afghan farmers? How does ISAF deal with warlords who benefit from the drug trade?

General JONES. Poppy eradication is not a military task for ISAF, but supporting Afghan government counternarcotics programs is an ISAF Key Supporting Task.

The United Kingdom as the G8 lead nation for counternarcotics is working with the Afghan government and international community to tackle the illicit opium trade. Part of their strategy is to introduce viable, legal alternatives. The Afghan government's integrated approach to counternarcotics incorporates interdiction, eradication, law enforcement, the judiciary, alternative livelihood programs, regional cooperation, improved border controls, and domestic demand reduction.

ISAF can offer the Afghan authorities supporting capabilities to enable them to counternarcotics and offer support to Afghan-led counternarcotics operations. If a drugs warlord was discovered conducting an illegal narcotics act during the course of a routine operation, he could be held by ISAF before handing him over to the appropriate Afghan authorities.

IRAN

68. Senator MCCAIN. General Jones, it seems clear to me that all NATO members share both alarm at Iran's nuclear program and revulsion at the anti-Israel threats that President Ahmadinejad continues to issue. Israel, in the face of these threats, shares the democratic values of NATO members. As a way of deterring an Iranian nuclear threat to Israel—and other existential threats to Israel—I believe that NATO should look closely at expanding cooperation with Israel, possibly leading to eventual membership. Could you describe the current state of NATO talks with Israel and possible areas in which we could upgrade our relations?

General JONES. Israel is a proactive country with NATO primarily through its active participation in NATO's Mediterranean Dialogue (MD). This program provides for political dialogue and practical cooperation with participating countries and helps foster democratic and military development with countries important to the U.S. and NATO in the war on terrorism.

The MD initiative aims to enhance security and stability by offering tailored advice on defense reform, budgeting, planning, and building civil-military relations. One of the most significant effects of MD is the promotion of better understanding and cooperation between Arab participants and Israel on a military-to-military basis. Such cooperation not only enhances a member's ability to help fight terrorism through information sharing and maritime cooperation, it also improves overall interoperability with NATO member nations.

In terms of NATO membership, Israel has recently developed and discussed the first work plan for cooperation with NATO and is playing a valuable role as a supporter of our Mediterranean and North African Security agenda. However, Israel has not requested NATO membership.

TAIWAN/PACOM

69. Senator MCCAIN. Admiral Fallon, have recent political developments in Taiwan or China increased danger in the Taiwan Strait? What is your assessment of the threat?
Admiral FALLON. [Deleted.]

70. Senator MCCAIN. Admiral Fallon, has the People's Republic of China (PRC) redeployed forces in the wake of Chen Shui-bien's statements?
Admiral FALLON. [Deleted.]

71. Senator MCCAIN. Admiral Fallon, is Taiwan acting assertively enough to defend itself?
Admiral FALLON. Taiwan has made some progress in procuring systems to defend itself, but they have yet to arrest a long-term decline in defense spending as a percentage of Gross Domestic Product.
[Deleted.]

72. Senator MCCAIN. Admiral Fallon, what is the state of Taiwan's capability to defend itself against potential cross-Straits attack?
Admiral FALLON. [Deleted.]

73. Senator MCCAIN. Admiral Fallon, does Taiwan's defense posture put the onus on the United States to secure the Taiwan Strait or repel a Chinese attack?
Admiral FALLON. [Deleted.]

74. Senator MCCAIN. Admiral Fallon, how has the PRC's military buildup influenced the defense postures and budgets of other states in the region, including India, Vietnam, Japan, and Indonesia?
Admiral FALLON. [Deleted.]

JAPAN/PACOM

75. Senator MCCAIN. Admiral Fallon, what is your assessment of our bilateral relationship with Japan?
Admiral FALLON. [Deleted.]

76. Senator MCCAIN. Admiral Fallon, the Government of Japan has expressed a more active role in missile defense. What can you tell us about this? Have they deployed missile defense equipment or associated radars in or around Japan?
Admiral FALLON. [Deleted.]

U.S. FORCES KOREA

77. Senator MCCAIN. General Bell, I continue to worry about the wisdom of large-scale redeployments of American troops from South Korea. Given that we are still in the midst of Six-Party Talks with North Korea over its nuclear program, and that we are looking for leverage over Pyongyang now, why would we preemptively withdraw troops from the peninsula? Wouldn't we at least keep our troops in place as a potential bargaining chip?
General BELL. I do not believe it is necessary to keep our current force structure in place as it is as a bargaining chip. Our commitment to the ROK–U.S. Alliance is enduring and remains unwavering; and our purpose is to deter and defend against a North Korean threat; and to sustain a mutual commitment to regional security and stability. Our commitment is not measured by the size of our force structure in Korea, but by the collective national power of the United States.
Historically, the metric of readiness has been the number of troops on the ground; however, what is truly important are the complementary deterrent and combat capabilities that each nation contributes to the security of the peninsula. Over the past several years, there has been a tremendous improvement in the interoperability of our combined forces. Concurrently, the U.S. Armed Forces have transformed our capabilities in many areas to include strategic deployability, command and control, precision strike, and joint and combined operations. These capabilities allow us to focus overmatching combat power when and where we choose to defeat armed aggression. United States forces can now be sized to provide tailored capabilities that complement those of our ROK allies, providing overwhelming strategic de-

terrence. Our regional and strategic reinforcing capabilities allow us to defeat any potential North Korean aggression.

My bottom line is that the United States has both the on-peninsula and in areas of close proximity to the peninsula the capacity to respond to a North Korean attack with immediate and devastating combat power. Additionally, the ROK military is modern, large, capable, and competent. Regarding the North Korean nuclear issue, it is my assessment that today and into the future the United States will have the requisite military combat power in the region to ensure our national command authority has the full range of options it needs to work towards a settlement of the nuclear issue with North Korea.

QUESTIONS SUBMITTED BY SENATOR SUSAN COLLINS

QUADRENNIAL DEFENSE REVIEW (QDR)/CHINA

78. Senator COLLINS. Admiral Fallon, the recently released QDR characterizes China as the nation with the "greatest potential to compete militarily" with the U.S. and field technologies that could disrupt U.S. supremacy. The strategy directs the Navy to adjust its force posture and basing to provide "at least six operationally available and sustainable carriers and 60 percent of its submarines in the Pacific to support engagement, presence, and deterrence."

While this sounds like a good policy in light of China's largest defense budget increase in 4 years and aggressive military modernization, I am concerned that shifting Navy ships from the east coast to the west coast could make it harder to maintain deployments of a given number of ships to the Persian Gulf.

Ships from both the Atlantic and Pacific fleets are used to conduct operations in the Persian Gulf and Indian Ocean area. Atlantic Fleet ships homeported on the east coast use the Suez Canal and have a shorter transit distance to the Persian Gulf than do Pacific Fleet ships homeported on the west coast.

Given the increase in transit distance to the Gulf for ships transferred from the east coast to the west coast, are you concerned that this could make it more difficult for the Navy to balance the maintenance demands of the fleet against the locations of repair and overhaul yards, some of which are located on the Atlantic and Gulf coasts, including the Portsmouth Naval Shipyard in Kittery, Maine?

Admiral FALLON. [Deleted.]

79. Senator COLLINS. Admiral Fallon, the recently released QDR expresses concern over the modernization of the Chinese military as a risk to regional stability, noting its investment in submarines, advanced torpedoes, and ballistic and cruise missiles. As I raised with Secretary Rumsfeld during a hearing last year before this committee, I am concerned about China's submarine modernization—particularly when combined with the decreasing number of ships and submarines being procured in the United States.

At the end of fiscal year 2005, the Navy operated a total of 54 attack submarines. Admiral Mullen's 313-ship fleet plan includes 48 attack submarines and four converted Trident cruise missile submarines. China's aggressive military modernization, particularly its emphasis on naval capabilities and platforms, makes a persuasive case for supporting a force structure of 55 or more attack submarines.

The argument concerning uncertain future threats was one element of the successful campaign last year in my home State in convincing the Base Realignment and Closure Commission to reject the Pentagon's flawed recommendation to close the Portsmouth Naval Shipyard in Kittery, Maine.

The Navy's fiscal year 2007 budget, however, requests funding to inactivate four attack submarines. In addition, the Navy's Future Years Defense Plan does not call for the Service to increase its purchase of *Virginia* class submarines to two per year until 2012.

What is your perspective on the dramatic buildup of the Chinese military capacity, particularly its Navy?

Admiral FALLON. [Deleted.]

80. Senator COLLINS. Admiral Fallon, based upon current operational requirements of the PACOM, and assuming the funding were available, would you prefer that Congress and the Navy keep submarines in the fleet as long as possible through overhauling or maintaining them versus retiring or inactivating them?

Admiral FALLON. [Deleted.]

81. Senator COLLINS. Admiral Fallon, in 2002, the Navy began funding the DD(X) destroyer program to pursue a series of new technologies in propulsion, power management, weaponry, and stealth. This next-generation DD(X) destroyer will have high-tech capabilities that do not currently exist on any Navy surface combatants. These capabilities include:

- Far greater offensive and precise firepower;
- Numerous engineering and technological innovations that will allow for a reduced crew size; and
- Sophisticated, advanced, weapons systems, such as the electromagnetic rail gun.

That year you spoke to the Surface Navy Association Symposium in Arlington, Virginia. You stated: "We believe that we are best suited to approach the conditions today with a family of ships. This is the vision from the top. We want to take the hull form of the DD(X) and have it be the basis for two distinct classes of ships, the DD(X) and the cruiser version, that are going to have theater-wide strategic reach."

I would like to know your views on the usefulness of the DD(X) to operations worldwide and specifically in the Pacific theater. What benefits do the design and capabilities of the DD(X) bring to your warfighting command?

Admiral FALLON. [Deleted.]

82. Senator COLLINS. Admiral Fallon, last year's Navy budget request slashed production of the DD(X) over the next 6 years, from 12 to 5 DD(X)s. This cut will affect the size of our major surface combatant fleet far in to the future. The former Chief of Naval Operations Admiral Clark stated to me before this committee that the requirement for DD(X) destroyers is unchanged at 12. Do you agree with Admiral Clark regarding the ongoing requirement for the DD(X)? Also, your command is as reliant on the U.S. Navy fleet as any in our military. What risks do we incur by these cuts in the procurement of major surface combatants?

Admiral FALLON. [Deleted.]

83. Senator COLLINS. Admiral Fallon, earlier this week, China announced that it would boost its defense budget by almost 15 percent this year—the biggest increase in its defense budget in 4 years. In fact, China's public military budget has increased by double digits in nominal terms every year since 1989.

Noting that China's public military budget markedly underestimates actual defense-related expenditures (excluding categories such as weapons research and foreign arms purchases), the DOD's 2005 Report to Congress on PRC military power generally concludes that China is greatly improving its military, including the number and capabilities of its nuclear forces, and that this build-up poses a long-term threat to Taiwan and ultimately to the U.S. military presence in Asia.

Do you think the Navy's fiscal year 2007 budget request adequately reflects the strategic and operational requirements needed to counter China's increasing military investments?

Admiral FALLON. [Deleted.]

84. Senator COLLINS. Admiral Fallon, what does the Pentagon report on China's military might mean for U.S. interests in the region?

Admiral FALLON. [Deleted.]

85. Senator COLLINS. Admiral Fallon, does the proposed 313-ship plan reflect a current and future naval force structure that can adequately respond to the growing Chinese threat?

Admiral FALLON. [Deleted.]

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

EUCOM FORCE POSTURE REALIGNMENT

86. Senator LEVIN. General Jones, under the DOD's Integrated Global Presence and Basing Strategy, or IGPBS, the posture of our armed forces in the European theater will undergo significant changes. Last year, the DOD announced plans for the return of the 1st Infantry Division Headquarters to the United States, and other U.S. Army Europe units will be returned, inactivated entirely, or converted or reassigned. These actions will eventually result in 11 Army bases being returned to Germany, and will affect thousands of soldiers, their family members, civilian DOD employees, and host nation positions.

The report of the congressionally-established Overseas Basing Commission, issued in August 2005, questions the timing and depth of the force cuts in the DOD's overseas basing plan. That report questioned the need to shift so rapidly to an expeditionary posture and recommended that the pace of changes be slowed and reordered, saying "we are putting the cart before the horse."

Do you believe we are moving too quickly to return forces to the United States and cutting too deeply the U.S. presence overseas, particularly in the EUCOM AOR?

General JONES. There is no substitute for forces in theater to maintain a security cooperation event schedule that will preclude repercussions in the form of increased instability and the spread of radical Islam. Having said that, STT is a plan in which we have spent considerable time and investment studying the best ways and means to achieve greater strategic effectiveness to meet the challenges of the 21st century. Thus far, I do not believe we have moved too quickly or cut too deeply. Our transformation plan is constantly being reviewed, updated, and refined within the context of our overarching U.S. strategic objectives—to include OSD's global defense posture and available resources.

For example, by shifting our focus to the South and East, Cold War legacy naval bases and single function bases will be eliminated. The remaining bases across the Mediterranean are ideally located and manned, trained, and equipped in line with our new focus. The remaining bases support multiple functions; air and seaport operations, joint operations, and weapons and fuel storage.

Similarly, throughout the 1990s, the USAFE executed a significant post-Cold War reduction in forward-based forces, closing 80 percent of main operating bases, reducing aircraft more than 70 percent, and reducing personnel by 60 percent. We assess that our current Air Force force structure in Europe is about the right amount required for Theater Security Cooperation, global air mobility throughput, and forward-based deterrence.

The most ambitious and challenging aspect of EUCOM's transformation involves the realignment of forces and bases for USAREUR. The goal is to establish a more agile strategically positioned land force that has a greater capability to shape the security environment and to respond to crises throughout the theater. As we tailor the existing force structure, the combination of permanent forces in the AOR and rotational forces from CONUS will satisfy the full spectrum of operational requirements. The primary combat forces will include a fully structured Airborne Infantry Brigade Combat Team stationed in Italy, a Stryker brigade stationed in Germany, and a rotational brigade combat team to form the EETAF.

EUCOM's ability to implement a robust Theater Security Cooperation strategy is predicated on having sufficiently forward stationed forces. These forces will enable EUCOM to achieve the following objectives: allow the U.S. to deepen and strengthen relations with allied and partner nations; assist our allies in developing capabilities to deploy rapidly and to be interoperable with U.S. forces; encourage our allies in developing a robust SOF capability; facilitate an alignment of our forces in a manner that enables a more rapid deployment to areas of instability; and permit an increase in U.S. influence with new NATO members. Due to competing global needs, the ability to provide a continuous rotational force presence at EETAF may not be tenable. I would not be comfortable with an Army posture that goes below three full brigades available for use by this theater.

We must also retain our Special Forces in theater. EUCOM has emphasized that our ability to maintain relationships with both our traditional and future partners underscores the importance of sustaining SOF capabilities within our theater. We have also highlighted SOF's relevance within EUCOM as a potential model for NATO's own transformation and development of a robust SOF capability within the Alliance.

87. Senator LEVIN. General Jones, are you concerned that a reduced U.S. presence in Europe could have a negative impact on our ability to exercise leadership within NATO? Is there a risk that these reductions could give a new impetus to efforts on the parts of European countries to create a military force alternative to NATO under European Union command and control?

General JONES. The United States leadership in the NATO is predicated in large measure on the units stationed in Europe, as well as a willingness on the part of the U.S. to provide the necessary resources and personnel. Our leadership and influence is what generated the NATO Response Force. Our presence provides a model for the Alliance's own transformation that is necessary to meet the challenges and threats of the 21st century. In fact, some NATO allies have questioned U.S. commitments to NATO operations and initiatives such as the NATO Response Force and the ISAF due to a perceived lack of U.S. contributions of personnel and equipment to these efforts. While it is possible that the EU could eventually compete with

NATO for resources and military influence, we are working hard with our allies to ensure any operational military effort on the part of the EU is complementary to NATO and not competitive or duplicative, wasting valuable national resources that could be used more effectively elsewhere.

BALLISTIC MISSILE DEFENSE FACILITIES IN EUROPE

88. Senator LEVIN. General Jones, I understand that the United States is discussing with a number of European governments the idea of constructing a third deployment site for deploying 10 Ground-Based Interceptors of the Ground-Based Midcourse Defense system for ballistic missile defense. What is the status of those discussions, and will they be concluded this year?

General JONES. [Deleted.]

89. Senator LEVIN. General Jones, are there discussions underway with any European governments for the deployment or use of other missile defense equipment on their territory, including radars? If so, what are the issues being discussed and what is the status of those discussions? Could those discussions affect the outcome or timing of the discussion on a third deployment site?

General JONES. [Deleted.]

PATRIOT PAC–3 MISSILE INVENTORY

90. Senator LEVIN. General Jones, although there is concern about the development and potential deployment of long-range ballistic missiles, there are already many hundreds of short-range, Scud-class ballistic missiles deployed today within range of U.S. forces. Do you believe the inventory of Patriot PAC–3 missiles currently available in the EUCOM theater is sufficient to defend against the existing threat, or would you want additional PAC–3 missiles deployed in your AOR?

General JONES. [Deleted.]

QUESTIONS SUBMITTED BY SENATOR DANIEL K. AKAKA

PHILIPPINES

91. Senator AKAKA. Admiral Fallon, in your testimony you mention that southeast Asia is the front line of the war on terror and that with the cooperation of the governments of the Philippines, Indonesia, and Malaysia, we have been building capacity and strengthening the ability of those countries to resist the activities of the terrorists and to actively seek their capture or demise. However, just last month, a group of Philippine marine officers attempted to overthrow the Philippine Government. Although the plot failed, there seems to be every evidence that there will be similar uprisings in the future.

What effect do you believe the recent political instability in the Philippines will have on efforts to neutralize the growth of terrorist groups in the Philippines such as the Abu Sayyaf Group and Jemahh Islamiyah?

Admiral FALLON. [Deleted.]

NORTH KOREA

92. Senator AKAKA. Admiral Fallon, in your testimony, you state that "the North Korean leadership remains an enigma and the known ballistic missile capability of this country plus the potential possession of nuclear weapons are cause for continuing concern and attention to the Korean Peninsula. The Six-Party Talks, while not yet yielding a resolution to the North Korean nuclear issue, provide an encouraging framework for regional diplomatic leadership by the ROK, Japan, Russia, and China."

Do you believe that the United States should play a more active role in these discussions rather than outsourcing it to China, Japan, Russia, and South Korea?

Admiral FALLON. The U.S. plays an active role in the Six-Party Talks, focused on reaching consensus between key partners while attempting to leverage Chinese, Japanese, South Korean and Russian relationships with North Korea. Although the Six-Party Talks have not, to date, yielded a resolution to the North Korean nuclear issue, working closely together is a very useful way to leverage the strengths of each country. Firm resolve and steady determination will be key in any successful negotiations with North Korea.

UNITED STATES ALLIANCE WITH SOUTH KOREA

93. Senator AKAKA. Admiral Fallon, in your testimony you state that the alliance between the United States and the ROK is healthy and evolving. Yet recently, a number of critics have suggested that the historic alliance between the United States and South Korea is deteriorating. In particular, they mention the different approaches that the United States and South Korea have taken with regard to North Korea's continued nuclear program. Please respond to these critiques regarding the stability of the alliance between the United States and South Korea.

Admiral FALLON. [Deleted.]

General BELL. The alliance is strong, and remains the pillar of stability for Northeast Asia. Moreover, our multi-faceted partnership extends beyond security and includes strong economic, political, diplomatic, and cultural ties.

While impassioned debates and public demonstrations do exist, a recent poll shows that 77 percent of ROK citizens support our military presence, viewing the alliance as essential to security and stability. Moreover, most South Koreans share the same view on two important issues: first, a nuclear armed North Korea is an intolerable threat to stability in the region; and second, a catastrophic failure within North Korea would destabilize the entire region and have extremely adverse consequences for South Korea.

Regarding the denuclearization of North Korea, both governments of the United States and the ROK support the denuclearization of North Korea through peaceful negotiations. Our national approaches to North Korea engagement may be different, however, we both share the common objective of verifiable denuclearization of North Korea.

NORTH KOREA

94. Senator AKAKA. Admiral Fallon and General Bell, in November 2005, North Korea instituted its second boycott of the Six-Party Talks, demanding that the Bush administration lift recent U.S. financial sanctions against Banco Delta Asia in Macau. The U.S. Treasury Department accused Banco Delta of laundering counterfeit U.S. $100 bills produced by North Korea. Last month, North Korea agreed to send representatives to New York this month to discuss claims that North Korea is involved in large-scale counterfeiting and distribution of U.S. currency.

Do either of you believe that a successful outcome of the upcoming talks with North Korea in New York regarding these allegations could lead to the resumption of the Six-Party Talks?

Admiral FALLON. U.S. Treasury officials briefed North Korean officials in New York on March 7; providing a useful opportunity to discuss the Banco Delta Asia issue. North Korea, however, continues to maintain that they will not return to the Six-Party Talks until the U.S. lifts the freeze on disputed North Korean assets, which I believe is unlikely without positive change in North Korean behavior. I have no understanding of what motivates North Korean actions regarding the Six-Party Talks or their behavior in general. I do believe that we are correct in pursuing a dialogue and resumption in the Six-Party Talks.

General BELL. The U.S. Treasury officials' briefing to North Korean officials in New York on March 7, 2006, provided the U.S. and North Korea with a forum to discuss the Banco Delta Asia issue and to explain both sides' positions. In that sense, the meeting appears to be a positive step and I believe that this type of engagement will contribute to the resumption of the Six-Party Talks. However, it is the U.S. policy not to link the criminal activity associated with counterfeiting with the resumption of the Six-Party Talks. As such, I am not able to predict how meetings regarding counterfeiting and other criminal activity sponsored by the North Korean regime might relate to the potential resumption of the Six-Party Talks.

[Whereupon, at 11:58 a.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2007

THURSDAY, MARCH 9, 2006

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

NAVY POSTURE

The committee met, pursuant to notice, at 9:38 a.m. in room SH–216, Hart Senate Office Building, Senator John Warner (chairman) presiding.

Committee members present: Senators Warner, McCain, Collins, Talent, Thune, Levin, Lieberman, Reed, and Akaka.

Committee staff members present: Charles S. Abell, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: Ambrose R. Hock, professional staff member; David M. Morriss, counsel; Lucian L. Niemeyer, professional staff member; Stanley R. O'Connor, Jr., professional staff member; Sean G. Stackley, professional staff member; Scott W. Stucky, general counsel; Diana G. Tabler, professional staff member; and Richard F. Walsh, counsel.

Minority staff members present: Richard D. DeBobes, Democratic staff director; Jonathan D. Clark, minority counsel; Daniel J. Cox, Jr., professional staff member; Gabriella Eisen, research assistant; Creighton Greene, professional staff member; Bridget W. Higgins, research assistant; and Gerald J. Leeling, minority counsel.

Staff assistants present: Micah H. Harris, Jessica L. Kingston, and Benjamin L. Rubin.

Committee members' assistants present: Cord Sterling, assistant to Senator Warner; Christopher J. Paul, assistant to Senator McCain; Mackenzie M. Eaglen, assistant to Senator Collins; Lindsey R. Neas, assistant to Senator Talent; Mieke Y. Eoyang, assistant to Senator Kennedy; Frederick M. Downey, assistant to Senator Lieberman; Elizabeth King, assistant to Senator Reed; Darcie Tokioka, assistant to Senator Akaka; and William K. Sutey, assistant to Senator Bill Nelson.

OPENING STATEMENT OF SENATOR JOHN WARNER, CHAIRMAN

Chairman WARNER. Good morning, everybody. I apologize for being tardy a few minutes. Particularly for the good old Navy Department, I try to be punctual. But I started the morning over in

your building at 7 o'clock with the Secretary, the Chairman, and General Abizaid, and I am just catching up here to get started today.

We meet today to receive the annual testimony of the Secretary of the Navy, and I congratulate you on your appointment and I guarantee you it will be the best job in your life bar none. I still say that. The Secretary is joined by the Chief of Naval Operations (CNO) and the Commandant of the United States Marine Corps, on the posture of the Department of the Navy and President Bush's defense budget for 2007.

We thank you, Secretary Winter, Admiral Mullen, and General Hagee, for joining us today and particularly our military witnesses, for your long and magnificent service to our country in uniform. We are proud of you. You occupy a unique vantage point and we are quite anxious to receive your views today with regard to the budget and your respective uniformed Services and how they fare under this budget. If they did not fare well, I hope you will bring it out this morning the best you can. We recognize you want to support the President.

Also, at all of our hearings we stop to pause and extend our gratitude to those soldiers, sailors, airmen, and marines and all others serving the cause of freedom around the world and the families which support them. We humbly offer our thoughts and prayers to those families and friends of those who lost their lives and those who are hopefully going to be nourished back to the best possible physical condition, given the seriousness of so many of the injuries that are being experienced.

Your operations place heavy demands on our sailors and marines and their families and provide the backdrop for our review of this year's budget. Alongside the request, we carefully consider the insights offered by the Quadrennial Defense Review (QDR), which has served as the Department's guide for shaping the future force. As well, we will weigh the administration's supplemental funding request for fiscal year 2006.

Trends in the Navy's ship force structure, I say to you, Mr. Secretary and the Admiral, remain of concern to this committee. One year ago in a hearing before the committee, it was noted that, if left unchecked, the rate of naval ship construction would drive our fleet below 250 major combat ships. While these ships' capabilities remain the envy of the world, the inescapable fact is that the Nation cannot consider downsizing to a fleet of such a small size without sacrificing the unchallenged freedom of access on the high seas throughout the world.

We are encouraged by the Navy's recent report which defines a future force structure of 313 ships to meet our national security needs. However, as is often the case, the challenge of building this Navy weighs heavily on the future years and indeed Congress to give you the support. I assure you this Senator will and I think most of my colleagues on this committee likewise.

As we witness significant naval expansion by emerging powers today, we must be uncompromising in our commitment to build our future force, to ensure the continued naval superiority and to preserve our strategic shipbuilding industrial base, and to support our

forward-deployed forces the world over in this fight against terrorism.

Thank you.

[The prepared statement of Chairman Warner follows:]

PREPARED STATEMENT BY SENATOR JOHN WARNER

The committee meets today to receive the annual testimony of the Secretary of the Navy, the Chief of Naval Operations, and the Commandant of the Marine Corps on the posture of the Department of the Navy and President Bush's defense budget request for fiscal year 2007 and the Future Years Defense Program.

Thank you, Secretary Winter, Admiral Mullen, and General Hagee, for joining us today. As you're well aware, I've been proudly associated with the Navy and Marine Corps for over 6 decades now, and it is from this unique vantage point that I am able to remark that yours is the privilege to represent the finest Navy and Marine Corps in the world. I commend you gentlemen for your outstanding leadership to our Nation, our service men and women, and their families.

At this time, we pause to extend our deepest gratitude to our sailors and marines at their posts, serving the cause of freedom around the world, and we humbly offer our thoughts and prayers to the families and friends of those who have been lost or wounded serving this vital cause.

We are mindful that the public has entrusted in us the authority, not merely to raise an Armed Force, but to properly equip, safeguard, and support that force in the performance of its duties, and we must be painstaking in exercising that authority. It is with this end in mind, that we begin these proceedings.

As President Lincoln once observed, the domain of our Navy and Marine Corps extends wherever the waters may reach. At this moment, deployed ships stand vigilant on distant seas, sailors and marines keep lit the torch of freedom in Iraq and Afghanistan, peacekeeping and humanitarian operations are performed with professionalism and compassion throughout the world, and our forces stateside stand ready to respond to global crises, many we cannot even contemplate today.

These operations place heavy demands on our sailors and marines and their families, and provide the backdrop for our review of this year's President's budget request. Alongside this request, we carefully consider the insights offered by the Quadrennial Defense Review, which has served as the Department's guide for shaping the future force. As well, we weigh the administration's supplemental funding request for fiscal year 2006.

These key elements must be taken together in arriving at a budget that assures victory in today's wars, and maintains a posture of deterrence for the future, or should deterrence fail, provides the measures which would enable us to meet future conflict.

This year's President's budget requests $127 billion for the Department of the Navy.

The priorities of supporting the global war on terror, restructuring our forces toward more agile, deployable forces, building joint capabilities for future threats, and taking care of our service men and women and their families are clearly the right emphasis within this budget request.

I commend the President for continuing his commitment to improving our defense capabilities and providing our forces with the resources and capabilities they need to successfully perform their missions.

While supportive of the overall request, I have some concerns on which I look forward to working with you and the Department over the coming months.

Congress is committed to doing all we can to ensure the safety of our soldiers, sailors, airmen, and marines. Our experience in the war on terrorism dictates that we dedicate the full extent of our resourcefulness to protect our warfighter, and to bring an end to the destruction caused by improvised explosive devices.

As well, we need to fully exploit our asymmetric advantage provided by the superior technologies which our forces bring to the fight. Most notably, unmanned aerial vehicles have contributed greatly to our battlefield dominance, and in the effort to further leverage this capability, we must work to explore greater use of this technology on the ground and on, above, and below the seas.

Trends in the Navy's ship force structure remain of concern. One year ago, in a hearing before this committee, it was noted that if left unchecked, the rate of naval ship construction would drive our fleet below 250 major combatant ships. While these ships' capabilities remain the envy of the world, the inescapable fact is that this Nation cannot consider downsizing to a fleet of such small size without sacri-

ficing the unchallenged freedom of access which command of the seas provides our forces today.

I am more encouraged by the Navy's recent report, which defines a future force structure of 313 ships to meet our national security needs. However, as is so often the case, the challenge of building this future Navy weighs heavily in the future years. As we witness significant naval expansion by emerging powers today, we must be uncompromising in our commitment to building our future force—to ensure continued naval superiority and to preserve our strategic shipbuilding industrial base.

One of this committee's most important duties is to oversee the large sums that the Department invests each year for acquisition of supplies, services, and equipment. While we commend the President for committing the resources necessary for the common defense, there is increasing concern regarding the eroded buying power of our defense dollars.

This committee has initiated and supported a number of legislative provisions to curb these cost trends, and to facilitate more sound acquisition practices. Maintaining our focus on improving the affordability of our weapons systems, we will continue to work with the Department on these and further initiatives.

With these competing demands in mind, we listen for your assessment of our readiness in Iraq, our performance in global operations, and the direction of our future force.

I thank you all for your distinguished service and look forward to your testimony.

Chairman WARNER. Senator Levin.

STATEMENT OF SENATOR CARL LEVIN

Senator LEVIN. Mr. Chairman, first let me join you in welcoming our three distinguished witnesses this morning. I also join you in extending through them our thanks to the men and women in uniform who are serving in dangerous places like Iraq and Afghanistan and in other places maybe less dangerous, but still far from home, and to their families for the sacrifices which they make on our behalf. We all salute them and we pledge to do our part and to do everything we can to ensure that they and their families are fully-supported as they face these hardships and dangers.

I believe that the world we face will continue to be one of uncertainty and unrest. Decisions that we make this year will have a direct effect on the forces and capabilities that future combatant commanders will have available to protect our interests.

We all know that our men and women in the Armed Forces will respond admirably in any crisis, just as they have been doing in the operations in Afghanistan and Iraq. Without adequate funding for readiness, however, our forces in the field could be exposed to unnecessary risk. Without adequate modernization, we could be faced with a situation of having forces without necessary capabilities or we could be in a position of trying to support theater combatant commanders' requirements with forces that are too small or too lacking in capability to meet their needs.

We must ensure that we are getting the most from our budget investments. We owe it to the taxpayers and, even more importantly, we owe it to those serving our Nation in the military. Over the long-term we cannot count on unceasing heroic performance from men and women in uniform to make up for inadequate or inappropriate resource allocations.

At previous hearings I have talked about the need for responsible budgeting and my view that this budget request understates the true cost of our defense program because it does not fully recognize or pay for the cost of ongoing operations in Iraq and Afghanistan.

In the interest of time, I will not restate my concerns this morning since I expressed them just yesterday.

There are a number of other, more programmatic issues that we will be discussing here this morning, including incremental funding of the DD(X) destroyer, reduction in Marine Corps force structure, developing conventional ballistic missiles to be deployed on Trident submarines, and cancelling the development of an alternate engine for the Joint Strike Fighter (JSF).

Mr. Chairman, again I join you in welcoming our witnesses and thanking them for their service.

Chairman WARNER. Thank you very much, Senator Levin.

Are there other Senators that would like to offer a word or two by way of opening comment?

Senator Lieberman, you are early bird on the block here.

Senator LIEBERMAN. Thanks, Mr. Chairman.

I welcome the Admiral, the General, and the Secretary. We are at a point in our Navy where—and I know the Admiral and the Secretary are on top of this—our fleet is at the smallest size I believe since before World War I. I know that you together have plans to try to get us back—we are around 280 ships now, and you want to get us back, get us up to 313 within 5 years. I think that is a worthy goal. I think it is a necessary goal.

What concerns me is that the budget—and I will go into this in my questioning—does not actually, by the Congressional Budget Office (CBO) estimate, give you the funding to be able to achieve that goal. I think we have to recognize that reality and try in our own way to deal with it as best we can to help you get to not only where you want to be, but where the Nation needs you to be.

General, I thank you for your leadership of the Marines and particularly for hanging in there and making a case that the end strength that the current budget gives the Marines of 175,000 may not be enough. There is a lot of concern on this committee, I think, about the end strength of the Army and the Marine Corps, particularly in light of the extraordinary range of demands that our Nation is putting on you in our defense and the extraordinary way in which the marines are carrying out those demands. So I look forward to questioning you about that.

The defense budget is large. It has been much larger as a percentage of our gross domestic product at different times in our history, so it may be going against the wind to say it should be larger, but I think in the ways that we are talking about here, both the size of our naval fleet and the size of the marines on the ground, we need to spend more at a very dangerous and difficult time in our Nation's history to secure our freedom and our security. I hope to ask you questions along that line.

But let me join the chairman and the ranking member in thanking the three of you for your service and through you the men and women who serve in uniform for us every day and do just an incredible job. We cannot thank them enough. So I thank you as much as I can this morning.

Thanks, Mr. Chairman, for giving me that opportunity.

[The prepared statement of Senator Lieberman follows:]

PREPARED STATEMENT BY SENATOR JOSEPH I. LIEBERMAN

Good morning and thank you for attending. I want to welcome Admiral Mullen, Secretary Winter, and General Hagee to our committee hearing, which begins our discussion of the Navy's proposed budget and its warfighting plans for the future. You have served your country with honor, and I want to commend your continued service to our Nation's military.

I applaud Admiral Mullen's ambitious, long-range, shipbuilding plan which he submitted to Congress last month. Our current Navy fleet is at its smallest size since prior to World War I. The Quadrennial Defense Review (QDR) made it clear that the United States cannot plan only for conventional threats. Since the terrorist attacks of September 11, our security environment has grown more complex. To respond, we must prioritize our warfighting capabilities to match the new threats we face. Admiral Mullen has taken this challenge seriously, and has responded with a bold initiative to ensure that the Navy is well-equipped to fight the range of threats which may confront our Nation.

I support the plan submitted by Admiral Mullen. But I am worried about whether we have provided enough money for shipbuilding in the budget to achieve these goals. According to the Congressional Budget Office, if the Navy wants to grow to 313 ships in 5 years, it will need an average of $18.3 billion per year for shipbuilding, or $19.5 billion if nuclear refueling is included. This year, the President's fiscal year 2007 budget includes $11.1 billion for shipbuilding and conversion. This is quite a disparity. If we are serious about growing the Navy to 313 ships in the near future, we must invest more money in our shipbuilding account. There is no way that the Navy can fulfill its new emphasis on expeditionary warfighting missions, as outlined in the QDR, with inadequate funding for shipbuilding.

In addition to a paucity of money for shipbuilding, I am also afraid that our plan for submarine construction is woefully inadequate. The Navy's plan calls for a submarine fleet of 48 boats. I believe this number is too low for the strategic threats we face. First, several submarine officers and Defense Department officials argue that fulfilling the day-to-day demands for attack submarines, particularly intelligence, surveillance, and reconnaissance (ISR) missions, would require a fleet of at least 70 submarines. Even with our current fleet of 54 submarines, the fleet can only provide combatant commanders with 65 percent of the "presence with a purpose" they requested. If our submarine fleet is too small now to perform the tasks required, we are inviting a level of risk that is unacceptable if we accept an even smaller fleet. Due to the proliferation of new trouble spots around the world, the need for undersea ISR has dramatically increased. A diminished submarine fleet cannot meet the demands of a post-September 11 world.

The prognosis only gets worse. If we adopt the Navy's proposed plan, which delays an increase of submarine production to two boats a year in fiscal year 2012, we will fall below the minimal requirement of 48 submarines in 2018. At that time, our intelligence estimates conclude that China will have a well-equipped, modernized submarine fleet of at least 50 boats. In addition, new submarines are being built elsewhere, and they may be in the hands of future competitors. If we do not move to produce two submarines a year as soon as possible, we are in serious danger of falling behind China, and we may have to accept dangerous risks elsewhere because we will have too few submarines.

To mitigate this strategic threat, the time to act is now. Our superiority in undersea warfare is not a capability we can recover quickly if it is lost. For the first time in 40 years, there is no new submarine design on the drawing board. We are losing our submarine designers and engineers at a rapid pace. Electric Boat, a submarine manufacturing company in Groton, Connecticut, projects that it will terminate almost half of its design team by 2008. When the dangerous reality of our diminished submarine fleet finally hits home, it will be very difficult, if not impossible, to recover our industrial base in order to meet the impending need.

The submarine is not a Cold War legacy. In fact, the *Virginia*-class submarine was designed specifically for post-Cold War operations. It operates well in littoral waters, gathers intelligence, engages in strike operations and antisubmarine warfare, and provides Special Operations Forces with delivery and support. Because of its near-shore capabilities, our submarines can intercept signals that are invisible to reconnaissance satellites and other platforms. These unique and powerful features make the *Virginia*-class an indispensable weapon in our arsenal to fight the "long war" on terrorism. However, if we do not increase our build rate, we will not replace our aging *Los Angeles*-class submarines fast enough. As a result, we run the risk of turning a deaf ear and a blind eye to a gaping hole in our national security. We live in a world in which we sometimes cannot anticipate attacks upon our home-

land and military. In this instance, we can prevent a looming threat on the horizon with decisive action.

The very least we can do is escalate production to two submarines as soon as possible. If we do this, we will maintain the recommended force structure fleet of 48 boats until 2025. While I still believe a fleet of 48 boats is too small for the conventional and asymmetric challenges ahead of us, it does put us in a better position to reduce the production gap between the United States and China.

In addition, I think we should act deliberately to transition New London from the world's best submarine center of excellence to the world's best undersea warfare center of excellence. Concentrating the east coast submarine force there, and basing the LCS antisubmarine warfare and countermine modules there would be a good start. Devoting more resources to new design at Electric Boat would further strengthen the remarkable synergy among New London, Electric Boat, and the world's leading undersea expertise in the region.

The Defense Science Board has described the attack submarine as the "crown jewel" of American defense. If we neglect our submarine production, we jeopardize our global undersea warfare superiority. We must move forward to devise a plan that will maintain a robust submarine force in the United States which can readily meet all of the challenges of warfighting, reconnaissance, and joint support placed upon it.

Chairman WARNER. Senator Thune.

Senator THUNE. Thank you, Mr. Chairman.

I too want to welcome our panel. Thank you for your service and for those who serve with you and under your command, we appreciate the great work that they do. I would echo and associate myself with some of the comments of my colleague from Connecticut. I am one on the committee who, like him, has some concerns about where we are. I know that we are in terms of funding levels historically in a good place, but you also talked about the size and some of the needs that we have and the fact that we are running a lot of our equipment into the ground. The size of the challenge that we are asking you all to meet, too, is much larger than it has been for some time. There are a lot of demands and a lot of needs around the planet.

As we look at the size of our force and the capabilities that we have, the budget numbers are historically high, but there are some of us who think we may have to do better, and I happen to be, along with my colleague from Connecticut, in that category.

So we welcome you and appreciate your being here and look forward to your testimony and to working with you as the defense bill moves forward. Thank you.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you Senator.

Senator Akaka, Senator Reed, do you have anything by way of opening?

Senator REED. No, thank you.

Senator AKAKA. Thank you, Mr. Chairman. I will just make a brief statement. I want to add my welcome to Secretary Winter and Admiral Mullen and General Hagee and to tell you that I am certainly proud and appreciative of the brave men and women serving in the Navy, Marine Corps, and Navy Reserve, and also the veterans that served in the Navy in the past.

This is what I want to pass on to you—I am committed to ensuring the members of the armed services that they receive the best training, the best equipment, and the best support that our Government can provide. I also am committed to ensuring that their families are provided with a good quality of life by our Government. Toward that end, I will continue to serve on this committee.

Thank you, Mr. Chairman. I have further questions.

Chairman WARNER. Thank you very much, Senator.

By way of announcement, the Senate Armed Services Committee next week on Tuesday will hold its first of two hearings on the JSF. On Tuesday we will have representatives from the partner nations testifying. The following day on Wednesday, we have Deputy Secretary of Defense England and Admiral Giambastiani, followed by the executives from United Technology, Senator, in your State, and the General Electric (GE) and Rolls-Royce partners will also be on. I will have a question on that to our witnesses in the course of the morning.

But at this time, Mr. Secretary, we welcome you. This is your first appearance before this committee as Secretary of the Navy.

STATEMENT OF HON. DONALD C. WINTER, SECRETARY OF THE NAVY

Secretary WINTER. Thank you very much.

Chairman WARNER. We will put your entire statement in the record, as will the other witnesses' statements be put in the record, and we would hope that you would just give us such summary as you feel appropriate.

Secretary WINTER. Thank you very much, Senator.

Chairman Warner, Senator Levin, members of the committee: I want to thank you for the opportunity you have given the Navy-Marine Corps team to appear before this committee.

Chairman WARNER. I am going to ask you to draw that mike up because there are folks in the back that cannot pick it up too well.

Secretary WINTER. See if this works a little better.

Chairman WARNER. It does indeed.

Secretary WINTER. Very good. Thank you.

Today I am joined by Admiral Mullen and General Hagee and I could not ask for better, more honorable teammates. It is a pleasure to work with them. Each of us has provided a statement to this committee and I appreciate the inclusion of those into the record of this hearing. These documents outline in detail this Department's priorities. Our top priority is clear: We must prosecute the global war on terror today while deterring potential adversaries and resetting the force for tomorrow.

Mr. Chairman, let me be blunt. We are a Nation at war. Support for sailors and marines in the Iraqi theater of operations is our most urgent task and I am focused daily on what the Navy and Marine Corps can do to help achieve victory in Iraq and against terrorists elsewhere around the globe.

This week marks the start of my third month as Secretary, and being a firm believer in the idea that there is no substitute for personal observation, I recently made my first visit to Iraq and to the Fifth Fleet. I met with sailors and marines at a number of major naval bases in the United States and overseas, and visited several leading shipyards on the east coast. During my visit to Iraq last month, where I traveled throughout al-Anbar Province from Falujah to the Syrian border, I spoke to hundreds of marines and sailors on an individual basis and the experience has left me with more pride and admiration for their courage and commitment than

I had thought possible. I was truly struck by their genuine enthusiasm and professionalism and humbled by their achievements.

It is difficult to describe the feeling one gets, for example, after meeting a team of four marines at al-Taqadam, southwest of Baghdad, standing in front of a mangled and broken Humvee, a vehicle destroyed by an improvised explosive device (IED) while they were patrolling in it just days before. Though the vehicle was damaged beyond repair, all four marines were healthy, resolute, and determined, ready to go back out on patrol.

Mr. Chairman, the courage of those four marines is symbolic of the courage shown by countless others on duty in the global war on terror, and it is inspiring to all of us who serve our Nation. There are countless unsung heroes—yes, heroes—doing extremely important work under demanding conditions on land and at sea 24 hours a day, 7 days a week, all over the globe.

To highlight one example, Navy sailors are guarding strategically vital oil terminals off the coast of Iraq, thereby protecting not only Iraq's but the world's economy from attacks by terrorists. They know the importance of their mission and they take great pride in doing it well.

Now, I would like to thank this committee for its strong support for the Navy and Marines and note that your visits to forward-deployed marines and sailors are essential and they are deeply appreciated by those serving so far from home. The same applies to your visits to wounded heroes at Bethesda Naval Hospital, Walter Reed Medical Center, and other medical facilities. I know from my own visits with injured sailors and marines that your personal concern and support means a great deal to these young patriots who have sacrificed so much in the service of this Nation.

Thank you, Mr. Chairman. I look forward to your questions.

[The prepared statement of Secretary Winter follows:]

PREPARED STATEMENT BY HON. DONALD C. WINTER

PROVIDING THE RIGHT FORCE FOR THE NATION TODAY . . . WHILE PREPARING FOR THE UNCERTAINTIES OF TOMORROW.

INTRODUCTION

Mr. Chairman and members of the committee, thank you for the opportunity to appear before you today. I recently had the opportunity to visit our forces in Iraq. This was my first visit to Iraq. I was truly impressed by the genuine enthusiasm and drive of our forces. Our marines and sailors believe in what they are doing and they are performing superbly in very challenging circumstances. From the Iraqi-Syrian border region to Iraq's off-shore oil terminals, our troops are making a difference in the transition of Iraq to a democratic nation. Our troops recognize they are making a difference and are proud of what they do. I am very proud of what they are doing to win the war. It is not an easy battle but one that, with the support of the American people and Congress, we can and will win. Your continued support of our sailors and marines has a profound, positive impact on our ability to provide matchless naval forces for the defense of the United States.

Throughout the world, the Navy and Marine Corps team continues to answer the Nation's call and play a leading role in the global war on terror. During 2005, the versatility and flexibility of expeditionary naval forces were repeatedly demonstrated while undertaking missions that ranged from major combat operations in Afghanistan and Iraq, to Humanitarian Assistance and Disaster Relief (HA/DR) operations in Indonesia and on our own Gulf Coast after Hurricanes Katrina and Rita.

Providing the right force for the Nation today, in a time of war, is not the only challenge. We must also prepare for the uncertainties of tomorrow that include future terrorists and other emerging asymmetric threats, as well as potential peer

competitors. All of these will require Navy and Marine Corps forces capable of preserving America's longstanding maritime dominance.

Naval forces have inherent, unique warfighting capabilities that include global access, a non-intrusive footprint, persistent presence, and expeditionary power that always figure prominently in the President's deliberations during times of crisis. Farsighted leaders in Congress, recognizing naval forces' unique strengths, deserve our thanks for the key resource decisions they have made in recent years.

This past year featured a long and impressive list of Navy and Marine Corps achievements in support of the global war on terror. Last year in Iraq, Navy and Marine Corps personnel proved critical to the achievement of wartime objectives. A Marine Expeditionary Force conducted operations in Al Anbar province, the heart of the Baathist insurgency, and was successful in ensuring security for the historic elections in January and December 2005. Marines also executed missions in Afghanistan and the Horn of Africa. Sailors were deployed to U.S. Central Command (CENTCOM) in various missions ashore, requiring boots on the ground. Missions were performed by sea, air, land (SEALs), Seabees, military police (MP), explosive ordnance disposal (EOD), medical, intelligence, civil affairs, and other support personnel.

The flexibility and professionalism of naval forces were also on display in providing humanitarian relief to tsunami victims in South Asia, earthquake victims in Pakistan, and to our own citizens along the Gulf Coast. After Hurricane Katrina hit, naval forces responded with 23 ships, more than 12,000 sailors and marines, and 104 aircraft to evacuate more than 8,000 victims and deliver more than 2 million pounds of food and countless gallons of water. The zeal and professionalism with which sailors and marines rushed forward to save lives and provide comfort to the afflicted were brought under an international spotlight, proving once again that naval forces have the versatility to serve as first responders with global reach.

In carrying out these missions, from Kabul to Baghdad, and Indonesia to New Orleans, the Navy and Marine Corps performed superbly, taking advantage of their unique capabilities to engage the enemy or rescue those in distress, achieving objectives ranging from eliminating a terrorist enclave to building enduring relationships and gaining influence through our goodwill gestures. Faced with the strategic imperatives of providing the right force for the Nation today, while simultaneously building naval capabilities for the challenges of tomorrow, the Department must continue on its course toward transformation and modernization. Funding technologies and weapons systems that will enable naval forces to enlarge their contributions to global war on terror is our most urgent task. Investing in the ships, aircraft, submarines, and Marine Corps warfighting equipment and people to preserve this Nation's historic naval power to dissuade or deter peer competitors, to prevail in war, and to win hearts and minds, remains an enduring, fundamental strategic requirement.

Responsible and successful statesmanship requires matching strategic ends to available means. This requires trade-offs and hard choices in a security environment where errors or misjudgments can result in significant consequences. The Department of the Navy's portion of the President's budget for fiscal year 2007 is the product of a realistic, rigorous assessment of naval requirements, resources, and priorities. It reflects both wartime exigencies and prudent investments, with a vigilant eye on the uncertainties of tomorrow.

As Navy and Marine Corps forces are actively engaged in combat operations in Iraq, Afghanistan, and stand ready around the globe, we have a solemn duty to ensure that our sailors and marines are trained, equipped, and prepared for all missions. The fiscal year 2007 President's budget meets these requirements.

FISCAL YEAR 2007 BUDGET PRIORITIES

In support of the Department of the Navy's mission and as validated by the 2006 Quadrennial Defense Review (QDR), the fiscal year 2007 President's budget provides the right force for the Nation today, prepares for the uncertainties of tomorrow, and effectively manages the risk imposed by legitimate fiscal constraints.

The fiscal year 2007 budget includes $127.3 billion for the Department of the Navy, an increase of $4.4 billion over last year's baseline appropriations.

In fiscal year 2007, every appropriations category increases except for research and development (R&D). Military Personnel accounts increase due primarily to health care costs and retired pay. Operating accounts increase because of the rising cost of fuel, and to support higher readiness levels that overall generates a more cost-efficient use of valuable naval assets. Procurement accounts increase as we build the future fleet. The R&D accounts decrease as a result of programs

transitioning from development to production. The following summarizes the fiscal year 2007 budget highlights for the Department of the Navy:

Personnel Salary and Benefits

The fiscal year 2007 President's budget includes an increase of $1.4 billion in military personnel spending which includes a basic pay raise of 2.2 percent for all servicemembers, health benefits, a 5.9-percent increase in housing allowance, special pays, and targeted pay raises for warrant officers and mid-grade/senior enlisted personnel. As a result of targeted pay incentives, the Navy and Marine Corps achieved nearly every Active-Duty recruiting and retention goal with exceptions found only in highly technical specialties. To maintain momentum, the Navy and Marine Corps have increased funding for enlistment bonuses. Congressional support is appreciated for the reenlistment bonus increases slated for selected technical ratings.

Operation and Maintenance

The fiscal year 2007 President's budget increases operation and maintenance by $2.1 billion. As part of a joint warfighting team, the Navy and Marine Corps will control the seas, assure access, and project offensive power and defensive capability to influence events at sea and ashore. The ability of naval forces to meet the combatant commanders' requirements is a function of their combat readiness. The Navy's Fleet Response Plan (FRP) produces adaptable force packages and better sustains readiness throughout a unit's operational cycle to ensure the availability of fully ready carrier strike groups (CSG) and other fleet assets. The goal of FRP is to provide the Nation with six CSGs within 30 days, and an additional CSG within 90 days. Fiscal year 2007 funding will invest in future readiness for an experienced and trained fleet and will also provide better trained, safer, and more lethal marines before they deploy. Marine forces preparing for combat operations also require additional training resources. Fiscal year 2007 funds will also pay to implement the following new joint capabilities, which reflect an increased role for the Department of the Navy in prosecuting global war on terror:

a. The Marine Corps Special Operations Command (MARSOC) will enhance interoperability, and provide greater flexibility and increased capability to conduct irregular warfare.

b. Regeneration of a Navy riverine capability will fill a critical capability gap by extending operations into the "brown water" environment, and provide additional opportunities to build partner-nation cooperation.

c. The Expeditionary Security Force will increase the effectiveness of shipborne security and maritime interdiction operations by supporting intercept and boarding capabilities in every CSG/expeditionary strike group (ESG), as well as providing high end defensive capabilities within the Navy in support of force protection, harbor/port defense, and protection of maritime infrastructure.

d. The National Maritime Intelligence Center, serving as the Nation's Global Maritime Intelligence Integration Center, will increase maritime domain awareness (MDA) by strengthening interagency operations and enhancing partner-nation cooperation.

Shipbuilding Account

The fiscal year 2007 budget for shipbuilding ensures that tomorrow's fleet will remain the world's preeminent. In fiscal year 2007, 14 ships will be delivered to the Navy that include: 4 Amphibious Transport Dock ships (LPD)—(Hurricane Katrina impact may delay 2 ships to fiscal year 2008), 3 Dry Cargo and Ammunition ships (T–AKE), 3 Guided-Missile Destroyers (DDG), 1 Amphibious Assault ship (LHD), 1 Attack submarine (SSN), and 1 Oceanographic Survey ship (T–AGS). Also, the first of its class Littoral Combat Ship (LCS) will be delivered, and built in less than 2 years. This is the payoff of previous years' investments toward buying naval capabilities for the future.

Aviation Account

The fiscal year 2007 budget increases aviation procurement by $1.2 billion to support the continued acquisition of critical programs including the Joint Strike Fighter (JSF), F/A–18E/F, EA–18G, MV–22, AH–1Z/UH–1Y, MH–60R, MH–60S multimission helicopters, and the Joint Primary Aircrew Training System (JPATS). Funding for 165 aircraft in fiscal year 2007 reflects an increase of 31 aircraft over fiscal year 2006, and a total of 1,150 new aircraft over the Future Years Defense Plan (FYDP).

Marine Corps Ground Equipment Accounts

High Mobility Multi-Purpose Wheeled Vehicle (HMMWV), Light Armored Vehicle Product Improvement Program (LAV PIP), Lightweight 155mm Howitzer (LW–155), High Mobility Artillery Rocket System (HIMARS), and the Assault Breaching Vehicle (ABV) are vital programs funded in this budget. The Expeditionary Fighting Vehicle (EFV) begins initial low rate production in fiscal year 2007.

Research, Development, Test & Evaluation (RDT&E) Account

In fiscal year 2007, research and development decreases by $1.8 billion, reflecting acquisition maturation and the transition to production. Additionally, there is a transfer of $280 million from Navy R&D to Defense Wide R&D for Joint Forces Command efforts. Critical Shipbuilding programs include CVN 21, DD(X), LCS, Joint Highspeed Vessel, and the SSN 774 *Virginia*-class submarine. Critical manned aviation programs include the JSF, P–8A Multi-Mission Maritime Aircraft (MMA), VH–71 presidential helicopter replacement, E2D, EA–18G, and CH–53K.

PROVIDING THE RIGHT FORCE FOR THE NATION TODAY . . .

NAVAL WORKFORCE

Those of you who have visited forward deployed Navy and Marine forces, as I have recently done, know that naval forces include the best of America's young men and women. I am energized every time I have an opportunity to meet and talk with our sailors and marines. It is pure joy each time I reenlist or promote these true patriots. I deeply admire their willingness to continue their service and swear an oath of allegiance knowing the dangers and hardships they face. My visits reinforced the highest regard I already hold for the tremendously dedicated men and women who serve our Nation, in uniform and out, and for their leadership.

Commitment to the welfare and professional development of these sailors and marines is a top priority. I give the same emphasis to safety. The Department is making investments in protecting sailors and marines through accident prevention initiatives and with armor and specialized equipment. Our sailors and marines, civilians, and contractors deserve our very best efforts to maintain their continued safety and welfare.

The rising cost of naval manpower continues to drive the overall budget significantly. While the Department continues to increase performance efficiency through targeted manpower reductions, total manpower costs continue to rise. We must invest in this force so that it remains technically competent, properly equipped, and well trained.

Protect Sailors and Marines

Protecting sailors and marines is a top priority. In response to growing force protection concerns in Iraq and Afghanistan, the Department has expeditiously acquired technology and hardware to equip marines and sailors for current wartime operations.

Personal Protective Equipment

Every marine, sailor, and Department of the Navy civilian is issued a complete set of body armor before going into Iraq or Afghanistan. They are outfitted with the Interceptor Body Armor System, including outer tactical vests, small arms protective inserts (SAPI), ballistic helmets, and ballistic goggles. Enhanced SAPI plates have been providing a significant force protection improvement, with 13,798 sets fielded. In June 2005 the Marine Corps identified the need for armor side plates. Delivery to the field began in November 2005, and to date 11,614 sets of body armor side plates have been shipped to theater, and an additional 9,000 sets will be fielded during the third quarter of fiscal year 2006. Other initiatives, such as an improved lightweight combat helmet, and lower face and body armor, are under development.

Vehicle Hardening

Since August 2004, all Marine Corps vehicles operating outside forward operating bases have been equipped with Level II armor or better. The Marine Corps worked hard to replace the first generation armor with this improved zonal protection.

A fiscal year 2006 bridge supplemental of $179 million is procuring the final 524 M1114s (Up-Armored Armament Carrier configuration of the HMMWV family) to fill the requirement for 2814 M1114s, by September 2006. The Marine Corps Systems Command and the Marine Corps Warfighting Lab teamed with the Army Developmental Test Command to test and rapidly assess various materials for use in vehicle hardening, to include improved ballistic glass, armor, and ceramics. These added armor capabilities have been incorporated into the next generation of vehicle

hardening initiatives: the Marine Armor Kit (MAK) for the HMMWV, and the Medium Tactical Vehicle Replacement (MTVR) Armor System (MAS). MAK and MAS armor are replacing previous generations with an integrated, comprehensive (improved perimeter, top, and under-body) armor kit. A total of 2660 HMMWV MAK installations were completed by November 2005. MTVR MAS kit installation is over 60 percent complete with an estimated completion date of May 2006 for the remaining vehicles.

Counter Improvised Explosive Devices Technology and Equipment

The Department has aggressively developed technologies to counter the threat posed by improvised explosive devices (IEDs) in Iraq and Afghanistan. I recently had the opportunity to visit our forces in Iraq. From first-hand observation, I can assure you that we are working the IED problem comprehensively and with a great sense of urgency. IEDs are a continuously evolving problem and we are constantly evolving our response. We are effectively addressing challenges associated with IEDs.

The Department of Defense (DOD) designated the Navy as the single manager for Explosive Ordnance Disposal (EOD) technology and training responsible for the development of Joint Service EOD technology. The Department has fully supported the Joint IED Defeat Organization with leadership as well as delivery to Iraq of a number of high and low powered jammers. The Office of Naval Research (ONR) is focusing on long-term (5–10 years) research for solutions to countering the IED threat. Over 450 responses to their Broad Agency Announcement have been received and are currently being evaluated.

Recruit/Retain the Right Force

With advances in the technology of weapons systems and platforms requiring personnel with highly specialized knowledge of computers and engineering, Navy and Marine Corps recruiters must target the top of the talent pool. Those who join and are subsequently trained to further develop their skills become increasingly valuable and are difficult to replace. Monetary incentives to recruit and retain are important, but not sufficient. Effective leadership and the sense that one is engaged in a noble, rewarding profession are even more important in motivating talented people to serve the Nation.

Pay Compensation Initiatives

Officer retention rates remain well above the historical lows of the late 1990s. The improvement is directly attributable to targeted incentive/critical skill pays established to address shortfalls. Despite the current positive retention trend, shortfalls remain in the lieutenant commander through captain ranks in the surface and submarine communities. The use of continuation pay to target shortfalls will be continued.

Family Support

Military service places unique demands on families and communities. The fiscal year 2007 President's budget for family and community services supports my personal emphasis on our people. It improves recruiting and retention, and supports our personnel in times of crisis. Family support programs and services assist in achieving operational readiness and improve retention by caring for our families. The Marine for Life—Injured Support Program provides continuing care for the critically injured marines and sailors serving with marines. A robust family support system is an essential element to maximizing every sailor's and marine's quality of service, and is my personal priority.

Housing Initiatives

Improving housing is a top priority as we recruit, retain, and improve the naval workforce. The complete elimination of inadequate military housing is our goal. The Department's housing strategy focuses on several areas including zero average out-of-pocket expenses for sailors and marines by raising basic allowance for housing (BAH) in high-cost areas, completing construction of new housing units, and completing our successful program of privatizing military family housing. Additional initiatives include maintaining the "Homeport Ashore" program that constructs new housing for single, junior (E1–E3) personnel currently living onboard their ships, even while in homeport. Marine Corps improved housing for single marines will be completed by fiscal year 2011.

Healthcare

Providing superb health care to sailors, marines, and their families is a critical part of the Department's support for personnel. The fiscal year 2007 budget includes

an increase in funding to support healthcare accrual costs. Navy medicine is focused on supporting the deployment readiness of the uniformed services by delivering the right medical care for the fleet and Fleet Marine Force while providing for the health care needs of families and retirees. This health care includes improved post deployment care for returning marines, sailors, and their families.

Shape the Force to Match the Need

As the world gets more complex, the future force must continue with technology intensive training, but must also develop new skill sets as we move from the blue to the green and brown water environments. Advances in ship and systems designs will allow us to use technology to improve warfighting readiness, while skills like cultural awareness and foreign languages will enhance our effectiveness as we operate across the littorals and ashore. Future emphasis will focus on matching the right skills and experience to the right place at the right time, and providing the personal and professional tools needed to succeed.

Moving forward to execute a comprehensive strategy to enhance combat effectiveness in the 21st century, the Department is designing a force that is aligned, shaped, and developed to current and future mission requirements. In order to reduce and reshape the force, incentives and tools are needed to identify personnel in obsolete or overmanned skill sets. The Perform-to-Serve and Early Release programs are two examples that have helped create a more experienced, better trained, and smaller force.

OPERATIONS

Today, sailors and marines are postured worldwide, fighting the war on terror, deterring aggression by would-be foes, preserving freedom of the seas, and promoting peace and security. On 15 February 2006, 141 ships (50 percent of the battleforce) were underway of which 97 ships (35 percent) are forward deployed. Navy Active strength totals 357,474 of which 5,298 are mobilized Reserves. Marines are forward deployed worldwide, including the combat zones of Iraq and Afghanistan. Marine Corps strength totals 179,139 with 7,040 mobilized Reserves.

Project Naval Power in the Global War on Terror

Winning the global war on terror is our number one strategic priority. Sailors and marines are actively engaged in operations in both Iraq and Afghanistan, as well as in counter-terrorist operations in the Horn of Africa, the Philippines, the Persian Gulf, and elsewhere around the globe.

Currently over 26,000 marines are serving in the CENTCOM Area of Responsibility (AOR), together with both sea- and shore-based Navy personnel in support of Operations Iraqi Freedom and Enduring Freedom. Marines continue to conduct operations in the Al Anbar province of Iraq with counter-insurgency operations in the Euphrates river valley and other locations in Iraq. Training of Iraq forces is of particular importance. In Afghanistan, marines provide a reinforced infantry battalion to the multi-national forces, and three embedded training teams within the Afghan National Army. These teams train, mentor, and operate with their Afghan counterparts. Building up the capacity of our partners is critical to the strategy of countering extremist influence in the war on terror.

All together there are over 10,000 sailors serving ashore throughout the CENTCOM AOR including more than 4,000 in Iraq, and an additional 2,600 in Kuwait that include SEALs, Seabees, MPs, EOD, medical, intelligence, legal, civil affairs, and other support personnel. Navy CSGs and ESGs continue to deploy in support of global war on terror, conduct combat operations in Iraq and Afghanistan, execute counter-piracy missions, and provide humanitarian assistance and disaster relief such as the tsunami relief, Pakistani earthquake, and on our own Gulf Coast after Hurricanes Katrina and Rita. Additionally, there are approximately 400 sailors in Afghanistan and 700 sailors at the Guantanamo Bay Naval Station, where the Navy is scheduled to assume responsibility for the joint task force in the spring 2006.

Improve Surge Capability

The global war on terror requires a naval force capable of surging to protect our interests throughout the world. The FRP is the operational framework that capitalizes on investments that have been made for higher readiness throughout a unit's operational cycle. By leveraging increased readiness under the framework of the FRP, the Navy has responded to support combatant commanders around the globe. The Navy today is meeting all commitments with trained and ready forces, and taking on new roles to address security challenges. The Marine Corps accounts for 4 percent of the DOD budget while providing 23 percent of the Nation's Active-Duty

ground forces. Currently, over 39,000 marines are forward deployed conducting combat, peacekeeping, humanitarian assistance, and training missions worldwide. This investment in expeditionary combat power is more than just a good value; it is a product of focused, responsible stewardship.

Enhance Homeland Security

The Navy has established a strong cooperative working relationship with the U.S. Coast Guard in support of maritime defense operations. The existing DOD/Department of Homeland Security (DHS) Memorandum of Agreement (MOA) enables rapid provision of Coast Guard forces to the Navy in the event of a national crisis. The Services are currently working the modalities of inter-service cooperation cited in the Maritime Operational Threat Response plan of the President's National Strategy for Maritime Security. Additionally, the Department will remain prepared for continental U.S. (CONUS) consequence management with capabilities that include maritime and aviation assets for logistics, search and rescue (SAR), EOD, headquarters and communication platforms, medical, salvage, and Seabee construction support.

Increase Maritime Domain Awareness (MDA)

Protection of the U.S. homeland and critical interests around the world requires a strong commitment to enhancing MDA, a key component of an active layered maritime defense in depth. The U.S. Navy is a vital part of this initiative. The Presidential Directive for Maritime Security Policy calls for a national plan to achieve MDA. The Navy actively participates in the National MDA Implementation Team with U.S. Northern Command (NORTHCOM) and 19 other agencies to develop an investment strategy. The team is improving MDA through interagency cooperation, developing and strengthening relations with international partners, and accelerating investment in multinational coordination, such as the Automatic Identification System (AIS), and the Multinational Information Sharing System (MNIS). Proliferation Security Initiative (PSI) and the Container Security Initiative (CSI) are important tools in this effort. Additionally, the Navy and Coast Guard are exploring other focused technology areas including data fusion and anomaly detection capabilities to enable analysts and watchstanders to transform large quantities of data into actionable intelligence.

Provide Humanitarian Assistance/Disaster Relief

The Navy and Marine Corps team can rapidly respond to crises around the globe to provide combat power projection or humanitarian assistance and disaster relief. After the tsunami struck South Asia late last year, forward-deployed naval forces were the first on-scene providing life-saving assistance. Within a few days of the disaster, U.S.S. *Abraham Lincoln* (CVN 72), U.S.S. *Bonhomme Richard* (LHD 6) and supporting ships arrived off the coast of Indonesia, and commenced ferrying supplies ashore and evacuating critical patients to sea-based medical facilities.

During the relief operation, over 25 ships with embarked aircraft and landing craft, and the hospital ship U.S.N.S. *Mercy* (T–AH 19), delivered more than 24 million pounds of relief supplies and treated over 6,500 patients. Recovery and relief in Pakistan following the devastating earthquake were led by on-station Navy and Marine Corps units. These kinds of missions show our Nation's compassion and are just as important as showing our military strength.

When Hurricanes Katrina and Rita left a swath of destruction across our southern Gulf Coast, the Navy and Marine Corps team responded. Ships of all types sortied from their homeports to the Gulf of Mexico. Navy and Marine Corps helicopters from air stations around the country quickly flew into New Orleans in the critical first few days following the storm to rescue thousands of stranded citizens. U.S.S. *Bataan* (LHD 5), conducting training exercises in the area, was first to respond. U.S.S. *Iwo Jima* (LHD 7), our newest amphibious assault ship, transited from Norfolk and docked pierside in New Orleans to serve as a joint, interagency command and control center, a landing strip for a multitude of helicopters, and a base for rescue workers. U.S.S. *Harry S Truman* (CVN 75) sortied from Norfolk to act as an additional aviation platform for ferrying relief supplies. Navy and Marine Corps Reserve personnel used their amphibious training and equipment for rescue operations, and in many cases, were the first help to arrive on-scene. The hospital ship U.S.N.S. *Comfort* (T–AH 20) surged from reduced operating status in Baltimore to be on-scene in a few days. Bases at Gulfport and Meridian provided over 7,000 meals a day to evacuees, military personnel and relief workers. Marines flew 815 sorties and transported 1.1 million pounds of cargo and 5,248 passengers. A total of 446 rescue missions were flown, resulting in the recovery of 1,467 personnel. The Seabees built self-contained tent cities that housed 6,500 people each and included hot showers, hot meals and laundry facilities. Fleet and family support centers from unaffected naval stations moved into the area to set-up "safe haven" programs to

help military families deal with the enormous stress that Katrina brought in her wake. All the efforts of the sailors and marines focused on helping others in time of need, regardless of geography or circumstance. Carrying on the proud tradition of naval service, they earned a particular sense of accomplishment in these noble missions.

Expand Presence and Capabilities into Littoral and Riverine Environments

The Navy and Marine Corps are expanding the Nation's ability to extend combat power from the sea to the littoral regions of the world. These regions encompass large portions of the world's populace and hold many vital centers for transportation, commerce, and government. One key initiative, the Naval Expeditionary Combat Command (NECC), will combine a riverine and small boat capability with expeditionary training, security, and logistics, maritime civil affairs, Seabees, EOD, and Mobile Diving and Salvage. This realignment of existing force structure with new warfare initiatives will enhance maritime boarding operations, port security, foreign military training, and crisis/disaster response to create influence and capacity for near-shore and inland waterway operations.

EQUIPMENT

The Department of the Navy is committed to enhancing procurement programs to improve capabilities, efficiency, and productivity. The Department's strategy is to establish consensus for procurement among the administration, Congress, and contractors to forge a new commitment to building a force for the future, while establishing a stable industrial base.

Simultaneously Reset, Recapitalize, and Modernize Equipment

Combat operations in Iraq and Afghanistan and the increased operational tempo in support of global war on terror are stressing equipment and diminishing pre-positioned stocks of hardware, munitions, and supplies.

Harsh environments, unavoidable maintenance delays, and battle damage are all taking their toll on equipment. The cost associated with resetting the force is above the baseline budget and will be covered with appropriate supplementals.

Combat operations have subjected much U.S. Marine Corps equipment to a lifetime worth of use in just a few years. Many systems are already at or beyond program service life. Examples include the M198 howitzer, HMMWV, EA–6B, CH–53D, CH–46E, and UH–1N. Service life extension programs and innovative forward deployed maintenance programs are helping keep current equipment combat-ready.

Enhance Procurement Programs: Improvements and Affordability

The Sea Enterprise initiative is transforming naval business processes and driving efficiencies and effectiveness, essentially balancing the "Right Force, Right Readiness, and Right Cost." Sea Enterprise is changing the Department's business culture, improving productivity, streamlining processes, and harvesting savings to support higher priorities.

The Department is developing leaders with a better understanding of business strategies, cost control, program risk, and rapid flexible design. As stewards of the Department's acquisition and total ownership processes, the systems commands, direct-reporting program managers (DRPMs), and program executive officers (PEOs) are responsible for furnishing high-quality yet affordable technologies, systems, platforms, training, and support to the operating forces.

To help guard against the danger of procurement fraud, the Department established the Naval Acquisition Integrity Office in the Office of the General Counsel. This office coordinates all parts of the procurement fraud program and provides training and guidance on procurement fraud matters.

. . . While Preparing for the Uncertainties of Tomorrow

SHAPE OUR 21ST CENTURY WORKFORCE

Future combat effectiveness and employment are dependent upon obtaining a force with the right skills in the right place at the right time. The Active and Reserve military components, civil servants, and the Department's contractors must continue to adapt to different operating environments, develop new skills, and rebalance capabilities and people to remain prepared for the new challenges of an uncertain future. The Department of the Navy is working to increase efficiency by implementing force shaping tools to target manpower reductions, and by defining the skill-mix of the force to capitalize on new technologies and conduct new missions.

Ensure the Correct Endstrength

To facilitate transformation, the Navy strength will decrease by 12,000 in fiscal year 2007 to 340,700. The budgeted Navy endstrength reflects a commitment to proper sizing and includes the following initiatives:

a. "Sea Swap" rotational crews for smaller ships.

b. Decommissioning of older, manpower intensive platforms.

c. Improved use of technology to reduce shipboard manning and shorten training pipelines.

d. Conversion of military to civilian, as appropriate. This includes the continued conversion of billets on selected Military Sealift Command ships and in medical facilities in rear areas or ashore.

The Marine Corps is realigning within its endstrength to ensure continued readiness to sustain combat capabilities. The Marine Corps is utilizing selected Marine Corps Reserve units and individual augmentees as necessary to maintain essential wartime capability. Baseline funded Marine Corps manning levels for Active and Reserve Forces remain the same in fiscal year 2007 at 175,000 and 39,600 respectively.

Develop a Force with the Skills Required for the Future

Future force attributes such as foreign language skills, cultural awareness, mastering technology and cyberspace, together with traditional warfighting skills will be critical to the Navy and Marine Corps. The Navy is expanding the Foreign Area Officer (FAO) program that will form a professional cadre of officers with regional expertise and language skills to provide support to fleet commanders, combatant commanders, and joint staffs. The immediate mission for the community is to rapidly improve the Navy's ability to conduct theater security cooperation, improve partner capacity in global war on terror, and generate actionable intelligence. These personnel will work in complex environments in remote locations and will forge personal relationships that could be useful during times of crisis.

The Marine Corps Center for Advanced Operational Culture Learning (CAOC–L) is the corps' "one-stop" clearing house for operational culture and language training. Through focused training for the operating forces, individual training and professional military education, distance learning, and professional reading, it promotes a grasp of culture and language as regular, mainstream components of the operating environment—the human terrain—throughout the full spectrum of military operations.

The Marine Corps is establishing a Marine Corps Special Operations Command (MARSOC) as a component of the U.S. Special Operations Command (USSOCOM). MARSOC will enhance Marine Corps and USSOCOM interoperability and provide greater flexibility with increased capability to fight non-traditional threats. The mission of MARSOC headquarters will be to organize, man, train, and equip Marine Special Operations Forces. The command's subordinate units will provide training to foreign military units and perform specific special operations missions such as: direct action, special reconnaissance, counterterrorism, and foreign internal defense. MARSOC will be organized into 3 subordinate elements with an authorized strength of 2,600 marines and sailors. The current plan calls for initial operational capability (IOC) during the fall of 2006 and a full operational capability by 2010.

Active/Reserve Integration

Active Reserve Integration (ARI) aligns Reserve component (RC) and Active component (AC) personnel, training, equipment, and policy to provide a more effective and efficient total force capable of meeting dynamic national defense requirements.

The Navy is currently aligning RC and AC units to better meet Operation Iraqi Freedom and Operation Enduring Freedom requirements and the Navy's vision for our future force structure. RC helo-combat support (HCS) forces will be integrated into AC helo, RC and AC EOD units are being integrated and two RC Navy coastal warfare units (NCW) are being converted to AC. The Navy established integrated Operation Vigilant Mariner units providing vessel security, as well as expeditionary training teams improving multinational capabilities.

The Navy is studying the role of the RC in future Navy mission areas of riverine warfare and civil affairs. Ongoing initiatives to meet Operation Iraqi Freedom and Operation Enduring Freedom provisional unit requirements, AC and RC sailors are working together to fill billets in civil affairs, detainee operations, intelligence, and reconstruction team efforts.

Implement the National Security Personnel System (NSPS)

NSPS is a new civilian personnel system, designed to meet the DOD national security challenges of the 21st century. NSPS will strengthen the ability to accomplish

the Department's mission in an ever-changing national security environment. NSPS accelerates efforts to create a total force (Active military, Reserve, Guard, civilian, and contractors), operating as one cohesive unit, with each performing the work most suitable to their skills. NSPS will provide a human resources system that appropriately recognizes and rewards employees' performance and the contributions they make to the Department's mission.

CHANGING THE WAY WE FIGHT

The Department of the Navy continues to transition to a force more capable of winning wars, deterring aggression, preserving the high seas, and securing the maritime domain, while ensuring access and sustainability of the joint warfighting team in the blue, green, and brown water arenas. The Navy and Marine Corps team will continue to transform in response to a new force planning construct as articulated in the 2006 QDR. Naval forces will use the sovereignty of the sea and enhanced networked joint Sea Basing to operate without restrictions. The Department's sailors, marines, and civilians will leverage innovative concepts, advanced technologies, and new business practices to increase warfighting effectiveness.

Meeting Future Challenges

Naval forces will engage potential adversaries as far from the United States and our interests as possible, and during times of crisis will form the leading edge of America's response. The ability of our forces to embrace and prevail in a future characterized by unrestricted warfare and uncertainty will be essential to mission success. The enduring role as our Nation's sea-based force will require that the Navy and Marine Corps team provide access, fight and win, and continually transform.

Strengthening Joint Concepts and Operations

The Navy and Marine Corps team is committed to strengthening and refining concepts and operations as part of the joint fight. From combat operations in Iraq, to stability operations in the Horn of Africa, to counter-drug operations in the Caribbean, naval forces are increasingly working in concert with other uniformed services and Government agencies. Joint acquisition of weapon systems and command, control, communications, computers, intelligence, and reconnaissance (C^4ISR) capabilities will increase interoperability and effectiveness while reducing costs. The vision for joint maritime forces, to include the Coast Guard, is a networked fleet that is more capable of projecting naval power in the brown and green waters of coastal areas.

Enhancing Navy's Role in Ballistic Missile Defense (BMD)

National Security Presidential Directive 23 identifies the Navy's role in BMD. That role is to support and ultimately field the maritime elements of the BMD system to support detection, tracking, and engagement of ballistic missile threats in all phases of flight. The Aegis BMD system contributes to the overall plan by providing the capability for Navy surface combatants, on-station near any area of concern, to detect missile launches, as well as cue and provide fire-control quality tracking information to ground-based interceptors. Additional capabilities to provide area defense by intercepting short- and medium-range ballistic missiles are being delivered to the fleet. U.S.S. *Lake Erie* (CG 70), the dedicated BMD test ship, has executed six successful flight tests of the SM–3 missile in seven attempts since 2002. The next test flight is scheduled for June 2006. The Aegis BMD capability has been installed on 12 ships: 2 cruisers (engagement capable), and 10 destroyers (long-range surveillance and tracking capable). By demonstrating the ability to track long-range ballistic missiles, and developing plans to demonstrate a sea-based engagement capability, the Aegis fleet has paved the way for the Navy to play a significant role in the Nation's missile defense.

Define Future Force Structure/Capability

The fiscal year 2007 President's budget supports a larger, more capable naval force structure to meet joint warfighting requirements, presence missions, and global war on terror demands. The budget provides for an increase in overall force structure, as well as a significant increase in capability. The annual investments in this budget support the growth of naval forces across the FYDP and lay the foundation for the force structure outlined in the Annual Long Range Plan for Construction of Naval Vessels for fiscal year 2007. The plan is to build to a target force structure based on our best estimate of the requirements. The number of ships and types of ships in this target force structure will evolve over time. The Department intends to maintain near-term stability to allow proper workforce, process, and capital end

product planning. Based on Navy analysis, the capability required to support the QDR Force Planning Construct is about 313 ships of a mix as defined in the long-range shipbuilding plan, providing capabilities that will make the fleet even more agile, fast, persistent, and lethal.

Surface Platforms

The fiscal year 2007 shipbuilding plan supports the Navy's vision of a new generation of ships with higher speed, more persistence and precision, and reduced manpower and life cycle costs. The Navy's challenge is to build a fleet of the future that possesses the capability and capacity to meet joint demands for naval forces across the spectrum of operations from major combat operations to humanitarian assistance and disaster relief. The Department, through the Defense Planning Guidance, and QDR, has defined the required capabilities for the joint force through 2020. The fiscal year 2007 President's Budget provides for seven new ships. The total number of new ships across the FYDP is 51, an increase of 3 ships from last year's budget projection.

CVN 21

Aircraft carriers remain the premier asset for rapid crisis response and early decisive striking power in major combat operations. CVN 21 balances improved warfighting capability and quality of life improvements for the crew, with reduced acquisition and life cycle costs. Efficient nuclear propulsion, electromagnetic aircraft launch system, advanced arresting gear, and a three-fold increase in electrical generating capacity will enable CSGs to provide forward presence, rapid response, endurance on station, and multi-mission capability. Construction of the lead ship (CVN 78) will cost $10.5 billion, of which $2.4 billion is non-recurring. Advanced procurement funding of $784 million is requested in fiscal year 2007 for CVN 78 and CVN 79. New technology development is on track and component testing is in progress. Steel was cut on the first advanced construction hull unit on April 2005, with the lead ship due to be delivered in fiscal year 2015 to replace U.S.S. *Enterprise* (CVN 65).

DD(X)

The DD(X) is the Navy's next generation destroyer. It is designed as a multi-mission surface combatant tailored for land attack and littoral dominance by providing persistent volume fires with high survivability. Under the "Dual Lead Ship" strategy, Northrop Grumman Ship Systems and General Dynamics-Bath Iron Works will each build a lead ship to the common design. The funding for these ships will be split between the fiscal year 2007 and fiscal year 2008 budgets.

Littoral Combat Ship (LCS)

The LCS will be a fast, agile, and networked surface combatant with capabilities optimized to assure naval and joint force access into contested littoral regions. Two ships are currently under construction with delivery of the first LCS, designated U.S.S. *Freedom,* scheduled for fiscal year 2007. A total of 23 LCS ships will be procured between fiscal year 2007 and fiscal year 2011. LCS is designed with a speed goal of over 40 knots at full displacement in sea state 3 to help defeat anti-surface threats. It will possess inherent capabilities to conduct missions supporting special operations, maritime interception, and homeland defense. The LCS sea frame is designed to be outfitted with reconfigurable payloads that can be changed out quickly. This modular design feature will provide the flexibility required to adapt to the uncertainty of the future.

San Antonio Class Amphibious Transport Dock Ship (LPD 17)

U.S.S. *San Antonio* (LPD 17) was commissioned on 14 January 2006. LPDs 18 and 19 have been launched, and LPDs 20 and 21 keels have been laid and are in full production. Contract awards for LPDs 22–24 are expected in the 2nd quarter of fiscal year 2006. LPD 17 is an amphibious transport dock ship that functionally replaces the LPD 4, LSD 36, LKA 113, and LST 1179 classes of amphibious ships for embarking, transporting, and landing elements of a marine force by helicopters, landing craft, amphibious vehicles, and by a combination of these methods. Its unique design will facilitate expanded force coverage and decreased reaction times of forward deployed marine expeditionary units. In forcible entry operations, LPD 17 will help maintain a robust surface assault and rapid off-load capability for the Marine Air-Ground Task Force (MAGTF) far into the future.

Maritime Preposition Force (Future) (MPF(F))

MPF(F) will transform the maritime prepositioned ships-supported marine expeditionary brigade (MEB) from an ashore fighting unit to one that can operate continu-

ously from a sea base without the need for support from land. The MPF(F) family of ships will advance the capability of seabasing to support a wide spectrum of joint force operations.

The fiscal year 2007 budget provides for procurement of one Dry Cargo and Ammunition Ship (T–AKE) in the National Defense Sealift Fund (NDSF). This will be the tenth ship of the class. The NDSF budget also includes funding for the development of future seabasing ships. The MPF(F) squadron of ships, a central part of the Sea Base operational concept, leverages current designs and production lines where possible. MPF(F) new construction commences in fiscal year 2009 and includes one T–AKE variant and one Mobile Landing Platform (MLP).

Amphibious Assault Ship (Replacement) (LHA(R))

The President's budget for fiscal year 2007 includes $1.1 billion for the LHA(R) program. LHA(R) will replace four aging LHA class ships that will reach the end of their extended service life in 2011. The LHA(R) will be a modified LHD 1 class, amphibious assault ship variant designed to leverage capabilities inherent in the JSF and MV–22. A four-ship LHA(R) shipbuilding program is needed to maintain future power projection and forward deployed combat capabilities of the Navy and Marine Corps. As noted in the 23 October 2004 LHA(R) report to Congress, the requirement for four ships is based on the current force structure (four LHAs being replaced by four LHA(R)s, with two of the four going to the MPF(F) squadron). LHA(R)s will include a significant increase in aviation lift, sustainment, and maintenance capabilities, spaces for an MEB, amphibious group, or small-scale joint task force (JTF) staff, a dramatic increase in service life allowances for new-generation Marine Corps systems, and substantial survivability upgrades.

Submarines

SSN: Virginia-Class Nuclear-Powered Attack Submarine

Exceeding expectations and meeting all mission requirements, SSN 774 completed its first deployment in 2005, 14 months before its planned November 2006 IOC. Fiscal year 2007 funds the fourth of five submarines under a multi-year procurement contract awarded in January 2004. A total of 10 ships have been ordered. Our intent is to increase the production rate to two attack submarines per year starting in fiscal year 2012.

SSGN: Nuclear-Powered Guided-Missile Submarine

The first of four Ohio class Trident fleet ballistic missile submarine, U.S.S. *Ohio* (SSGN 726), completed the conversion process to launch Tomahawk missiles, completed sea trials, and returned to fleet service on February 7, 2006. The other three are scheduled to return to fleet service by September 2007. These submarines can carry up to 154 Tomahawk land-attack missiles and have the ability to conduct large-volume strikes with the surprise inherent in submarine operations. The SSGN has the capability to support a Special Operations Force contingent for an extended period of time, providing clandestine insertion and retrieval via built-in lockout chambers and dry deck shelters.

Aviation Platforms

The fiscal year 2007 budget sustains aviation superiority for the Navy and Marine Corps and emphasizes capability-based investment strategies, new warfighting concepts, and enabling technologies. The Navy and Marine Corps tactical air integration plan continues to reduce the total number of new aircraft needed to maintain naval air superiority. The fiscal year 2007 budget provides robust development funding for the F–35 JSF, MV–22, EA–18G, P–8A Multi-Mission Maritime aircraft (MMA), E–2D, CH–53K, VH–71 Presidential Support Helicopter, and Joint Unmanned Combat Air Vehicle (JUCAV). The budget continues to maximize the return on investment, primarily through the use of multi-year procurement contracts for the F/A–18E/F, EA–18G, E–2C, MH–60S/MH–60R, and KC–130J. Additionally, the fiscal year 2007 budget demonstrates the Department's continuing commitment to developing, acquiring, and fielding transformational unmanned aerial vehicle (UAV) technologies for intelligence, surveillance, reconnaissance, and tactical missions. The budget includes funding for the Fire Scout for deployment on LCS ships, and the Broad Area Maritime Surveillance (BAMS) UAV.

F–35 Joint Strike Fighter (JSF)

The fiscal year 2007 President's budget requests $2.28 billion for the JSF. The first flight of the conventional takeoff and landing (CTOL) variant is scheduled for August 2006; the first operationally ready carrier-based JSF squadron enters the fleet in 2013. The JSF will provide the Navy and Marine Corps with long-range, stealthy striking power from CVNs, large deck Amphibious Assault Ships (LHA/

LHD, LHA(R)), and airfields. JSF variants will provide naval aviation with a 21st century multi-mission tactical strike fighter, replacing the AV–8B, F–14, and the older F–18A/B/C/D airframes. Jointly developed with the Air Force and 8 other countries, the JSF is in its 5th year of development. The Marine Corps is pursuing the Short Take-Off/Vertical Landing (STOVL) version, while the Navy will purchase a follow-on aircraft carrier (CV) variant. High commonality between the variants will reduce both acquisition and operating costs. It has been concluded that a single engine supplier provides the best balance of risk and cost. The maturity of technology as demonstrated with the engine development of the F/A–18E/F and F–22 indicate that sole source risks are modest and acceptable. Canceling development of the alternate source engine program will save $1.8 billion through fiscal year 2011.

MV–22 Osprey

The fiscal year 2007 President's budget contains $1.5 billion for 14 aircraft. The MV–22 completed operational evaluation (OPEVAL) in 2005 and will reach its IOC in 2007. Block A and Block B aircraft have been procured to support developmental testing, OPEVAL, training, and initial fleet fielding. In full rate production, the aircraft procurement rate will ramp up to 37 aircraft per year. The program of record includes 360 MV–22s for the Marine Corps and 48 for the Navy. The demands of global war on terror and modernization of our expeditionary warfare capabilities have increased the urgency to rapidly field the MV–22 Osprey. Its design incorporates advanced technologies in composite materials, survivability, airfoil design, fly-by-wire controls, digital avionics, and manufacturing. The MV–22 is capable of carrying 24 combat-equipped marines or a 10,000-pound external load, and has a strategic self-deployment capability of 2,100 nautical miles with a single aerial refueling. It is vastly superior to the CH–46E it replaces, with twice the speed, three times the payload, and six times the range. The V–22 Osprey, as a joint platform for the Navy, Marine Corps, and Air Force is providing significant opportunities for joint training, tactics development, and mission execution.

E/A–18G Growler

The fiscal year 2007 budget includes $0.9 billion for 12 EA–18Gs. The critical design review for the EA–18G was successfully completed in April 2005. The aircraft has completed its second year of system development and demonstration, is on cost, on schedule, and meeting performance standards. The EA–18G Growler will replace the EA–6B Prowler, providing full-spectrum electronic attack to counter enemy air defenses and communication networks. Many of the systems provided with the EA–18G will fulfill the Navy role in the joint force in providing advanced technology to strengthen electronic warfare capabilities. As a tactical aircraft, its expanded flight envelope offers much greater speed, altitude, and maneuverability. The EA–18G will maintain a high degree of commonality with the F/A–18F, retaining the strike fighter and self-protection capabilities, while providing air-to-air self-escort to free other assets for strike-fighter tasking.

P–8A Multi-Mission Maritime Aircraft (MMA)

President's budget for fiscal year 2007 requests $1.13 billion for continued development of the MMA program. The program has successfully completed the system requirements review, system functional review, preliminary design review, and has entered the detailed design phase. The MMA will replace the P–3C Orion aircraft, which has reached the end of its service life. The MMA's transformational architecture will integrate its onboard mission suite with UAVs, satellite systems, and other external sensors to assure maritime access.

E–2D Advanced Hawkeye

The President's budget for fiscal year 2007 provides $498 million for the E–2D Advanced Hawkeye program that replaces the older E–2C. Utilizing new state-of-the-art radar, open architecture processing systems, and other critical surveillance systems, the E–2D provides a two-generation leap forward in capability. The Advanced Hawkeye also adds improved surface and air search, air traffic control and communications, search and rescue coordination, and battle management capabilities. The E–2D completed critical design review in October 2005. The first test aircraft's flight is on track for fiscal year 2007, with IOC expected in fiscal year 2011.

CH–53K Heavy Lift Helicopter Replacement

The President's budget for fiscal year 2007 provides $363 million for the continued development of the CH–53K program. The current Marine Corps heavy-lift aircraft, the CH–53E, has experienced significant operational wear, interoperability, and maintenance supportability challenges. In order to support the MAGTF and the JTF

in the 21st century joint environment, the CH–53K will maintain the Marine Corps' heavy-lift capability. Major systems improvements include larger and more capable engines, expanded gross weight airframe and drive train, advanced composite rotor blades, modern interoperable cockpit, external and internal cargo handling systems, and improved survivability. The CH–53K will be capable of externally lifting 27,000 pounds, more than double the current CH–53E ability under similar conditions. Additionally, the CH–53K will be capable of carrying 30 combat-loaded troops. IOC is planned for fiscal year 2015.

F/A–18E/F Super Hornet

The President's budget for fiscal year 2007 provides $2.3 billion for 30 aircraft. The F/A–18E/F Super Hornet continues to be the centerpiece of Navy combat aviation. Enhanced warfighting capability investments for the F/A–18E/F introduce a transformational radar, helmet-mounted sight, advanced targeting pod, and fully integrated weapons system. Significant improvements in combat range, payload, survivability, and growth capacity make the F/A–18E/F the dominant strike-fighter well into the 21st century. The F/A–18E/F is replacing the F–14 and early model F/A–18s. Lethality, flexibility, reliability, and survivability of the F/A–18E/F make it the right aircraft to fulfill a wide range of future missions.

MH–60R/MH–60S Seahawk Multi-Mission Combat Helicopters

The President's budget for fiscal year 2007 provides $915 million for 25 MH–60R and $548 million for 18 MH–60S models. Successful OPEVAL of the MH–60R was completed in September 2005 and the first four helicopters were delivered to the fleet in December 2005. The MH–60S was approved for full-rate production in August 2002 and is currently undergoing scheduled block upgrades for combat and airborne mine countermeasure missions. The Navy plans to acquire 271 MH–60S models. MH–60R/S platforms are produced with 85 percent common components to simplify maintenance, logistics, and training.

KC–130J Hercules Tactical Tanker and Transport

The fiscal year 2007 President's budget provides $299 million for the procurement of four KC–130Js. The KC–130J is replacing the Marine Corps' aging fleet of KC–130Fs and KC–130Rs. The KC–130J will include warfighter modifications such as the addition of aircraft armor, upgrading the aviation survivability equipment suite, and improved in-flight refueling pods. Twenty-one aircraft have been delivered to date, with marines making the first combat deployment of six KC–130Js in February 2005. The program of record for the KC–130J is 51 aircraft.

Unmanned Aerial Vehicles

The Department is investing in a family of advanced UAVs. Systems such as the Fire Scout and the Broad Area Maritime Surveillance Unmanned Aircraft System (BAMS UAS) contain a variety of advanced sensors to give warfighters immediate actionable intelligence, and in the case of armed UAVs, the ability to strike targets that appear for a fleeting moment.

Fire Scout. The President's budget for fiscal year 2007 provides $38 million for 4 Fire Scout UAVs and $105 million for Fire Scout development. The Fire Scout Vertical Takeoff and Landing Tactical UAV (VTUAV) is designed to carry modular mission payloads and operate using the Tactical Control System (TCS) and Tactical Common Data Link (TCDL). Fire Scout will provide day/night real time intelligence, surveillance, reconnaissance, and targeting as well as communications relay and battlefield management capabilities to support LCS mission areas.

Broad Area Maritime Surveillance Unmanned Aircraft System. The fiscal year 2007 President's budget provides $26.4 million for the development of the BAMS UAS program. BAMS UAS is integral to the Navy's intelligence, surveillance, and reconnaissance (ISR) recapitalization strategy providing a persistent, maritime, worldwide ISR capability. BAMS will consist of unmanned aircraft, payloads and ground/shipboard systems. The BAMS program will meet the Navy requirement for a persistent ISR capability, and address the enhanced maritime surveillance capability. IOC is expected in fiscal year 2013.

Marine Corps Equipment

Expeditionary Fighting Vehicle (EFV)

The fiscal year 2007 President's budget includes $266 million for procuring 15 EFVs. The EFV will be the primary means of tactical mobility for the marine rifle squad during combat operations. As a self-deploying, high speed, armored amphibious vehicle, the EFV is capable of transporting 17 combat-loaded marines from ships located beyond the horizon to inland objectives. The EFV program is in the systems development and demonstration (SDD) phase of the acquisition process

with IOC scheduled for 2010. The Milestone C Operational Assessment began on January 16, 2006, and is being conducted with four SDD vehicles (three personnel (P) variants and one command and control (C) variant. An additional five SDD vehicles are undergoing extensive reliability, availability, and maintainability testing to grow vehicle reliability in support of low-rate initial production (LRIP). Certain operational assessment phases will occur 3 months later than planned to synchronize with the return from Iraq of the unit designated to participate. This will result in the Milestone C Operational Assessment being completed in August 2006, and the Milestone C decision in December 2006. This schedule change does not breach the program baseline, and will not affect the fiscal year 2007 budget request.

Lightweight Howitzer

The fiscal year 2007 budget provides $94 million to procure 34 M777A1 Lightweight Howitzers. The M777A1, through design innovation, navigation and positioning aides, and digital fire control, offers significant improvements in lethality, survivability, mobility, and durability over the M198 howitzer. The Marine Corps received the first of 356 new howitzers in April 2005.

Internally Transportable Vehicle (ITV)

The ITV program is a Marine Corps-led joint program with the U.S. SOCOM to field an assault vehicle supporting expeditionary maneuver warfare and over-the-horizon amphibious operations. The ITV will provide MAGTF combat units with a vehicle that fits internally in the CH–53 and MV–22 aircraft. IOC is scheduled for September 2006, when a selected infantry battalion receives eight ITVs.

Light Armored Vehicle Product Improvement Program (LAV PIP)

The fiscal year 2007 budget includes $26 million for the LAV PIP program, which will extend the service life through 2015, improve the readiness, survivability, and sustainability of these vehicles, and reduce the LAV fleet's operations and support costs. The extension program includes a block of vehicle upgrades, incorporating a next generation improved thermal sight system, and thermal and visual signature-reduction kits.

IMPROVING BUSINESS PRACTICES

Providing sailors, marines, and Department of the Navy civilians with high quality facilities, information technology, and an environment to achieve goals are fundamental to mission accomplishment. As the QDR states, this will demand a revolution in management, technology and business practices to reduce redundancies and ensure the efficient flow of businesses processes. The Navy and Marine Corps team are implementing continuous improvement initiatives consistent with the goals of the President's Management Agenda. These improvements enable realignment of resources to increase our output and re-capitalize our force. The cornerstone of the continuous improvement effort is the implementation of industry proven Lean Six Sigma efficiency methodologies in day-to-day operations. The Department of the Navy will continually evaluate systems and processes to optimize their responsiveness.

Efficiently Implement BRAC 2005 Decisions

The BRAC process has been a major tool for reducing the domestic base structure and generating savings. Continuing to balance the Department's force and base structures by eliminating unnecessary infrastructure is critical to preserving future readiness. The fiscal year 2007 budget reflects a fully financed implementation program that completes all closures and realignments within the statutory 6-year implementation period. In fiscal year 2010 and beyond, annual savings exceed annual costs, and the Department will see a positive return on investment.

Actively Foster Department of the Navy Business Transformation

The Department is transforming people, processes, and systems, and aggressively adopting proven best commercial practices to support business transformation objectives. Initiatives will complement each other, resulting in better-controlled, integrated, and automated processes that deliver more accurate, reliable, and timely financial management information. The goal of the Department's business process transformation is to provide reliable, accurate, and timely business intelligence, supporting resource efficiency and sound business decisions. It will involve building a modern, integrated, automated environment within the DOD architecture. The Department's business transformation continues to evolve, providing the framework within which future business processes will operate.

Since 2002, the Navy and Marine Corps have integrated their tactical aircraft to reduce excess capacity and provide equal or greater combat capability with fewer

resources. Efficiencies gained through integration, and investing in more capable aircraft (F/A–18E/F Super Hornets and F–35 Joint Strike Fighters) allows the Navy and Marine Corps to reduce the number of Active and Reserve squadrons while continuing to provide flexible, responsive, and interoperable forward deployed combat air power. It also allows for reduction in the sustainment, maintenance, and training requirements, providing operations and maintenance savings to be invested in more pressing areas.

The Department will continue to be aggressive in pursuing new business initiatives that will make the Navy and Marine Corps more efficient, effective, and responsive.

Optimize Management of Naval Installations, including Environmental Stewardship

Building the Navy and Marine Corps' future shore infrastructure requires the "right bases" in the "right places" with the "right capabilities" at the "right price." The Commander of Naval Installations is providing the mechanism for senior Navy leadership to guide planning ashore in support of operations afloat through Navy Ashore Vision (NAV) 2030. This document develops the first set of guiding principles to help leadership plan and execute basing and investment strategies. NAV 2030 provides an agile foundation to size and locate ashore infrastructure. It capitalizes on innovation and effectiveness to sustain fleet readiness and reduce cost. Success in realigning and revitalizing the shore infrastructure is vital to our future Navy. We must capitalize on joint basing opportunities with our sister services to consolidate support delivery, reduce duplication, and improve operational efficiency while enhancing combat effectiveness.

Regionalization of Marine Corp installations will bring all Marine bases and stations, with the exception of recruit training depots, under the purview of five Marine Corps Installation Commands. This transformation will provide optimal warfighter support, improve alignment, enhance use of regional assets, return marines to the operating forces, and reduce costs.

Utilize Information Technology to Improve Efficiency and Effectiveness

Information Technology (IT) is critical to providing secure, accessible, timely, and accurate information needed for the 21st century Navy and Marine Corps team. By integrating national security, business, and warfighting systems, we will reduce redundancies, inefficiencies, and time-critical delays across the Department. The use of standardized, open architecture protocols and equipment reduces costs, enhances flexibility, and improves network security. Today, the Navy and Marine Corps Intranet (NMCI) is serving over 600,000 users and supporting critical business and combat support applications. During fiscal year 2006/2007 we will complete the deployment of NMCI seats, transition legacy systems and servers to NMCI, shutdown the vast majority of our legacy networks, and seamlessly integrate the sea and shore networks to provide one secure high performance environment for our next generation of combat, combat support, and business operations.

CONCLUSION

The Navy and Marine Corps team is proudly serving our Nation, answering the call to protect America and her strategic interests. In preparing for the future we will not overlook the present. The fiscal year 2007 President's budget request is about both prevailing in today's wartime environment and bridging to a successful future. We are confident in our warfighting success and contribution to the joint force today and will improve it with the investments of this budget. As we commit to being responsible stewards of the American treasure, both in lives and in dollars, we set a course to do our share to win our Nation's wars and prepare to meet future challenges.

Our sailors and marines are bearing the burden of today's war. More than just forward deployed, they are continuing to make sacrifices in defense of liberty. They are performing superbly, bringing honor and renown to the naval service. These proud warriors deserve not only the accolades and laurels of a grateful Nation, but our full measure of support as they continue to serve in defense of the United States.

In supporting the funding decisions outlined in the fiscal year 2007 President's budget request, Congress will continue to provide the Department of the Navy the right force for the Nation today, while preparing for the uncertainties of tomorrow. We are grateful for the unwavering support that Congress has given the Navy and Marine Corps in the past, and we appreciate its clear intent to ensure our strategic readiness for any future contingency. Its continued support is critical to our Nation's security and to our ability to meet America's global responsibilities. On behalf of every sailor and marine in today's naval forces and the warriors who will serve to-

morrow, I thank Congress for its continued support of and confidence in the United States Navy and the United States Marine Corps.

Chairman WARNER. Thank you, Mr. Secretary.

Admiral.

STATEMENT OF ADM MICHAEL G. MULLEN, USN, CHIEF OF NAVAL OPERATIONS

Admiral MULLEN. Good morning, Mr. Chairman, Senator Levin, distinguished members of this committee. Thank you for the opportunity to appear before you today as part of the Navy-Marine Corps leadership team. It is an honor to be here with my good friend General Hagee, with whom I go back a very long time. As I made clear before the House last week, I know I speak for sailors everywhere when I say how privileged we feel to have Secretary Winter now at the helm. He has certainly, as we like to say in the Navy, hit the deckplates running and we are better for his leadership.

Mr. Chairman, you are fond of reciting the Constitution's requirement that Congress provide and maintain a Navy. I know you hold those words dear. I am here to report to you and to the American people that Congress has again met that requirement. Today your Navy is in fighting trim. Out of the 281 ships we have today, 99 of them, ships and submarines, and over 39,000 sailors are forward deployed right now. More than half of those men and women, some 22,000, are serving in the Central Command (CENTCOM) theater and half of that number are on the ground in combat and combat support roles.

I too have traveled much of these first 7 months as CNO, spending time with sailors at sea and ashore. They know the task before them. They understand the importance of their work and they are eager to contribute. While some, such as those in Japan, Korea, and Guam, keep faith with enduring missions in that vital area of the world, others are adapting quickly to new missions in new places. Seabees are driving convoys and building forward staging bases deep inside Iraq. Ships are acting as forward staging bases in the Arabian Gulf. Navy security personnel are guarding a new prison near Baghdad. Explosives technicians are finding and disarming IEDs. Our special warfare forces remain hotly engaged in the jungles, the deserts, and in the mountains, finding and apprehending terrorist leadership and training our allies to do the same. Doctors, nurses, and corpsmen are accomplishing amazing medical feats in the most austere conditions, often under fire, risking life and limb to save the lives and limbs of others. We are chasing pirates, flying ground support missions from our carriers, and helping rebuild communities devastated by natural disasters far away and here at home.

We will be pitching in even more. A Navy Admiral takes command of the detainee operation in Guantanamo Bay this month. We will take command of the joint task force in the Horn of Africa and naval officers will soon lead 6 of the 12 United States-led provincial reconstruction teams in Afghanistan.

There is incredible talent in your Navy. Our sailors have character and resolve and hold themselves and their shipmates to high standards. I am enormously proud of them and their families and grateful for their service at this critical time in our history.

As I said, we are in fighting trim, but we must work hard to stay that way. During my confirmation hearing last April, I identified three challenges facing our Navy: the need to sustain our combat readiness, the need to build the right force for the future, and the need to transform our manpower and personnel system. Everything I have seen in these last 7 months has only convinced me further that sea power in this century is taking a whole new meaning and that these are exactly the right priorities.

America is a maritime nation. We need a strong Navy. We are a strong Navy. What I seek is balance. We must be able to win the big and the small wars—two challenges, one fleet.

Our fiscal year 2007 budget request, like the QDR itself, helps provide that balance. The fleet today stands at 281 ships, not enough in my view to deliver the joint warfighting capabilities combatant commanders will need over the course of this long war. Nor does the current rate of shipbuilding provide the stability this country must possess to preserve its vital industrial base. Our long-range shipbuilding plan, centered on 11 carriers with a fleet of about 313 ships, meets these needs, for the good of the Navy, for the good of the Nation, and for the good of our allies and partners.

On this very day back in 1862, the Civil War ironclads *Monitor* and *Virginia* fought a historic duel, mauling each other for more than 4 hours in the waters off Hampton Roads. There were few casualties. Neither suffered much in the way of damage. But the face of warfare changed forever. It was the beginning of the end of the age of sail.

Today we stand on the cusp of a new age, an age of speed and stealth and information dominance. New warships like DD(X), CVN–21, the Freedom class Littoral Combat Ships (LCS), and our new class of *Virginia* submarines will do for our Nation's maritime security what *Monitor* and *Virginia* did for it at the dawning of the age of iron and steam.

Mr. Chairman, members of this committee, with your continued support, which is greatly appreciated, we will usher in this new age and we will lead it. I thank you again for that support, for your time, and for your commitment to the men and women of the United States Navy. They and their families are the best I have ever seen. On their behalf, I stand ready to answer your questions.

[The prepared statement of Admiral Mullen follows:]

PREPARED STATEMENT BY ADM MICHAEL G. MULLEN, USN

Mr. Chairman and members of the committee, it is a privilege for me to appear before you today, and it is with pride and humility that I address you for the first time since becoming the Chief of Naval Operations in July of last year. In November 2005 our Service celebrated 230 years of honor, courage, and commitment to the ideals that make our country a beacon of freedom and democracy spanning the world's waterways. The greatest honor I will ever have is to serve and represent the sailors and civilians—the people—who are your United States Navy.

During my confirmation testimony last April, I identified three challenges facing our Navy: the need to sustain combat readiness at a high level; the need to build a Navy capable of meeting the most demanding future threats; and the need to transform our manpower and personnel system to better serve and to be more responsive to our people.

Having now been in the job for a little more than 6 months, I have visited our fleet, have observed numerous operations at home and overseas, participated in the comprehensive Quadrennial Defense Review (QDR), and met with the chiefs of

many foreign navies. This has helped shape my perspective of our Navy today and where I believe we need to go in the future. It has also validated the challenges I identified last April as the right priorities upon which we must focus. It is my belief that the QDR and our fiscal year 2007 budget are the first steps toward establishing this critical balance between maintaining current readiness, building a future Navy, and serving our people. Your Navy remains first and foremost a warfighting, seagoing service.

This budget:

- Sustains combat readiness . . . with the right combat capabilities—speed, agility, persistence, and dominance—for the right cost.
- Builds a fleet for the future . . . balanced, rotational, forward deployed, and surge capable—the proper size and mix of capabilities to empower our enduring and emerging partners, deter our adversaries, and defeat our enemies.
- Develops 21st century leaders . . . inherent in a strategy which, through a transformed manpower, personnel, training, and education organization, better competes for the talent our country produces and creates the conditions in which the full potential of every man and woman serving our Navy can be achieved.

Our future Navy will ensure access and sustainability of the joint force in blue, green, and brown waters through globally distributed and networked operations. It will do so in partnership with the Marine Corps, and will be symbiotic with the Coast Guard, as envisioned in the President's National Strategy for Maritime Security. It will be a larger and more lethal fleet of faster ships, with capacity to overmatch our most capable adversaries, including any future strategic competitors, and to further develop our emerging and enduring partnerships worldwide. It will rely on joint seabasing that will provide for sustained, air and ground anti-access operations in access-restricted environments. It will leverage both manned and unmanned capabilities. It will build upon the programmatic foundation of FORCEnet and Sea Power 21.

Sea power in this new century will require speed, agility, persistence, and dominance. To achieve this your Navy must deliver a balanced force of the right capabilities, the right mix, and the right size, at the right cost.

INTRODUCTION

During my recent tour in Europe, as Commander U.S. Naval Forces and Commander, Joint Force Command, Naples I gained an extraordinary appreciation of the partnership of nations—not only through NATO's engagement in the global war on terror, Operation Active Endeavor in the Mediterranean, and NATO's training mission in Iraq—but through the multitude of operations conducted daily with our allies and emerging partners throughout the European Command area of responsibility. I also learned, first hand, that staying the course in post-conflict Bosnia and Kosovo had paid rich dividends as military presence was eventually transitioned to civilian infrastructures and maturing rule of law. Here, too, partnerships were the key, including multi-national militaries, non-governmental organizations (NGO), and interagency and international community players. Interoperability and timely communication remain critical. Throughout Europe, the Caucasus, and Africa I witnessed the true value of our Navy's work with emerging and enduring partners through the Theater Security Cooperation program. We are building confidence, trust, and lasting relationships that will most assuredly prevent future crises and conflicts.

In July of last year I took over a Navy in great shape, with sailors and civilians at the peak of readiness and proud of their warfighting ethos. I set about defining the capabilities needed to remain strong and to prevail in this new century. It wasn't long, though, before hurricanes Katrina and Rita devastated our gulf coast. I was reminded of the power of the sea, and was struck by the tremendous potential of "sea power." Our Navy answered the call just as we had after the Indonesian tsunami, where no other institution in the world was better equipped or more ready to respond than your Navy. In a powerful demonstration of the flexibility provided by the Fleet Response Plan, 23 ships sailed to the Gulf. The hospital ship U.S.N.S. *Comfort,* sister ship to the *Mercy* that had opened the world's eyes to America's compassion following the tsunami, was underway within 72 hours.

U.S.S. *Bataan* was the first Navy responder, arriving in the vicinity of New Orleans one day after Katrina's landfall, coordinating helicopter rescue efforts with the Coast Guard and providing medical care to some 800 evacuees. HSV–2 *Swift*'s high speed and shallow draft combined to make it an ideal platform for the delivery of relief supplies and the support of other platforms operating in the gulf area, just

as it had during relief operations in Indonesia. In both cases, *Swift* was able to reach ports inaccessible to other ships in the logistics force and played a critical role in the early delivery of supplies. More than 3,300 Seabees paved the way to hurricane recovery by clearing 750 miles of roads, removing more than 20,000 tons of debris, restoring 60 schools serving 40,000 students, and completing 453 utility projects.

The crew of U.S.S. *Tortuga* essentially conducted a non-combatant evacuation in the flooded parishes of New Orleans taking their boats inland to pull people out of dilapidated houses. The *Harry S Truman*, uncharacteristically carrying no strike aircraft, anchored off shore with 19 helicopters embarked and provided a ready deck for rescue helicopters that saved lives through dramatically decreased response times. U.S.S. *Iwo Jima*, pier side in downtown New Orleans, served as the city's only functional airport, command center, hotel, and hospital. I met with Vice Admiral Thad Allen of the Coast Guard aboard *Iwo Jima* shortly after he had taken command of FEMA's efforts—and he raved about the significant role the ship was playing in the crisis and the brilliant performance of her crew.

This reminded me of a comment I had heard in Europe following our tsunami relief effort from an individual representing an NGO. She said, "Thank God for the U.S. Navy. No other institution in the world could have responded with that level of effort so quickly." It struck me that our Navy really is like a "city at sea," offering hope and relief in times of crisis. We have seen it again, in the wake of the Pakistani earthquake, where Navy ships, aircraft, Seabees and medical personnel lent a helping hand and made a difference in winning hearts and minds in the global war on terror.

In September I addressed the International Sea Symposium—49 Chiefs of Navy and Coast Guard and representatives from 72 countries in Newport, Rhode Island. My topic was "Establishing a Global Network of Maritime Nations for a Free and Secure Maritime Domain." While I asked the participants to imagine an international maritime force of 1,000 ships—the world's navies and coast guards working together to face the challenges of a new era—I realized this was becoming a reality before my very eyes. There were meaningful discussions taking place regarding regional cooperation in countering piracy, terror, and the proliferation of weapons of mass destruction. There were testimonials from NATO and ASEAN navies, and from South American and African navies. It occurred to me that this is what Sea Power in the 21st century is all about. The U.S. Navy has taken the lead as a global maritime force for good, and there are plenty of nations willing and eager to do their part.

But the Navy's capabilities extend beyond traditional missions of sea-borne shaping and stability operations, conventional and irregular warfare, freedom of navigation, homeland security, and deterrence. In fact, the Navy is tackling new missions every day that don't involve ships. More than 10,000 sailors are currently on the ground in the Central Command (CENTCOM) area of responsibility (AOR), 4,000 of whom are in Iraq. In March of this year, the Navy will take command of the detainee mission in Guantanamo Bay, Cuba. We recently took command of a new high security prison in Iraq. In April, a Navy admiral will take command of the Joint Task Force Horn of Africa in Djibouti.

This is in addition to counter piracy operations off east Africa and a return visit to Southeast Asia and the South Pacific from Navy medical personnel aboard U.S.N.S. *Mercy*. Soon, we will have a riverine capability that will extend the outreach of our newly established Navy Expeditionary Combat Command and Expeditionary Security Force into the world's shallow waterways. Whether extending a helping hand or fixing, finding, and finishing our enemies, we are redefining the limits and meaning of Sea Power in the 21st century.

Over the past 2 months, I have visited our sailors at Guantanamo and in the CENTCOM AOR, spending time in Iraq, Kuwait, Bahrain, Djibouti, and at sea in the North Arabian Gulf. I have also recently been to Japan, Korea, Guam, and Hawaii. In every respect, these were terrific trips—eye-opening and encouraging. Our people are doing amazing things. Their morale is high, their sense of accomplishment firm. I didn't speak with a single sailor who didn't know how, or to what degree, his or her job contributed to the overall effort in this war. In fact, you would be hard pressed to find one who didn't believe what he or she was doing was the most important thing that could be done.

It was against this operational backdrop that we tackled the QDR, the most comprehensive review of its type since the first was produced more than a decade ago. For the first time, the QDR was conducted in a time of war. It represents an important step in a continuum of transformation that began more than 5 years ago. The Navy was an integral participant in the QDR process and I am confident in the course it sets for DOD and the Navy.

QDR 2006 has helped shape a naval force with increased capability and capacity. Specifically it:

- Reaffirms the need for a forward deployed, rotational, and surge capable force to provide persistent awareness and decisive joint combat power when and where needed;
- Supports a modern, fast, and lethal fleet of ships able to fight in all waters around the globe;
- Expands capability to conduct conventional and irregular warfare, especially in littoral waters;
- Expects the Navy and Marine Corps team to project its combined air, land, and sea power from innovative "sea bases" of ships and personnel, regardless of access to land bases. This will better enable us to engage in missions ranging from traditional combat and special operations to humanitarian assistance and disaster relief.
- Increases our ability to enhance the capabilities and capacity of partner nations.
- Improves DOD's contribution to the active, layered defense of our homeland, working closely with the United States Coast Guard and other agencies.
- Provides 60 percent of our submarines and six operational aircraft carriers to the Pacific.

In summary, the QDR and my own recent experiences, further support my three priorities and have helped shape the following eight tenets that guide my vision for the 21st century Navy:

1. America is and will remain a maritime nation.
2. We live in a challenging new era.
3. The Navy will remain rotational, forward deployed, and surge capable.
4. The level of maritime cooperation will increase.
5. New opportunities and security challenges require new skills.
6. Calculating the size of the force demands balance between capabilities, capacity, and fiscal reality.
7. The future fleet will be more capable, larger, and more lethal.
8. Sea Power 21 will remain the framework for our Navy's ongoing transformation.

Navy's VISION

Americans secure at home and abroad; sea and air lanes open and free for the peaceful, productive movement of international commerce; enduring national and international naval relationships that remain strong and true; steadily deepening cooperation among the maritime forces of emerging partner nations; and a combat-ready Navy -- forward-deployed, rotational and surge capable -- large enough, agile enough, and lethal enough to deter any threat and defeat any foe in support of the Joint Force.

I. SUSTAINING READINESS

A. Taking a Fix

Current Operations

We are a maritime nation, and we are at war. For the last 230 years, our Navy has defended our shores, kept our sea-lanes free, and promoted our national interests around the globe. For generations, our Navy has been the world's premier maritime force for freedom, time and again proving its flexibility and unique adaptability in support of liberty, national security, and our economic viability.

Your Navy today is in great shape. Readiness is high. Maintenance is being performed faster and more efficiently. Recruiting and retention remain strong. Our people are motivated, well trained, and battle-tested. They understand the mission, their role in it, and the importance of the effects they are achieving. In addition to the critical strategic deterrence our forward presence and global strike capabilities represent, there are more than 10,000 of our shipmates on the ground in Kuwait,

Afghanistan, Iraq, and the Horn of Africa. Many thousands more are deployed aboard ships at sea in direct support of the global war on terror and regional deterrence, strengthening capabilities and relationships with our enduring and emerging partners, and dissuading potential adversaries from attempting to threaten our freedom at home or abroad. They are performing magnificently.

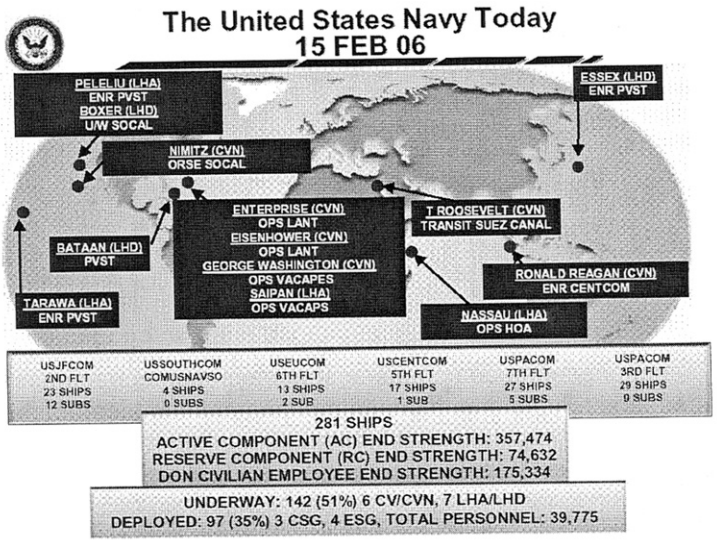


Figure 1

While numbers vary slightly with daily operations, on 15 February 2006 we had 97 ships on deployment (35 percent of the fleet) and 142 ships underway (51 percent of the fleet) serving our combatant commanders in every theater of operation; this includes 6 aircraft carriers, 7 big deck amphibious ships (LHA/LHD), and 29 submarines (Figure 1). On that day there were 2,614 Active and Reserve Seabees working tirelessly overseas to provide our joint force and many civilians with vital infrastructure such as roads, runways, schools, and hospitals. There were also 3,574 of our Active and Reserve medical corps serving in foreign and sometimes hostile environments. Additionally, 673 members of the Navy special warfare community were deployed overseas (of 3,633 deployable), as were 256 explosive ordnance disposal personnel (of 1,321 available to deploy), and 838 security personnel (of 5,929 deployable).

On 15 February 2006, there were 39,775 of our sailors deployed in support of the Nation's interests in the Persian Gulf, the Mediterranean, the Indian Ocean, and the Western Pacific, continuing operations like strategic deterrence; intelligence, surveillance, and reconnaissance missions; extended maritime interdiction, counter piracy, and counter-drug patrols. No less vital are the sailors and civilians—the total Navy—who serve the shore-based infrastructure that underpins our fleet worldwide.

The fiscal year 2007 budget provides funds necessary to support 36 underway days per quarter of the Active operational tempo (OPTEMPO) for deployed forces and 24 underway days per quarter for non-deployed forces (primarily used for training). Our fiscal year 2007 baseline budget estimates also include reductions to peacetime OPTEMPO levels. For aircraft carrier OPTEMPO, the fiscal year 2007 budget supports the "6+1" surge readiness level. As in fiscal year 2006, it is anticipated that operational requirements will continue to exceed peacetime levels in fiscal year 2007.

Oceans that once served as insulating barriers now provide open access to friends and enemies alike. The world's waterways are open highways that are becoming more congested with pirates and those trafficking in drugs, weapons of mass destruction, illegal immigrants, slaves, criminals, and terrorists. Ninety-five percent of U.S. overseas trade travels by water and that volume is expected to double by 2020.

Our Nation's prosperity depends upon unimpeded maritime commerce just as our security demands continued maritime dominance. Sea power in the 21st century must provide this assurance while serving as freedom's global lifeline.

Whether spearheading Operation Enduring Freedom (OEF) by providing sovereign deck space from which to launch the war in Afghanistan, continuing to support ground operations in Iraq from the sea, in the air, and on the land as part of Operation Iraqi Freedom (OIF), conducting deterrence operations in the Persian Gulf, responding to humanitarian crisis in Indonesia or Pakistan, patrolling for pirates and interacting with developing navies in Africa, serving with the NATO Response Force in Europe, supporting counter-terrorism operations in the Philippines, exercising with the navies of Russia and India, or remaining keenly vigilant while expanding cooperative interaction with others, our Navy must work in non-traditional ways with our global partners to preclude or forestall conflict. Equally important is that our Navy maintain its strategic deterrence and global strike capabilities that remain vital to our Nation's defense.

Emerging Missions

In March of this year, the Navy will take command of Joint Task Force Guantanamo, relieving the U.S. Army of that mission. In May of this year, the Navy will take command of the Joint Task Force, Horn of Africa, relieving hundreds of marines who have led that effort since October 2002. Almost 500 sailors have already begun performing security duties at Fort Suse Prison in Iraq.

As the Navy develops shallow water and riverine capabilities, we will seek increasing synergies with the Coast Guard, at home and abroad, exploring complementary design, acquisition, operations, and training initiatives. Working cooperatively with the Joint Services, interagency, allied, coalition, and non-governmental organizations, our Navy will expand our global maritime domain awareness and provide unique operational options for the President of the United States and our combatant commanders.

B. Plotting the Course: Where we're heading in sustaining readiness

The world has entered a "new era" in which our military is confronting a highly dynamic security environment far more complex, uncertain, and potentially threatening than any we have faced before. While this is a time of promise and developing partnerships, it is also an era of irregular and increasingly unrestricted warfare. Our adversaries, unable and unwilling in some cases to match our technological warfighting advantage, will increasingly resort to whatever means are available to wreak havoc and destruction—physically, economically, and psychologically—unhindered and unconstrained by moral conscience or social norms. To be effective in this environment, our combatant commanders need tools that are not only instruments of war, but implements for stability, security, and reconstruction.

To be successful as an interdependent part of the U.S. Joint Force, our Navy must be balanced. We must be balanced in our support of diplomatic, informational, military, and economic efforts intended to positively influence the world's diverse people and cultures. We must be balanced in our global maritime presence: providing non-threatening outreach to emerging and enduring partners while demonstrating overwhelming military superiority and unflinching determination to our adversaries.

We must at the same time represent hope and empowerment to our friends and convincing deterrence to our enemies. The United States Navy will need to be a highly visible, positive, engaged, and reassuring presence among the global maritime community of nations—sometimes a "cop on the beat," but always a respected and valued member of a global neighborhood watch. We must encourage nations to provide security within their territorial waters and to seal seams between neighbors, either by accepting assistance to improve their own capabilities, or through collective security and information sharing arrangements.

We must adopt a more comprehensive and coordinated approach to regional engagement, synchronizing our efforts with other Services, agencies, and allied nations through the Theater Security Cooperation program, and shaping stability operations. Wherever the opportunity exists, we must develop and sustain relationships that will help improve the capacity of our emerging partners' maritime forces. We will do this through the deployment of expeditionary teams capable of addressing specific developmental deficiencies. From personnel specialists and base infrastructure advisors, to trainers afloat and network consultants, these tailored teams will foster the ability of partner nations to contribute to collective security and shared maritime domain awareness, and to fend off threats to their economic and regional stability.

To enable our operations at home and away, our Navy, in partnership with the Coast Guard, must be supported by the right information at the right time—expand-

ing maritime domain awareness throughout the global commons and the world's shallow waterways. In pursuit of pervasive and persistent intelligence, surveillance, and reconnaissance, however, we must ensure the "unblinking eye" does not become an "unthinking" eye. In a world of growing global connectivity, the volume of information we are able to collect matters less than our ability to identify and understand what is important. Our sailors must learn to recognize what matters, and to comprehend the implications of the complex information they gather, so that we can act upon it instantly, with the right capabilities, when required to do so.

Naval Intelligence remains focused on addressing the multitude of intelligence requirements from the fleet, theater, and national decisionmakers, augmenting and transforming its intelligence capability to support the increasing range of Navy missions. The intelligence and cryptologic resources requested in the President's budget submission will allow the Navy to remain postured to support the war against terror, defend the homeland, shape the environment overseas, and counter the most capable potential adversaries.

In concert with interagency and foreign partners, we are developing Global Maritime Intelligence Integration (GMII) as part of Global Maritime Domain Awareness (MDA) in support of joint and Navy operations. It is no longer acceptable to focus intelligence only on the most obvious potential threats. We need, and are building, a capability that will lead us to a more complete understanding of the maritime environment—close to home and abroad. We are shaping our relatively small Naval Intelligence cadre to work more closely with Special Operations Forces, the interagency, the Coast Guard, joint forces, and our international partners. The establishment of a National Maritime Intelligence Center will further enhance our maritime domain awareness.

Maritime domain awareness contributes to the Navy's ability to provide flexible forward presence such as that provided by the Fleet Response Plan (FRP).

The FRP is the maintenance, training, and operational framework through which the Navy meets global combatant commander demand signals for traditional (e.g., global war on terror, major combat operations, humanitarian assistance/disaster relief, shaping and stability operations, counter piracy, etc.) and emerging mission sets (e.g., riverine warfare, NECC, medical outreach). FRP is mission-driven, capabilities-based, and provides the right readiness at the right time (within fiscal constraints). It enables responsive and dependable forward presence. With FRP we can deploy a more agile, flexible, and scalable naval force capable of surging quickly to deal with unexpected threats, humanitarian disasters, and contingency operations.

The FRP maximizes the Navy's ability to respond to emergent crises, changes the way ships are maintained, and keeps the Navy at a high state of readiness. FRP provides the capability of deploying numerous Carrier Strike Groups (CSGs), in whole or in part, immediately to wherever in the world the mission calls, with an additional CSG deploying within 90 days. This planning is currently structured to fulfill a 6+1 goal: six CSGs would be ready to deploy within 30 days of notification and another within 90 days.

The ability to surge dramatically shortens response times to any contingency and enables the United States to increase global presence-with-a-purpose as needed. Commander Fleet Forces Command, based in Norfolk, Virginia, is leading the implementation of the FRP across the Navy. Last fall, the FRP concept was vividly validated by the response to Hurricane Katrina, in which 23 ships were immediately made available for relief efforts. FRP will further help to facilitate Navy's establishment and defense of the joint sea base, allowing for a reduced footprint ashore in anti-access operations.

In the Pacific, response time is exacerbated by the tyranny of distance. Consistent with the global shift of trade and transport, the QDR has recognized the Navy's need to shift more strategic assets to this vital and rapidly developing theater. In the future, approximately 60 percent of our submarines and six operational aircraft carriers will be based in the Pacific. The FRP and basing options will provide a rheostat to meet foreseeable forward presence requirements.

As FRP bolsters fleet effectiveness and efficiency, so too does the aviation maintenance program called AIRSpeed.

AIRSpeed is the naval aviation business model that has increased the combat effectiveness of naval aviation through more efficient business practices. The AIRSpeed program balances and aligns maintenance and supply activities to end-user demands by ensuring the right material is in the right place, at the right time and at the right cost. We are committed to implementing this throughout the Navy. AIRSpeed has moved naval aviation away from "readiness at any cost" to "cost-wise readiness" practices, enabling Naval Aviation to answer the call in every corner of the globe.

Another initiative to improve global readiness addresses the expeditionary nature of emerging missions ashore and in coastal waterways. In January of this year, the Navy officially established the Navy Expeditionary Combat Command (NECC) to help meet some of the asymmetric challenges of the 21st century. The NECC will serve as a functional command in control of manning, training, equipping, and organizing forces that will execute force protection, shore-based logistical support, and construction missions across the joint operational spectrum.

The Navy plays a vital role in direct and indirect support of Joint stability and shaping operations worldwide. To this end, NECC will re-establish a riverine force to close gaps in very shallow-water littoral areas, ensuring access to the world's waterways. NECC will be the single advocate for the expeditionary security force, to include existing forces/missions (Seabees, explosive ordnance disposal, expeditionary security, naval coastal warfare, mobile diving and salvage, port handlers, etc.) and key new Navy capabilities (riverine, maritime civil affairs group, expeditionary training team, advanced visit, board, search, and seizure, etc.).

Our Navy must stand ready to support the current critical and emerging requirements of the combatant commanders. Whether this is accomplished through grey hulls, white ships, hard hats, blue shirts, or red crosses, we need to complement the FRP with sustainable sea basing, intelligently and selectively applied Sea Swap, and a forward deployed naval force.

C. Getting Underway: Programs and Practices in Support of Sustaining Readiness

Through FRP, the deployment of adaptable force packages, and the strategic realignment of key assets, the Navy will increase its ability to aggregate and disaggregate the force as required to provide persistent forward presence and overwhelming combat power. This supports the Nation's requirement for an immediate, credible response and sustainable naval forces necessary not only to fight the global war on terror, but also to support a meaningful naval presence in key areas of concern to U.S. strategy and policy.

Programs and practices of particular interest include:

Fleet Response Plan

As highlighted by the QDR, the FRP is an ongoing mission-driven means to provide the right readiness at the right time (within fiscal constraints). FRP enables responsive forward presence and drives our ability to answer the combatant commanders' demand signals. With FRP, Navy has deployed and developed a more agile, flexible, and scalable naval force capable of surging quickly to deal with unexpected threats, humanitarian disasters, and contingency operations.

Sea Swap

Sea Swap is an initiative designed to keep a single hull continuously deployed in a given theater, replacing the entire crew at 6-month intervals. The primary objective is to effectively and efficiently increase forward Naval presence without increasing operating cost. Navy commenced its second Sea Swap experiment in March 2005 with three east coast destroyers—U.S.S. *Gonzalez* (DDG 66), U.S.S. *Laboon* (DDG 58), and U.S.S. *Stout* (DDG 55). The first of the three overseas swapping of the crews occurred in September 2005. While the results of these experiments are still being evaluated, it is clear that when selectively applied, Sea Swap will offer greater flexibility in the deployment of a variety of platforms.

Forward Deployed Naval Forces (Japan)

The government of Japan has agreed to have U.S.S. *George Washington* (CVN 73) replace the U.S.S. *Kitty Hawk* (CV 63) as our forward deployed aircraft carrier at the Yokosuka naval base. The move represents a strong commitment to the security of the Asian Pacific region and our alliance. The *George Washington* will become the first nuclear aircraft carrier to join the Navy's permanently forward deployed naval forces (FDNF), replacing the conventionally powered the *Kitty Hawk* in 2008.

Facilities Recapitalization

Facilities recapitalization is comprised of modernization and restoration. Modernization counters obsolescence by updating and renewing a facility to new standards or functions without changing the fundamental facility size. Restoration includes repairs necessary to restore degraded facilities to working condition beyond design service life (C3/C4 corrections) or to fix accidental damage from natural disaster, fire, accident, etc. Our goal is to modernize facilities at a rate of 67 years (Recap Rate). The restoration goal is to eliminate all C3/C4 deficiencies by 2013.

Facilities Sustainment

Facilities Sustainment includes those maintenance and repair activities necessary to keep facilities in working order through their design service life. It includes regularly scheduled maintenance and major repairs or replacement of facility components that are expected to occur periodically throughout the life cycle of facilities. The Fiscal Year 2007 Sustainment Rate is 91 percent of the Facility Sustainment Model (FSM).

Utilities Privatization (UP)

Navy had originally planned to complete all competitive UP evaluations by September 2005. However, delays for 159 utilities systems have extended the completion schedule. To date, Navy has completed source selection decisions for 486 of our 645 systems.

Environment and Marine Mammal Protection Act

Effective antisubmarine warfare (ASW) is critical to ensuring the Navy's ability to defend national interests around the world. The Navy's ASW forces must be highly trained and capable in littoral-water operations in order to provide assured access for the joint force to strategic areas worldwide.

The Navy takes seriously our responsibility to act as good stewards of our natural resources and incorporates protective measures into training to minimize effects on the environment. The Navy is committed to environmental compliance, and we are committed to working with those interested in protecting valuable environmental resources.

The Navy's use of sonar, and the ability to test and train with it, is critical to operational readiness and our national defense. Effective use of active sonar is a perishable skill that demands realistic training. The Navy recognizes that such active sonar testing and training must be accomplished in an environmentally sound manner that is science-based and protective of marine life.

The Navy has recently published a Draft Environmental Impact Statement (DEIS) for an undersea warfare training range (USWTR) to be located off of the east coast of the United States. This DEIS marks the first time the Navy will apply for a permit under the Marine Mammal Protection Act for a permanent training range vice a one-time training authorization. The Navy's Fleet Forces Command and regional staffs are cooperating with Federal and State agencies throughout the process to keep them informed and to coordinate for the appropriate permits.

Intelligence Surveillance and Reconnaissance (ISR)

Navy Human Intelligence (HUMINT) initiatives remain consistent with those of the Under Secretary of Defense for Intelligennce (USD(I)) and, in cooperation with Defense HUMINT, we are creating Navy manned, maritime collection elements worldwide. These elements will provide maritime focused collection capability, postured to capitalize on regional opportunities, and prosecute the global war on terror and other non-traditional missions.

Furthermore, the Navy has established maritime interception operations (MIO) intelligence exploitation teams to increase on-scene intelligence collection and exploitation during MIO boardings in support of OEF and OIF. This unique effort will significantly reduce time lags between MIO boardings and analysis of intelligence collected.

Additionally, Navy is creating a cadre of trained and certified Navy interrogators to sustain operations at the joint interrogation facility at Guantanamo Naval Base, Cuba and to support future joint interrogation requirements.

Advanced Deployable System (ADS) is a rapid, unobtrusively deployed undersea surveillance system and capability focused against enemy diesel-electric submarines, nuclear submarines, high-interest merchant shipping, and the detection of sea-mine laying activities in the littorals.

Cobra Judy Replacement (CJR) is a deployed shipboard radar system designed to collect high fidelity radar data in support of treaty monitoring obligations and U.S. missile defense system testing. CJR is the functional and operational replacement for the current Cobra Judy system and the USNS Observation Island hull, which has reached the end of its service life.

Submarine Support Equipment Program (SSEP) develops electronic warfare support (EWS) systems improvements to enhance operational effectiveness in the increasingly dense and sophisticated electromagnetic/electro-optic littoral environment. SSEP provides agile threat warning capability to respond to emerging threats.

Distributed Common Ground/Surface Systems (DCGS) is a joint family of interconnected C^4I systems for posting, processing, exploiting, and updating ISR informa-

tion. The Common Data Link (CDL) program ensures interoperability between the airborne ISR platforms and the family of ground systems.

II. BUILDING THE FUTURE FORCE

A. Taking a Fix

The QDR included a rigorous evaluation of requirements and budgetary constraints that will shape how we confront the very uncertain and challenging security environment of this new century and the "long war" in which we are currently engaged. The fleet we are building today, and the leaders we are training, will be the Navy that confronts tomorrow's challenges. The environment in which that force operates will be very different from that in which we have come of age.

Due to the fiscal and temporal realities associated with the design and development of modern, sophisticated weapons systems, the Navy is continuing to transform. As recognized in the QDR, the size and capabilities of our force are driven by the challenges we will face. The capacity of the force is determined by its global posture in peacetime and the requirement to respond from this posture, as well as to surge, in crisis. In the case of our Navy, it is based upon the need for a ubiquitous but carefully tailored maritime presence that can provide our President and our allies with strategic options in support of dynamic security requirements.

The Navy recently submitted to Congress our 30-Year Shipbuilding Plan designed to replenish the fleet, while stabilizing workload and funding requirements. A stable plan will allow the shipbuilding industry to maintain critical skills and to make sound corporate decisions to best meet the Navy's projected shipbuilding requirements.

A stable shipbuilding industry is essential to sustain optimum employment levels and retain critical skills to meet our requirements for an affordable and capable force structure. We must align the industrial base for long-term force development through advanced procurement and incentivized cost savings. We must have a robust enough industrial base to withstand natural disaster or catastrophic attack. We must build ships more efficiently, cost effectively, and quickly. To do this, we are committed to help provide stability in the shipbuilding plan and rigorously control requirements. Costs and production schedules must be kept within contractual limits. Industry must be viewed as a trusted partner while we provide a stable baseline upon which to plan.

The 2007 Annual Long Range Plan for Construction of Naval Vessels is an investment plan that is both executable and affordable based on balancing several factors: naval force operational capability, risk, and the ability of the shipbuilding industrial base to execute the plan. The Navy continues to analyze operational requirements, ship designs, costs, acquisition plans, tools, and industrial base capacity to further improve its shipbuilding plan. Full funding and support for execution of this plan is crucial to transforming the Navy to a force tuned to the 21st century and built upon the foundation of Sea Power 21 and FORCEnet.

Our Sea Strike capability will continue to revolve around carrier and expeditionary strike groups, with sufficient lift, sustainability, and tactical air (TACAIR) assets to meet irregular and conventional joint warfighting requirements.

Seabasing provides assured access to the joint force by keeping the logistics tail safely at sea while putting the teeth of the combat forces ashore. The iron mountain of equipment we staged on land in earlier operations, now will come from international waters at sea, minimizing our footprint ashore and the associated permissions required from host nations. Our seabasing will be facilitated by large deck, expeditionary warfare ships and connectors, by heavy lift and transport aircraft, by maritime prepositioning forces, and by the combat logistics force.

Our Sea Shield capabilities will be advantaged by advanced anti-submarine warfare, internetted under sea warfare, and theater ballistic missile defense (TBMD) technologies, and our submarine fleet will need to maintain its technological edge over all adversaries in warfighting, ISR, detectability, and survivability.

As a primary catalyst for naval transformation, FORCEnet has the potential to fundamentally transform operations themselves, generating greater effectiveness, efficiency, and adaptability. Further, through the transformation of systems related to training, administration, recruitment and acquisition, FORCEnet is expected to influence the entire naval enterprise.

As highlighted by the QDR, achieving the full potential of net-centric warfare requires viewing information as an enterprise asset to be shared and as a weapon system to be protected. The underlying power of FORCEnet derives from leveraging the network effect, which causes the value of a product or service in a network to increase exponentially as the number of those using it increases. FORCEnet will ex-

tend visibility of information and will support a more horizontal command, control, and communications structure.

To better fight the global war on terror and prevent piracy and the trafficking of weapons of mass destruction, humans, and narcotics we will need faster, multi-mission ships, and the right mix of helicopters, small boats, and combat capabilities. To expand the number of maritime nations able to contribute to regional stability and join us in the fight against violent extremism, we will need shallow draft ships and more helicopters to better support a variety of training, outreach, and civil affairs operations.

B. Plotting the Course: Where we're heading in building the Future Force

In building the Navy of the future, access is as important as presence. Whether delivering training, humanitarian assistance, or lethal combat power our Navy cannot be restricted in its access to the world's navigable waterways. Conducting disbursed and networked operations, with the proper force mix, people, and tools, will enable us to simultaneously fight an irregular war, defend the homeland, and participate in pro-active, cooperative engagement on a day-to-day basis while retaining the capability to rapidly aggregate dominant combat power to deter or conduct major combat operations should they arise.

Two challenges, one Navy.

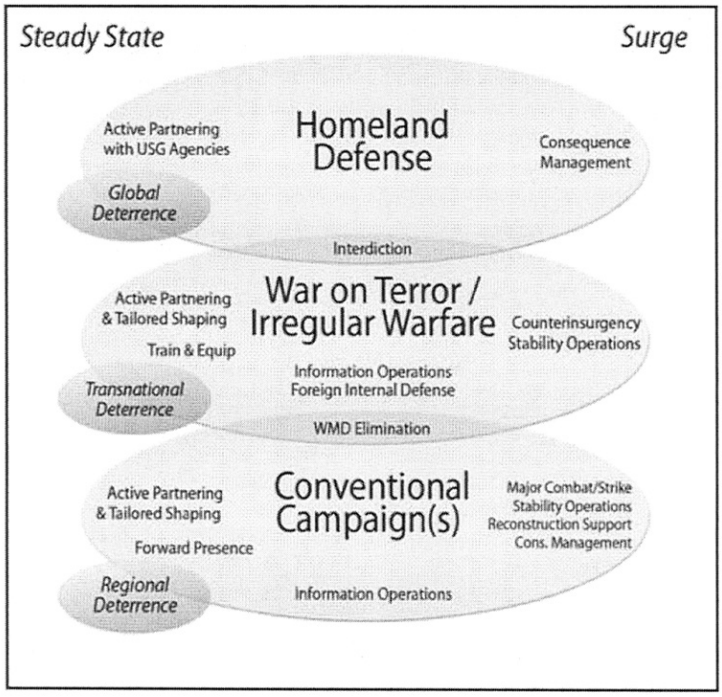


Figure 2

As part of the QDR process, the Navy used a capability-based approach (shown above in Figure 2) to calculate the size and composition of the future force required to meet expected joint force demands in peace and in the most stressing construct of the Defense Planning Guidance. Further, we evaluated detailed assessments of risk associated with affordability and instabilities in the industrial base. The analysis concluded that a fleet of about 313 ships is the force necessary to meet all of the demands, and to pace the most advanced technological challengers well into the future, with an acceptable level of risk. The Navy expects to achieve this force structure by fiscal year 2012.

Through transformation, recapitalization, and modernization, we seek a balanced force that delivers speed, agility, persistence, and dominance—characterized by disbursed and networked operations, comprehensive maritime domain awareness, cooperative engagement with allies and partners, and lethal combat capabilities.

Our naval aviation capabilities are a vital part of this balanced force. Here, too, we must invest in the technology and platforms that will carry us into a future joint environment of low observability, electronic attack, unmanned aerial vehicles, broad ocean surveillance and reconnaissance, complex command and control, and precision strike. We must outpace and overmatch the most capable technological competitors and overcome the most difficult and time-critical targeting challenges.

Aircraft carrier-based strike capability is a concrete example of the Navy's ongoing transformation. During Operation Desert Storm it took, on average, more than one "sortie" or flight of strike aircraft to engage a single target. This trend was reversed during Operation Iraqi Freedom as technology and operations improved, allowing multiple targets to be engaged per single flight. For example, it took two divisions (eight aircraft) to attack and destroy a single bridge during Operation Desert Storm, but two divisions of F/A–18C Hornets carrying GPS guided bombs attacked more than eight aim points with precision during Operation Iraqi Freedom.

In 2020, our carrier air wings with F/A–18E/F Super Hornets and F–35C Joint Strike Fighters will attack targets at nearly twice the range currently possible. They will do this in the highest threat environments without the extensive tanker support required today, and they will destroy more targets with 24/7 persistence.

As underscored by the response to the tsunami and hurricanes, we must also have a robust rotary wing capacity. This will be achieved primarily through recapitalization and modernization programs such as the CH–53X and the MH–60R/S. The flexibility and versatility of rotary winged aircraft have proven increasingly more valuable in support of the global war on terror, anti-submarine warfare, humanitarian and disaster relief operations, theater security cooperation programs, and logistics support. We must consider this in future acquisition planning.

The Navy's challenge is to build an affordable fleet for the future with the capability and capacity to meet joint demands for naval forces that range from homeland security and humanitarian assistance to major combat operations.

C. Getting Underway: Programs in Support of Building the Future Force

A balanced force of about 313 ships and about 3,800 aircraft meets the criteria we have established for the future. Within this force, eleven aircraft carriers and their associated air wings are sufficient to ensure our ability to provide coverage in any foreseeable contingency and do so with meaningful, persistent combat power. Although there is risk here, we believe the risk is both moderate and manageable.

There is risk in other areas as well. Despite the fact the total SSN numbers drop below 48 between 2020 and 2034, our fast attack submarines will provide the ISR capability we need to support indications and warning of any impending threat throughout their areas of operations and will be sufficient to sustain minimum required deployed presence needed for major combat operations.

Surface combatant capability is robust, but does not provide extended TBMD capacity—that just isn't affordable within the top line we have today. Navy is, however, expanding our currently limited short- and medium-range ballistic missile defense capabilities through the fielding of the Aegis BMD and SM–3 missiles. A future sea-based terminal (SBT) BMD capability will be addressed initially through upgrades to existing missile inventories and eventually through Navy open architecture initiatives in Aegis ships and CG(X).

Our expeditionary capability provides the joint forcible entry capacity necessary to support the sea base as a lodgment point for joint operations but represents an acceptable decrease in marine expeditionary brigade lift capacity. A myriad of tactical, surveillance and reconnaissance, heavy lift, and support aircraft, as well as a variety of support ships, provide the Navy with sufficient capacity in each mission area.

To win the "long war" against terror we need a Navy that can be many places simultaneously. Engagement with allies and friends is the only effective way to deter this kind of aggression. We must operate with, and show commitment to, our friends around the world in order to ensure their assistance in active pursuit of terrorist organizations. In developing our capabilities and ship-count, we matched the demand signal to ship types and ensured we were not "over-building" our Navy based on this demand signal. Additional global reach is provided, in part, by our flexible Littoral Combat Ship (LCS) platform which leverages modular capability against cost. The planned build of 55 Freedom class LCS, augmented by the Navy Expeditionary Combat Command's riverine capabilities, will better serve our combatant commanders and complement the capability of our partners worldwide.

Programs of particular interest include:

CVN 77, CVN 21

Navy plans to launch the aircraft carrier, U.S.S. *George H.W. Bush* (CVN 77) in October 2006, and we expect it to enter the fleet in late 2008. Meanwhile, we continue to design the future aircraft carrier, CVN 21, which will serve as the replacement for U.S.S. *Enterprise* and our *Nimitz* class aircraft carriers. CVN 21 balances significantly improved warfighting capability, quality of life improvements for our sailors, and reduced acquisition and life cycle costs. Highlights of these enhancements include: 25 percent increase in sortie generation rate, nearly three-fold increase in electrical generating capacity, and increased operational availability. At the same time, CVN 21 will also achieve over $300 million reduction in procurement costs, $5 billion reduction in life cycle costs, and up to 1,000 billet reductions. These manpower reductions are expected in several key areas:

- Damage Control, Bridge/Navigation.
- Warfare System
- Air Wing
- Staffs
- Supply Chain Management
- Weapons Handling
- Pit Stop
- Automation

CVN 21 and the carrier strike group will continue to provide forward presence, rapid response, endurance on station, and multi-mission capability to serve our Nation's needs for generations to come.

DD(X)

DD(X), a multi-mission surface combatant tailored for land attack and littoral dominance, will provide independent forward presence and deterrence, and operate as an integral part of joint and combined expeditionary forces. The DD(X) will capitalize on reduced signatures and enhanced survivability to maintain persistent presence in the littoral. DD(X) program provides the baseline for spiral development to support future surface ships as part of Navy's "family of ships" strategy.

With its Advanced Gun System (AGS) and associated Long Range Land Attack Projectile (LRLAP), DD(X) will provide volume and precision fires in support of joint forces ashore. A GPS-guided, 155mm round, LRLAP will provide all-weather fires capability out to 83 nautical miles. The DD(X) Dual Band Radar represents a significant increase in air defense capability in the cluttered littoral environment. Investment in open architecture and reduced manning will provide the Navy life cycle cost savings and technology that can be retrofit to legacy ships.

The open architecture environment in the DD(X) total ships computing environment will allow Navy to rapidly and cost-effectively upgrade ships through software changes while avoiding costly hardware changes. This in turn will allow us to keep ships viable against emerging threats and avoid the high cost of supporting numerous baselines, a problem that we are paying for in the AEGIS program today.

CG(X)

While DD(X) is a multi-mission destroyer tailored for land attack and littoral dominance, CG(X) will be focused on sea-based solutions to theater ballistic and cruise missile gaps. CG(X) will provide airspace dominance and protection to all joint forces operating with the sea base and will reach initial operational capability (IOC) in 2019. CG(X) will bring to sea significant warfighting capabilities.

LCS

Navy will commission the first LCS, U.S.S. *Freedom* (LCS 1) in fiscal year 2007. The *Freedom* class will be a fast, agile, and networked surface combatant with capabilities optimized to assure naval and joint force access to contested littoral regions.

LCS operates with focused-mission packages that deploy manned and unmanned vehicles to execute a variety of missions, including littoral anti-submarine warfare, anti-surface warfare and mine countermeasures. Innovations for the LCS include:

- Focused mission ship with interchangeable mission packages
- Reduced manning to reduce lifecycle cost
- Optimization for warfighting in the littorals
- Inherent capabilities to increase utility in littorals beyond focused mission packages
- Extensive use of Unmanned Vehicles and off-board sensors for mission packages

- Acquisition Strategy that provides two LCS variants designed to the same requirements
- Contracting for complete systems (less mission packages)
- Seaframe and mission package acquisition strategies that provide for spiral design

LPD 17

The lead ship of the class, U.S.S. *San Antonio* (LPD 17) was commissioned on January 14, and will soon be joined by four other ships currently under construction. LPD 17 functionally replaces four classes of amphibious ships for embarking, transporting, and landing elements of a Marine Landing Force in an assault by helicopters, landing craft, amphibious vehicles, and by a combination of these methods.

LHA(R)

LHA(R) flight 0 is a modified LHD 1 class variant designed to accommodate aircraft in the future U.S. Marine Corps (USMC) Aviation Combat Element (ACE), including JSF/MV–22, and to provide adequate service life for future growth. LHA(R) will replace four aging LHA class ships that reach their administrative extended service life between 2011–2019. This program maintains future power projection and the forward deployed combat capability of the Navy and Marine Corps. LHA(R) enables forward presence and power projection as an integral part of joint, interservice, and multinational maritime expeditionary forces.

Modernization

The Navy must ensure we achieve full service life from our fleet, something we have not done well in the past. Modernization of our existing force is a critical component of our ability to build the Navy of the future. Our platforms must remain tactically relevant and structurally sound for the entire duration of their expected service lives.

Naval aviation modernization efforts continue with the F/A–18 A/B/C/D Hornet and the EA–6B Prowler as a bridge to a more capable air wing that will include the F–35 Joint Strike Fighter, the EA–18G Growler, and the F/A–18 E/F Super Hornet. Modernization also continues with the E–2D Advanced Hawkeye, the CH–53X, and the SH–60R/S.

The surface force modernization program will help bridge the gap to DD(X) and CG(X) and mitigates the risk associated with transitioning from legacy combat systems to Open Architecture compliant commercial off-the-shelf (COTS) technologies. We expect modernization efforts on our AEGIS CGs and DDGs to enable these ships to realize an expected service life of 35 years. Historically, ships that were not modernized were decommissioned (on average) after 17–20 years of service due to obsolescence of sensors, command, control, communications, computers, and intelligence (C^4I) suites, and combat systems.

Cruiser (Mod)

AEGIS cruiser modification improves warfighting capability through enhanced self-defense (close-in weapon system (CIWS) block 1B, Evolved Sea Sparrow Missile (ESSM)), expanded information sharing and collaborative engagement (Cooperative Engagement Capability ((CEC)), improved littoral anti-submarine warfare capability and significant land attack improvements (Tactical Tomahawk (TACTOM)). A comprehensive mission life extension (MLE) package includes the All Electric Modification, SmartShip, hull mechanical, and electrical system upgrades and a series of alterations designed to restore displacement and stability margins, correct hull and deck house cracking, and improve quality of life and service onboard. This modernization will extend the service life of the AEGIS cruisers to approximately 35 years.

The SmartShip installation reduces enlisted crew manning on CGs by 13 (297 vice 310). At its inception, the CG Mod Program was not established with a requirement for manning reductions; however, program executive officer (PEO) Ships has commissioned a Total Ship Integration Team (TSIT) study in conjunction with DDG Mod efforts to determine additional areas for potential manning reductions in CG Mod. The TSIT works with the system program managers and Navy manpower analysis center (NAVMAC) to fully model CG Mod manning with respect to watchstanding, maintenance, and fatigue analysis.

Destroyer (Mod)

The DDG Modernization Program is likewise designed to reduce manning and total ownership costs while increasing warfighting capability. DDG modernization supports the transition to DD(X) and CG(X), and mitigates the risk associated with the transition from legacy combat systems to open architecture (OA) compliant, com-

mercial-off-the-shelf (COTS) technologies. The intent is to provide a coherent strategy to keep each ship relevant and affordable through their entire 35-year hull life.

Virginia Class Fast Attack Nuclear Submarine (SSN)

Navy needs to maintain an SSN force structure sufficient to meet current operational requirements, the global war on terror, and any potential future threat from near peer competitors. The first 10 *Virginia* Class (SSN 774) submarines are already under contract. Navy is pursuing a number of cost reduction initiatives intended to lower SSN 774 acquisition costs to $2.0 billion (in fiscal year 2005 dollars) at a stable build rate of two-per-year, currently planned for fiscal year 2012.

The Navy intends to pursue design modifications to the *Virginia* class that will lower acquisition cost, while sustaining or improving warfighting capability. The Navy and our submarine shipbuilders are conducting a detailed study of design options that will dovetail with ongoing production and contracting initiatives and sustain the critical skills necessary for nuclear submarine design. A detailed report meeting the requirements of the National Defense Authorization Act statute and reflecting the outcome of the study will be available later this spring.

F–35 Joint Strike Fighter (JSF)

The JSF is an affordable multi-mission strike fighter aircraft that incorporates matured and demonstrated 21st century technology to meet the warfighting needs of the Navy, Marine Corps, Air Force, and eight other countries. The JSF program pillars are range, lethality, survivability, supportability, and affordability. The U.S., U.K., Italy, Netherlands, Denmark, Turkey, Norway, Australia, and Canada comprise the JSF cooperative partnership. There are three JSF variants: conventional take off and landing (CTOL), carrier variant (CV), and short take off vertical landing (STOVL). Department of Navy procurement is expected to be 680 aircraft.

The JSF CV variant is projected to exceed its required 600 nautical mile combat radius, and the STOVL variant is projected to exceed its required 450 nautical mile combat radius.

F/A–18E/F Super Hornet

The Super Hornet is the Navy's next generation strike-fighter. The F/A–18E/F replaces the F–14, older model F/A–18, and S–3 carrier-based tankers. F/A–18E/F is five times more survivable than the F/A–18C. The Super Hornet provides a 40-percent increase in combat radius, a 50-percent increase in endurance, 25 percent greater weapons payload, and three times more ordinance bring-back than the F/A–18C. The F/A–18E/F will have the active electronically scanned array radar system (AESA), Integrated Defensive Electronic Countermeasures System (IDECM), Joint Helmet Mounted Cueing System (JHMCS), Advanced Targeting Forward-Looking Infrared Radar (ATFLIR), Shared Reconnaissance Pod (SHARP), Multi-Function Information Distribution System (MIDS), and Advanced Crew Station (ACS). 246 Super Hornets have been delivered of a total procurement of 460.

EA–18G Growler

The EA–18G is a two-seat carrier-based replacement aircraft for the EA–6B Prowler electronic attack aircraft. The Growler is scheduled for initial operational capability (IOC) in 2009. The Growler shares a common airframe with the F/A–18F Super Hornet. A total inventory of 90 aircraft is planned for service in 11 squadrons. EA–18G upgrades include the destruction of enemy air defenses with joint weapons, advanced radio frequency (RF) receiver and jamming modes, integrated peer-to-peer networking, integration with stand-in assets, and coordinated off-board electronic support (ES).

F/A–18A/B/C/D Hornet

The F/A–18 Hornet is naval aviation's primary strike-fighter. The Hornet is the workhorse of Navy/Marine Corps tactical aircraft and is also flown by the armed forces of seven allied and friendly countries. Its reliability and precision weapons-delivery capability highlight the Hornet's success. Improvements to the Hornet A/B/C/D variants provide state-of-the-art war fighting enhancements in precision strike, anti-air and C^4I capabilities. The more than 680 Navy and Marine Corps Hornets will continue to comprise half of the carrier strike force until 2013, and the A/B/C/D Hornet variants are scheduled to remain in the Naval Aviation inventory through 2022.

E–2D Advanced Hawkeye

The E–2D Advanced Hawkeye (AHE) program will modernize the current fleet of aircraft carrier based airborne early warning E–2C aircraft. AHE will have a new radar and other aircraft system components that will improve nearly every facet of

tactical air operations. The modernized weapons system will be designed to maintain open ocean capability while adding transformational littoral surveillance and theater air and missile defense capabilities against emerging air threats in the high clutter, electromagnetic interference and jamming environment. The AHE will be one of the four pillars contributing to naval integrated fire control-counter air. The AHE program plans to build 75 new aircraft. The program is on track to meet the first flight milestone in fiscal year 2007.

P–8A Multi-Mission Maritime Aircraft (MMA)

The P–8A is the Navy's next generation MMA, replacing the P–3C. The P–8A missions will include broad area maritime and littoral surveillance, anti-submarine warfare, anti-surface warfare and ISR. The P–8A fulfills the combatant commander's requirements for major combat operations, forward presence and homeland defense. It will replace the P–3C on a less than one-for-one basis, and trades 4,500 military billets for 900 contractor billets. IOC for the P–8A is fiscal year 2013.

MV–22B Osprey

The MV–22 Osprey is the Navy and Marine Corps' next-generation medium-lift assault support aircraft. It will replace the CH–46E and CH–53D. The Osprey will significantly improve the operational reach and capability of deployed forces: The MV–22 is twice as fast, has triple the payload, and has six times the range of the airframes it will replace. The Navy and Marine Corps MV–22 requirement is 408 Osprey aircraft.

MH–60R/S Multi-Mission Helicopter

The MH–60R and MH–60S are the Navy's multi-role helicopters that incorporate advanced sensors and weapons systems to perform a multitude of missions that were previously performed by six different types of aircraft. The MH–60R Multi-Mission Helicopter will replace the SH–60B and SH–60F Seahawk helicopters entirely, and perform the anti-ship role of the fixed-wing S–3 Viking, which is currently being phased out of service. The MH–60R will perform anti-submarine, undersea, and surface warfare missions.

The MH–60S is the Navy's primary combat support helicopter designed to support the carrier strike group and expeditionary strike group in combat logistics, vertical replenishment, anti-surface warfare, airborne mine countermeasures, combat search and rescue, and naval special warfare mission areas.

CH–53X

The CH–53X is the follow on to the Marine Corps CH–53E heavy lift helicopter and will have double the lift capacity of the CH–53E. The CH–53X will incorporate more powerful engines, an expanded gross weight airframe, composite rotor blades, updated cockpit, and cargo handling systems and will be more survivable. The CH–53X will serve the Navy's sea base and is an integral part of the Marine Corps 2015 ship-to-objective maneuver doctrine. IOC is planned for 2015.

Broad Area Maritime Surveillance (BAMS) Unmanned Aircraft System (UAS)

BAMS UAS is an unmanned aircraft capable of carrying various mission payloads. BAMS UAS will incorporate radar, electro-optical, infrared, and electronic surveillance measures capabilities that will allow BAMS UAS to detect, classify, and identify targets using either active or passive methods. The BAMS UAS is also a key node in the Navy's FORCEnet C^4I architecture. It will be capable of providing persistent worldwide maritime ISR capability, supporting maritime domain awareness, and providing information that enables commanders to achieve decision superiority.

Global Hawk Maritime Demonstration (GHMD)

GHMD provides a high altitude, high endurance UAV capability 7 years before the IOC of the BAMS UAS. Two Global Hawk UAVs are being procured on an Air Force production and modified with a radar and limited capability electronic support measures (ESM) suite that support ship detection. GHMD will be used to support testing of persistent maritime ISR technologies, and to help develop concepts of operation (CONOPs) and tactics, training, and procedures (TTP) for maritime UAVs.

Joint Unmanned Combat Air System (JUCAS)

JUCAS is a Boeing industries project that will provide the Navy with a carrier-based unmanned combat air vehicle (UCAV) capable of performing strike, suppression of enemy air defense (SEAD), and ISR missions in high threat environments against future air defense systems. JUCAS capabilities will help minimize the risk of loss or capture of friendly forces. JUCAS is anticipated to fulfill ISR missions by 2018, with follow-on strike and SEAD mission capabilities achieved by 2024. The Navy's primary initial objective is to complete aircraft carrier flight demonstration

of a tailless UAV. Three land-based vehicles are scheduled for first flight in fiscal year 2007 and will demonstrate in-flight refueling capabilities and limited weapons and sensor integration. Two carrier suitable vehicles are scheduled for their first flights in fiscal year 2008. An aircraft carrier demonstration is scheduled for fiscal year 2011.

MQ–8B Fire Scout Vertical Takeoff UAV (VTUAV)

The Navy VTUAV is designed to operate from all aircraft- capable ships. VTUAV will carry modular mission payloads and use the tactical control system (TCS) and tactical common data link (TCDL). VTUAV will provide day/night real time ISR and targeting, as well as C^4I and battlefield management capabilities to support the LCS core mission areas of antisubmarine warfare, mine warfare, and anti-surface warfare. Fire Scout is currently in engineering and manufacturing development (EMD).

Tactical Control System (TCS)

The TCS provides a common interface for future tactical and medium altitude unmanned aerial sensors (UAS). TCS will enable different UAS to use a common system for mission planning, command and control, and C^4I. TCS software will provide a full range of scaleable UAS capabilities, from passive receipt of air vehicle and payload data to full air vehicle and payload command and control from ground control stations both ashore and afloat. TCS gives the LCS a UAV capability when fielded in conjunction with the Fire Scout VTUAV system. TCS will also be evaluated for use in future programs such as BAMS UAS, Multi-mission Maritime Aircraft (MMA), and DD(X).

Pioneer Tactical Unmanned Aerial Sensor (UAS)

The Pioneer UAS system is a transportable ISR platform capable of providing tactical commanders with day and night, battlefield, and maritime ISR in support of Marine expeditionary warfare and maritime control operations. Currently eight air vehicles are deployed with Marine forces and have flown over 12,000 flight hours in support of Operation Iraqi Freedom. The Navy operates two air vehicles as test platforms for equipment and system upgrades, which will allow Pioneer sustainment until a follow-on system is fielded. The current USMC UAS plan calls for sustainment of the Pioneer UAS through at least fiscal year 2015, pending the fielding of a replacement system.

III. DEVELOPING 21ST CENTURY LEADERS

A. Taking a Fix

The men and women of the United States Navy—Active, Reserve, and civilian—are the lifeblood and heart of the Service. Today they are the best, most talented, and capable team of professionals the Nation has ever assembled. The Navy currently has an Active Force of 357,474, of which 39,775 are now deployed. Our Reserve community consists of 74,632 sailors, 4,281 of whom are now activated.

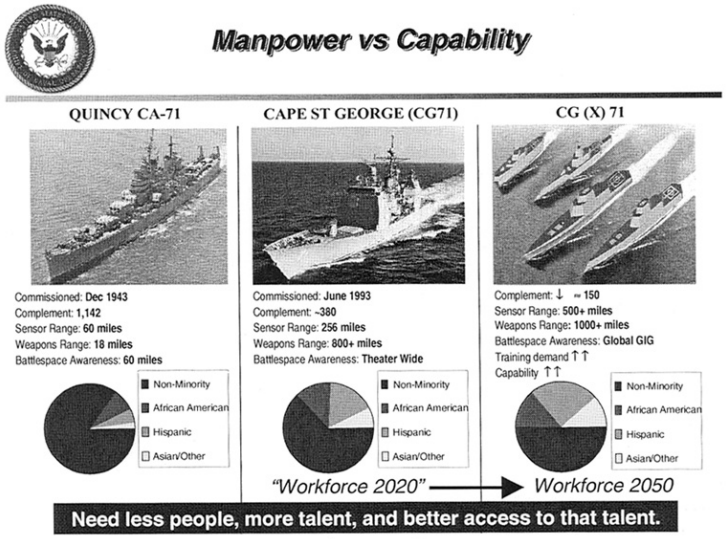


Figure 3

The Navy's Strategy for Our People provides overarching guidance for achieving a capabilities-based and competency-focused total Navy workforce (Active, Reserve, civilian) in sync with joint and Service-specific mission requirements. Capitalizing on the success of manpower and personnel reforms over the last several years, we will shape a more agile and operationally capable Navy. While we address our skill imbalances we will also focus and improve our efforts in the talent marketplace to achieve a more diverse workforce (see Figure 3 above). We will link and leverage Sea Warrior and National Security Personnel System (NSPS) processes to achieve an agile and robust total Navy personnel architecture that rewards performance and can quickly respond to emerging competency demand signals.

In fiscal year 2005 the Navy met 100 percent of its Active-enlisted accession goal, with 95 percent high school graduates and 70 percent in test score category I–IIIA. For Reserve enlisted recruiting, Navy met 85 percent of fiscal year 2005 accession goals, with shortfalls in ratings with insufficient numbers of Navy veterans (e.g. Seabees, Master at Arms). In officer programs, 84 percent of Active component goals and 90 percent of Reserve goals were attained in fiscal year 2005. Shortfalls were mostly in medical programs.

Retaining the best and brightest sailors has always been a Navy core objective and essential for our success. Navy retains the right people by offering rewarding opportunities for professional growth, development, and leadership directly tied to mission readiness. Navy has remained successful in filling enlisted operational billets around the world to sustain fleet readiness objectives.

Key to these successes has been Navy's aggressive program to enhance quality of service for our total Navy (the combination of quality of work and quality of life). We continue to monitor the impacts of an improving economy and the war on terror to ensure programs support sailors and their families and contribute to making the Navy their career of choice. We remain focused on providing adequate pay, health care, housing, proper work environments, and career-long learning for our sailors.

But retention and the drive to attract and hold onto the best people, underscores the need to seek efficiencies in the force—efficiencies that ultimately will translate into reduced end strength. By the end of fiscal year 2006, your Navy will have reduced its Active end strength by almost 30,000 (7.7 percent of the Active component) since 2003. Further reductions will result from efficiencies yet to be realized through technological advances that eliminate outdated, labor-intensive jobs. As potential reductions in manpower are identified, the Navy will execute these reductions in a planned, controlled, and responsible manner that is consistent with the security interests of the country.

Prior to considering sailors for separation (and selective application of voluntary separation incentives), we employ a progressive approach to evaluate options for re-

taining sailors by shifting personnel from overmanned to undermanned skills through retraining and conversion. This is accomplished through a variety of means, including the perform to serve, lateral conversion bonus, transfer to fill valid Reserve component requirements, or through interservice transfer (e.g. Army's Blue-to-Green initiative).

After exhausting all logical retention options, consideration is given to releasing sailors whose service/skills are no longer required. Under no circumstances should we retain personnel in over-manned skills if it is not feasible and cost-effective to move them into undermanned skills. To do so would be poor stewardship of taxpayer dollars and would force Navy to endure gaps in undermanned skills to remain within authorized aggregate strength levels, thereby adversely impacting personnel readiness.

In parallel with the strategy for our people, we are pursuing an Active-Reserve Integration (ARI) program that will support a more operational and flexible unit structure. The Navy Reserve is evolving into a flexible, adaptive, and responsive operational force needed to fight the asymmetric, nontraditional threats of our future. Active-Reserve integration has already enabled a Reserve Force that is ready, relevant, and fully integrated into our Nation's defense both overseas and in the homeland. We recognize and value the diverse skills our reservists possess, accrued in both military service and civilian life.

Our vision for the future is to capture the skills of our outstanding citizen sailors for life. In the "Sailor for Life" model, reservists would seamlessly transition between Reserve and Active components, answering the Nation's call to arms when needed. Congress' continued support of financial incentives and bonuses will ensure the retention of these highly-skilled sailors.

Navy Reserve sailors have performed a pivotal role in the global war on terror. Mobilized sailors provide a portion of this support—4,281 sailors are currently serving on involuntary mobilizations in such areas as Customs Inspection, cargo handlers, Navy coastal warfare, naval construction battalions, medical and corpsmen, helicopter Special Operations Forces support and numerous others. But mobilization alone does not reflect the total contribution of the Navy's Reserve. On any given day, an additional 15,000 reservists are providing operational support to the fleet around the globe. During the past year, Reserve sailors have provided over 15,000 man-years of support to the fleet. This support is the equivalent of 18 naval construction battalions or 2 carrier battle groups.

Finally, we must recognize another aspect of readiness that is equally as important as preparing and maintaining our ships and training and equipping our sailors. "Family readiness" describes the support needed to ensure our sailors and their families are as well prepared for operations as our ships and airframes. The Navy is working hard to implement the right support mechanisms, ombudsman training, family advocacy programs, spouse education and employment programs, mentorship, and family counseling. We can do little without the support of our families, and it is up to us to ensure they are well taken care of and ready and eager to support.

B. Plotting the Course: Where we're heading in Developing 21st Century Leaders

To better serve the men and women who are the United States Navy, and in turn, enable them to be as effective as possible in a challenging new global era, we must: improve diversity; encourage and reward continuing education and training that stresses critical thinking; institutionalize executive development; assign our best and brightest to critical joint, interagency, and foreign exchange tours; increase access to foreign language and cultural awareness training; respond rapidly to significant changes in leading indicators for recruiting and retention; and, better recognize the important role families play in our readiness and quality of life. It is this commitment to our own that will best demonstrate our resolve and determination in a new era.

New opportunities and security challenges require new skill sets. Brainpower is as important as firepower. Our sailors must be empowered to operate and fight in a vast array of environments that range from failing states and ungoverned spaces to the most technologically advanced nations, virtual worlds and cyberspace. They will form the foundation of an expeditionary force when and where required. They will be expected to understand and foster cooperation in cultures far different from our own. They will be ambassadors, educators, health care providers, mentors, and friends to a diverse cross-section of the global community. They must be equipped with the tools and skills to meet these challenges, to excel as professionals, and to develop as individuals.

We are increasingly leveraging technology to improve our warfighting advantage and to broaden the skill sets required to meet the multi-cultural, asymmetric challenges of this century. Advances in ships and system design allow us to shed some

obsolete, labor-intensive functions while improving productivity and warfighting readiness. Economies are gained by eliminating redundant and non-essential skill sets. The optimal end strength for our Active and Reserve components must reflect the economies derived from transforming the force to meet the challenges we face in this new century.

The concept of total Navy encompasses those serving the Department of the Navy in uniform and in a civilian capacity, Active and Reserve component alike. NSPS is a new personnel system that will create civil service rules for the 750,000 civilian workers in the Department of Defense. It strengthens our ability to accomplish the mission in an ever-changing national security environment. NSPS accelerates Department of Defense efforts to create a Total Force (military personnel, civilian personnel, Reserve, Guard, and contractors), operating as one cohesive unit, with each performing the work most suitable to their skills. The Navy's Strategy for our People needs a manpower and personnel system that appropriately recognizes and rewards our civilian employees' performance and the contributions they make to the Department of Defense mission. NSPS gives us better tools to attract and retain good employees.

Throughout total Navy, diversity is a fundamental building block upon which the Strategy for our People stands. The Navy's diversity objectives are aimed at improving our access to the full range of the Nation's talent and improving our ability to harvest and represent the full strength of the Nation. The Strategy for Our People views total Navy as a team, whose people are treated with dignity and respect, are encouraged to lead, and feel empowered to reach their full potential. Total Navy diversity represents all the different characteristics and attributes of individual sailors and civilians, which enhance our mission readiness.

Training, education, mentoring, and leadership programs are aimed at increasing awareness of diversity and creating a culture that promotes growth and development opportunities for every member of the Navy. These programs are currently funded through training and education commands. Specific diversity-focused training for leadership is a newly-funded initiative that seeks to create awareness and communication skill competencies for all levels of leadership and embed diversity values into the force.

The Navy is a full partner and supporter of the Department's Training Transformation Program. We are better preparing units and staffs for joint operations through the Joint National Training Capability, and individuals for joint assignment through the Joint Knowledge Development and Distribution Capability.

The cornerstone of Navy's Strategy for Our People is the Sea Warrior program. Sea Warrior comprises the Navy's training, education, and career-management systems that provide for the growth and development of our people. It provides them with greater individual career management and enables them to take a more active role in furthering their careers through education and training opportunities. Sea Warrior will include an automated, web-enabled system and processes which will increase overall mission effectiveness by efficiently developing and delivering an optimally matched, trained, educated, and motivated workforce.

C. Getting Underway: Programs and Practices in Support of Developing 21st Century Leaders

The Navy's Strategy for our People provides the guidance and tools to assess, train, distribute, and develop our manpower to become a mission-focused force that truly meets the warfighting requirements of the Navy. At the same time, we must improve the work-life balance, and quality of service so our sailors and civilians will enjoy meaningful job content, realize their important contributions, and have expanded opportunity for professional and personal growth. We will deliver all the above, while tackling head-on the pernicious challenges of sexual harassment, sexual assault, and substance abuse, and offering an environment that values and rewards diversity.

Programs and practices of particular interest include:

Diversity

The Navy diversity strategy is aimed at creating and maintaining our Navy as a team, whose people are treated with dignity and respect, are encouraged to lead and feel empowered to reach their full potential. Specific initiatives are aligned under the four focus areas of recruiting, growth and development, organizational alignment, and communications. Navy has increased advertising and marketing funds specifically targeted at diversity recruiting for the past 5 years. We have also chartered outreach programs aimed at minority and female engineering and technical organizations.

Transforming training, education, mentoring, and leadership programs are aimed at increasing awareness of diversity and creating a culture that provides growth and development opportunities for every member of the U.S. Navy. The Navy is currently developing CONOPs for an aggressive program to increase the diversity of our Service.

Some examples of progress to date include:

- Recruiting—Coordination of national public awareness and recruiting events. Increased diversity event sponsorship. More visibility into ROTC application, recruiting, and board processes.
- Developing—Diversity awareness and communication training has been built into all levels of leadership development courses; Navy-wide Equal Opportunity Advisor (EOA)/Diversity symposium will become an annual event.
- Alignment/Oversight—Diversity Senior Advisory Group and Fleet Diversity Councils will coordinate best practices with various Navy enterprises.

Enlisted Retention (Selective Reenlistment Bonus)

Selective Reenlistment Bonus (SRB) continues to be our most effective retention and force-shaping tool, enabling us to retain the right number of high quality sailors with the right skills and experience. More importantly, it affords Navy the ability to compete in a domestic labor market that increasingly demands more skilled, technically proficient, and adaptable personnel.

The Navy is continuing to transform our workforce by recruiting fewer generalists and becoming a predominantly technical and more experienced force. To retain the critical skills we need, our SRB strategy has shifted from targeting general skill sets with less than 10 years of service, to focusing on the specialized skills of sailors across the career continuum (up through 14 years of service). Navy has applied increasing analytical rigor in predicting and monitoring reenlistment requirements. By monitoring actual reenlistment behavior down to the individual skill level, Navy personnel managers review clear and unambiguous data to ensure precious SRB dollars are applied only when and where needed, based on requirements and outcome.

We are grateful to Congress for increasing the SRB cap from $60,000 to $90,000 and will ensure the higher award cap is judiciously applied. A portion of this increased SRB may be used to reverse declining retention among our most skilled personnel in the Nuclear Propulsion specialties. Fiscal year 2005 culminated in achieving only half of our zone B nuclear rating reenlistment goal and left several nuclear specialties at less than 90 percent of required manning. Applying an increased SRB level to retain these highly trained, highly skilled, and highly sought after personnel makes sense, both financially and from a force readiness perspective. The Navy saves over $100,000 in training costs and 10 to 14 years of irreplaceable nuclear propulsion plant experience for each individual SRB enables us to reenlist. The additional flexibility provided by the SRB cap increase will allow Navy to incentivize experienced nuclear-trained personnel and to address other skill sets as retention trends emerge.

Having a flexible and adequately resourced SRB program will help us continue to sustain high readiness with a top quality workforce.

Officer Retention

Creating an environment conducive to professional growth that provides an attractive quality of service, including education, adequate pay, health care, and housing, will aid retention efforts. However, continued focus on increasing unrestricted line (URL) officer retention across all warfighting disciplines is required. Officer retention shows positive trends despite shortfalls in the ranks of lieutenant commander to captain in the surface and submarine unrestricted line communities.

National Security Personnel System (NSPS)

NSPS strengthens our ability to accomplish the mission in an ever-changing national security environment. NSPS accelerates the Department's efforts to create a Total Force (military personnel, civilian personnel, Reserve, Guard, and contractors), operating as one cohesive unit, with each performing the work most suitable to their skills.

Civilian Career Management

The Navy supports efforts to develop a career management system for civilian employees. Our approach includes documenting and validating competencies for use in career planning and development. The validated competencies will be made available to the workforce as career roadmaps through both 5 Vector Models (Navy) and the Civilian Workforce Development Application (CWDA) (USMC). Also in process

is the development of guidance directed toward supervisors and employees indicating how to use competency data to assist with the performance management process including career planning and development.

Health Care

A vital part of Navy and family readiness hinges on our commitment to provide top quality health care for our Active and retired personnel and their dependants. Navy Medicine transformation initiatives link authority and accountability to facilitate performance-based management that maximizes efficiencies while maintaining quality. Increases in the cost of providing health services in Navy medical treatment facilities (MTFs), for example, have been kept below the healthcare rate of inflation and that trend is expected to hold true in the out years. As a priority, the Navy is also carefully monitoring the support offered to servicemembers who were injured during OEF/OIF service, ensuring a seamless transition to the services available through the Veteran's Administration (VA).

The Department of Defense and Congress have established TRICARE as the "gold standard" health care benefit. Health care costs have increased dramatically in recent years and are expected to grow at rates that exceed standard indices of inflation [1]. Far from being immune to these costs, the DOD must include this reality in the budgetary calculus of providing for the Nation's security. DOD TRICARE costs have more than doubled in 5 years from $19 billion in fiscal year 2001 to $38 billion in fiscal year 2006, and analysts project these costs could reach $64 billion by 2015—more than 12 percent of DOD's anticipated budget (versus 8 percent today). On the other hand, TRICARE Premiums have not changed with inflation since the program began in 1995, so that total beneficiary cost shares have declined substantially—27 percent of total benefit cost in 1995 while 12 percent in 2005.

When TRICARE for Life was developed for the 2001 National Defense Authorization Act, we could not have anticipated the growing number of retirees and their dependents, not yet Medicare eligible, who would choose or be driven to switch from private/commercial health care plans to TRICARE in order to better cope with rising health care costs. Indeed, the Services are increasingly picking up the tab for businesses and local and State governments unwilling or unable to provide adequate health care benefits to their retired veteran employees.

The Navy will continue to meet our security commitments to the American people while fully supporting the health care needs of our Active and Reserve members and their families and keeping the faith with those who stood the watch before us. This can be accomplished by working cooperatively with Congress to implement carefully crafted initiatives and administrative actions that will restore appropriate cost sharing relationships between beneficiaries and the DOD.

Family Advocacy

Navy Family Advocacy Program (FAP) has led the way among the Services and the DOD in domestic abuse policy and process by: providing victim advocacy at some Navy installations since the mid-1990s, and by (since 1997) responding to allegations of domestic abuse between unmarried intimate partners, providing a formal diversion process for low-risk cases, and providing limited discretionary reporting when a victim of domestic abuse seeks counseling voluntarily. Navy commands remain active partners in stopping family violence and responding to domestic abuse.

Sexual Assault

Navy now provides 24/7 response capability for sexual assaults on the installation and during deployment by activating watchbills for victim advocates and notifying the installation Sexual Assault Response Coordinators (SARC). Victims of restricted cases of sexual assault are offered advocacy, medical and counseling services without triggering an investigation through law enforcement or the command.

Active-Reserve Integration

Active Reserve Integration (ARI) aligns Reserve component (RC) and Active component (AC) personnel, training, equipment, and policy to provide a more effective and efficient total Navy capable of meeting dynamic national defense requirements.

The Navy is currently aligning RC and AC units to better meet OIF and OEF requirements and the Navy's vision for our future force structure: RC Helicopter-Combat Support (HCS) missions will be integrated into AC helicopter missions; RC and AC explosive ordnance disposal (EOD) units are being integrated and two RC Navy Coastal Warfare Units (NCW) are being converted to the AC. The Navy is also

[1] Total national health expenditures increased by 7.7 percent in 2003 (over 2002), four times the rate of inflation in 2003. Smith, C.C. Cowan, A Sensenig and A. Catlin, "Health Spending: Growth Slows in 2003," Health Affairs 24:1 (2005): 185–194.

studying the role of the RC in future Navy mission areas of riverine warfare and civil affairs. In support of OIF/OEF, AC and RC sailors are working together to fill billets in civil affairs, detainee operations, intelligence, and reconstruction team efforts.

The Navy Reserve has evolved from a strategic force of the Cold War to the flexible, adaptive, and responsive operational force required to fight the asymmetric, irregular wars of the future. Change of this magnitude is not easy and challenges the senior leadership of both the AC and the RC. Support of Congress is critical as we implement initiatives that will enable the effective and efficient use of both manpower and equipment, providing resources needed to recapitalize the Navy of the future. The total number of Navy reservists, both Selected Reserves (SELRES) and full-time support (FTS), will be 73,100 at the end of fiscal year 2006.

Sea Warrior

Sea Warrior comprises the training, education, and career-management systems that provide for the growth and development of our people and enhance their contribution to our joint warfighting ability. Sea Warrior leverages technology to provide sailors the choice and opportunity for professional development and personal growth through Navy Knowledge Online (NKO), the Job Career Management System (JCMS), and the maturing of the 5 Vector Model VM) (professional development, personal development, leadership, performance, certification, and qualification). Sea Warrior will also provide commanders with a better manpower fit, matching the sailor with exactly the right skills and training to the billet.

Task Force Navy Family

Task Force Navy Family (TFNF) was established to help our people who were affected by hurricanes Katrina, Rita, or Wilma. In all, the lives of more than 88,000 Navy personnel, retirees, and immediate family members were severely disrupted. TFNF leveraged existing agencies and local community support centers to ensure that each Navy family was contacted personally and, if desired, assigned an individual "family case manager." TFNF has resolved 15,300 unique issues (76 percent of those reported). Housing and financial problems were, and remain, the most difficult to resolve, with over 1,000 severe issues yet to be resolved.

TFNF has now completed its original task and has transitioned outstanding issues to Commander, Naval Installations Command and others for final resolution. In the process of serving our Navy family, TFNF has helped develop tools and structures that can be rapidly deployed in the event of future catastrophic events and render aid more efficiently and quickly.

Key lessons learned by TFNF focused on communications, information sharing, and taking care of those affected by the devastation. These lessons learned, including the need for a more effective method of accounting for the whereabouts of ashore personnel and their families during crises, have been tasked to the appropriate organizations within the Navy for follow up and development of action plans.

Foreign Area Officer Program

Recognizing the need to build partner capacity, the QDR calls for the Navy to reinvigorate the Foreign Area Officer (FAO) program. Navy has begun establishing a separate Restricted Line community of 300–400 officers that will compete discretely for statutory promotion through flag rank. Navy's FAOs will form a professional cadre with regional expertise and language skills who will provide support to fleet, component commander, combatant commander, and joint staffs. Their immediate mission will be to rapidly improve the Navy's ability to conduct theater security cooperation (TSC), improve partner capacity in global war on terror, and generate maritime domain awareness while improving Navy's readiness and effectiveness in the conduct of conventional campaigns against increasingly sophisticated regional adversaries. The first FAO selection board was held 14–15 Dec 2005. Forty-two personnel were selected for lateral transfer and four of these officers already meet regional/cultural expertise and language skill requirements. They will be detailed to existing FAO billets in fiscal year 2006.

Joint Professional Military Education (JPME)

As ongoing operations in Iraq, Afghanistan, and the global war on terror vividly illustrate, Navy must continue to adapt to growing Joint warfighting and interagency planning demands. Meeting such requirements will prepare our Nation to defeat extremist groups and state adversaries who will challenge us in ways far different than in the past. We continue to develop a continuum of professional education and training to enhance the ability of Navy leaders to provide unique and complementary warfighting skills. Leaders who demonstrate the highest potential for service will be rewarded with in-residence joint professional military education

(JPME), to prepare them to excel in naval, joint, multi-national, and interagency billets around the world. Non-resident courses are often facilitated through advanced distributed learning. Navy personnel are also enrolled in joint knowledge development and distribution capability courses to better prepare them for joint assignments.

Navy Education

Education is a key enabler in developing the competencies, professional knowledge, and critical thinking skills to deliver adaptable, innovative combat-ready naval forces. The Navy will develop a continuum of capabilities-based and competency-focused life-long learning to keep naval forces on the cutting edge for mission accomplishment as well as to provide for the professional and personal growth of our people. Navy education must be tied to requirements and capabilities. Central to our efforts are the Naval Reserve Officers Training Corps (NROTC), the Naval Academy, Naval Postgraduate School, and the Naval War College.

The Naval Reserve Officers Training Corps (NROTC) Program comprises 59 NROTC units at 71 host institutions of higher learning across the Nation. In addition, departments of naval science are located at the United States Merchant Marine Academy and 6 selected state maritime institutions, two of which also host NROTC units. NROTC is the key source of nuclear power candidates, nurses and increased officer corps diversity. NROTC is designed to educate and train qualified young men and women for service as commissioned officers in the Navy or Marine Corps. NROTC prepares mature young men and women morally, mentally, and physically for leadership and management positions in an increasingly technical military. In addition, participation in the naval science program instills in students the highest ideals of duty, honor, and loyalty.

The Naval Academy gives young men and women the up-to-date academic and professional training needed to be effective naval and marine officers in their assignments after graduation. Renowned for producing officers with solid technical and analytical foundations, the Naval Academy is expanding its capabilities in strategic languages and regional studies.

The Naval Postgraduate School (NPS) is our cornerstone of graduate education providing relevant, defense-focused degree and non-degree programs in residence and at a distance. We are expanding resident opportunities at NPS where the distinctly joint and international environment contributes to the resident academic experience by mirroring the nature of today's operating forces. Included in this expansion is the support of regional expertise development within our Foreign Area Officer program. We are also increasing access to NPS graduate education through a variety of non-resident, distance learning opportunities.

NPS may be one of our best tools to ensure the alignment of advanced operational concepts and technologies among the Department of Defense, Homeland Security, interagency, and international military partnerships. NPS provides specialized programs that support U.S. national security priorities and the combatant commanders, including counterterrorism, homeland security, and security cooperation. Masters Degree programs and seminars have been developed on homeland defense and security, as well as counter-drug strategy and policy, for the Department of Homeland Security. NPS teaches a classified graduate education program for the National Security Agency, is a University of choice for the National Reconnaissance Office, and NASA sponsors the annual Michael J. Smith NASA chair at NPS with focused areas of space research, education, and training for future astronaut candidates. Additionally, NPS receives sizeable annual funding from the National Science Foundation for basic research in oceanography, meteorology, information sciences, engineering, and technology development, often partnering with other universities on interdisciplinary research projects.

The Naval War College is the centerpiece of Navy professional military education and maritime-focused joint professional military education that develop strategically minded critical thinkers and leaders who are skilled in naval and joint warfare. The Naval War College is restructuring its programs to improve comprehensive development of operational warfighting competencies, and key cross-functional and special competencies, including regional studies. We are increasing both War College resident and distance learning opportunities. Completion of non-resident courses and programs is facilitated through advanced distributed learning.

IV. CONCLUSION

The Navy cannot meet the threats of tomorrow by simply maintaining today's readiness and capabilities. Our adversaries will not rest, our global neighbors will not wait. Neither will we. Building upon Sea Power 21, we must continue to transform and recapitalize for the future without jeopardizing our current readiness and

the strides we have made—and continue to make—in personnel and manpower management. With our partners in industry, the acquisition community, OSD, and the interagency, and with the continuing support of Congress, the Navy will build a force that is properly sized, balanced, and priced for tomorrow.

We will build for our Nation and its citizens the right Navy for a new era. American sea power in the 21st century is the projection of power, and more: it extends beyond the sea; it is joint and interagency; it requires awareness and understanding; it enables access and cooperation; it provides for presence and interaction; it is driven by compassion and collective security; and, it is decisive and lethal.

Your Navy would not have remained, for 230 years, the world's premier maritime force without the constant support of Congress and the people of the United States of America. I would therefore like to thank you once again, on behalf of the dedicated men and women who daily go in harm's way for our great Nation, for all that you do to make the United States Navy a force for good today and for the future.

Chairman WARNER. Thank you, Admiral. That was a very moving statement, recognizing that this is your first delivery of a posture statement on behalf of your beloved Navy. I listened attentively and learned a few things. I did not realize so many of our sailors were involved in the construction battalions in Afghanistan and now on the Horn of Africa. We always associate them at sea.

What is the total number of sailors on the ground in the Iraq area?

Admiral MULLEN. 10,000, just about 10,000.

Chairman WARNER. 10,000 sailors.

Admiral MULLEN. I expect it to go up over the next couple of years. A couple more thousand is what we anticipate.

Chairman WARNER. Commandant.

STATEMENT OF GEN. MICHAEL W. HAGEE, USMC, COMMANDANT OF THE MARINE CORPS

General HAGEE. Good morning, Mr. Chairman, Senator Levin, distinguished members of the committee. I am really happy to be here with, as the CNO said, a good friend and shipmate. Actually, since the summer of 1964 we have been shipmates and it, in fact, does make a difference. I am very honored to be here with our new Secretary of the Navy, and privileged to report on the state of your Marine Corps.

Sixty-one years ago approximately today, there was a slight pause in the battle on Iwo Jima. The flag-raising on Mount Suribachi had occurred just a few days earlier, but it seemed a distant memory to the marines on the island. Lieutenant General Howland "Mad" Smith and the leadership of the Fifth Amphibious Corps peered down on Motiyama Plateau. They contemplated the scope of hardships that they would endure in securing the remaining northern third of that island from a determined and lethal foe.

Today we pause to report on the state of the Department of the Navy and our preparedness for the unknown battles which await us in the long war against yet another determined and lethal foe. Marines executing this war today know they are well-equipped, well-trained, well-led, and have the backing of the American people and their Congress. They and their families also know that they are doing something important and they are making a difference.

On behalf of all marines and our families, I would like to thank you for your strong and unwavering support. Like the Secretary, I would also like to extend my personal appreciation for the time you

take to visit our wounded and console the families of our fallen warriors.

Now in the fifth year of this conflict, the future remains uncertain. However, history teaches us that uncertainty is best met with flexibility and adaptability, two principles which have long characterized your Marine Corps.

My written statement lays out some of the actions we have taken in training, education, and organization to increase our flexibility and adaptability in the fight against this ruthless and determined enemy. We have embraced culture and language as combat multipliers. We are institutionalizing this effort through our Center for Advanced Operational Cultural Learning. This center will help develop regional expertise in our career marines. Additionally, we have revamped our predeployment training at Twentynine Palms and Bridgeport, California, and Yuma, Arizona, to better prepare our units for the nontraditional environment.

Finally, on February 24, 2006, we activated the Marine Corps Special Operations Command (MARSOC), which will add about 2,600 marines to the Special Operations Command (SOCOM), increasing its capacity and capability.

With over a third of our operating forces deployed, we retain the ability to rapidly respond to additional contingencies as they arise. This Nation invests tremendous capital in its naval forces. Last year these forces responded across the spectrum of conflict from Iraq and Afghanistan to tsunami relief in the Indian Ocean, to earthquake relief in Pakistan, to aid for fellow Americans across Louisiana and Mississippi, and finally in a mudslide-engulfed village in the Philippines. Maritime forces have demonstrated their readiness, relevance, and responsiveness as part of the joint force.

In terms of recruiting and retention, this year has been challenging but successful. Thanks to the dedication of your marines and your continued support of our recruiting, advertising, and reenlistment bonuses, we continue to make mission. Further, the quality of marines we recruit and retain remains high.

We continue to modify our equipment, training, and tactics to the adaptive enemy of today and to be ready to face the warfighting challenges of the future. However, as I have mentioned in previous testimony, the current operational tempo (OPTEMPO) and environment are significantly degrading the service lives of our equipment. We estimate the total cost to reset our force is about $11.7 billion. This amount is in addition to the annual cost of war needs, which we estimate to be approximately $5.3 billion in fiscal year 2006. We ask for your support of the supplemental request to reset our capabilities and ensure we remain prepared for the unseen challenges of tomorrow.

However, in the final analysis it is not the equipment but our people who make the difference. Be they Active, Reserve, or civilian, your marines and their families are making the greatest sacrifices. I know that you share the conviction that we cannot do enough for these young Americans who so willingly go forward for the sake of our country. I firmly believe that the most dangerous weapon system on any battlefield is a well-armed, well-educated U.S. marine, and with your continued support I do not believe that will change.

I look forward to your questions, sir.
[The prepared statement of General Hagee follows:]

PREPARED STATEMENT BY GEN. MICHAEL W. HAGEE, USMC

Chairman Warner, Senator Levin, distinguished members of the committee, it is my honor to report to you on the state of your Marine Corps. Now entering the fifth year of what is a long war, your Marine Corps is wholly fixed on this challenge to the Nation. This conflict requires the uniformed services to provide a broader range of capabilities supporting extended global operations, ultimately delivering greater agility, adaptability, and duration of sustainment. While our Armed Forces continue to predominate in traditional warfare, our current enemy necessitates the adoption of unconventional and indirect approaches throughout the joint force.

History reveals a pattern of marines aggressively adapting to circumstances, and we consider ourselves in the vanguard of instituting the changes required to address the present challenge. The over 30,000 marines serving on the forward fronts in the Central Command Area of Operations today are a manifestation of transformational advances in manning, training, educating, and equipping to confront this latest threat to our way of life. From force structure revision, to urban training facilities, to cultural and language instruction, to leveraging emerging technologies, our efforts recognize the new character of conflict, and we are delivering both marines and Marine Corps units that thrive in the uncertainty which will likely define warfare throughout the coming decades.

This war, like any other, is costly, and the essence of this statement outlines the challenges we share in sustaining the caliber of service the Nation has come to expect from its Corps of Marines. Readiness is the enduring hallmark of your Marine Corps, and if this war ended today, we would require continued supplemental budgetary support in order to "reset the force." We also remain committed to providing for your marines and their families in a manner befitting their dedication and selfless sacrifice.

Marines are grateful for the unwavering support of Congress, welcome the opportunity to report on the present state of the corps, and consider service to the Nation during this demanding period a distinct privilege.

I. INTRODUCTION

Today, marines are forward deployed in prosecution of the global war on terror, as they have been since that fateful day in September 2001. The performance of marines on the field of battle during these last 4 years has validated our commitment to warfighting excellence and to remaining the world's foremost expeditionary warfighting organization.

Our bedrock is our warrior ethos and the philosophy that every marine is first a rifleman. We recruit quality Americans whom we then infuse into a culture that requires individuals to think independently and act aggressively in chaotic and unpredictable environments where information is neither complete nor certain. We rigorously train these young marines to perform under adverse circumstances, and to accept greater responsibility as part of a team. We educate these marines and their leaders to prepare their minds for the intellectual component of the clash of wills and chaos inherent to combat. These past 4 years have further validated our forward deployed posture, our maneuver warfare doctrine, our adaptive logistics backbone, and the unique flexibility and scalability of the combined-arms Marine Air-Ground Task Force construct. Time and again, we have delivered to the combatant commander a solution tailored to their joint force requirements.

In an uncertain world, readiness is the coin of the realm. In November 2001, at the direction of the combatant commander, we projected the combat power of two marine expeditionary units some 350 miles into the heart of Afghanistan during Operation Enduring Freedom. Less than 18 months later, we deployed 70,000 marines and sailors in less than 60 days in support of Operation Iraqi Freedom. As part of the joint force, our 500-mile push from Kuwait, through Baghdad, and up to Saddam's hometown of Tikrit more than doubled our doctrinal expectation for force projection.

After a short respite at home, we again demonstrated the readiness and responsiveness to the Joint Force Commander by deploying 25,000 marines back to Iraq in March 2004. We are now entering our third year in the Al Anbar province and the service men and women of the Multi-National-Force-West have acquitted themselves in such locales as Fallujah, Ramadi, and throughout the Euphrates River valley with valor and distinction.

In 2004, we also provided a combined-arms marine expeditionary unit for the "Spring Offensive" in Afghanistan, significantly reducing the Taliban's influence and setting the stage for the national elections which followed. We continue to provide support in Afghanistan in the form of embedded training teams with the Afghan National Army.

The Nation invests tremendous capital in its naval forces, and this past summer the Navy-Marine team had an opportunity to turn that capability homeward in support of our fellow Americans along the gulf coast ravaged by Hurricanes Katrina and Rita. Organized as a special-purpose marine air-ground task force, over 2,500 marines from both the Active and Reserve Forces came to the aid of communities across Louisiana and Mississippi. Marines and sailors welcomed this direct involvement in a domestic humanitarian crisis that further highlighted the strategic flexibility of naval forces in meeting challenges to the Nation both around the world and at home.

The Nation is receiving a superb return on its investment in the world's finest expeditionary force. Nearly one in three marines of our operating forces is today forward deployed or forward based protecting America's interests.

II. RESETTING THE FORCE AND PREPARING FOR THE NEXT CONTINGENCY

The war on terror has made extraordinary demands on the Marine Corps' tactical equipment. Extended operations in Iraq, Afghanistan, and elsewhere over the past several years have severely tested our materiel. The great majority of our equipment has passed the test of combat with flying colors. However, it has been subjected to a lifetime's worth of wear stemming from vehicle mileage, operating hours, and harsh environmental conditions.

We documented this situation last year in an Iraqi theatre assessment of equipment readiness report. Figure 1 demonstrates the impact of the operating tempo on both ground and air vehicles. We have responded to enemy tactics and techniques, such as the employment of increasingly destructive improvised explosive devices (IED), by adding armor protection to vehicles—thereby increasing their weight and ultimately increasing the wear and tear on frames, axles, and suspension systems. In the case of the High Mobility Multipurpose Wheeled Vehicle (HMMWV), for example, its expected "peacetime" service life is 14 years. Under current conditions, we will have to replace it after less than 5 years of service in Iraq.

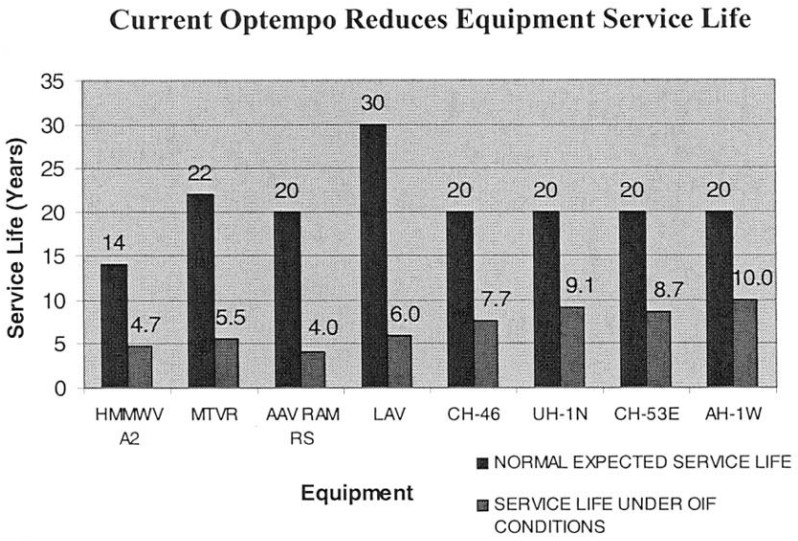


Figure 1

The significant distances in the Al Anbar Province, which is approximately the size of the State of Utah, exacerbates the demand on equipment. The extended dis-

tances, enemy tactics, and continuous nature of operations have placed extraordinary demands on marine engineering equipment as well. We maintain roads and infrastructure across the Al Anbar province to accommodate the heavy logistics support demanded by coalition forces. Control points and compounds require round-the-clock power generation for vital communications, equipment repairs, and hospitals. These requirements place a heavy demand on the existing inventory of Marine Corps' engineering equipment such as power generators, tractors, forklifts, and road construction vehicles.

Our expansive area also requires our headquarters' elements to perform the command and control functions normally held by the next higher command in traditional tactical and operational settings (e.g., battalion headquarters often function like a regimental headquarters). The marine expeditionary force in Al Anbar has command and control requirements that far exceed the existing organizational tables of equipment.

The equipment readiness report also noted that the types of missions we are conducting in Iraq require an increase in the number of some weapons contained in the units' table of equipment allowance. For example, most infantry, logistics, and security battalions are employing twice the number of .50 caliber, M240G and MK19 machineguns they normally rate.

Supplemental funding (Figure 2 below) is essential to address "reset the force" and wartime contingency costs since our annual baseline budget procurement averages approximately $1.5-$2.0 billion.

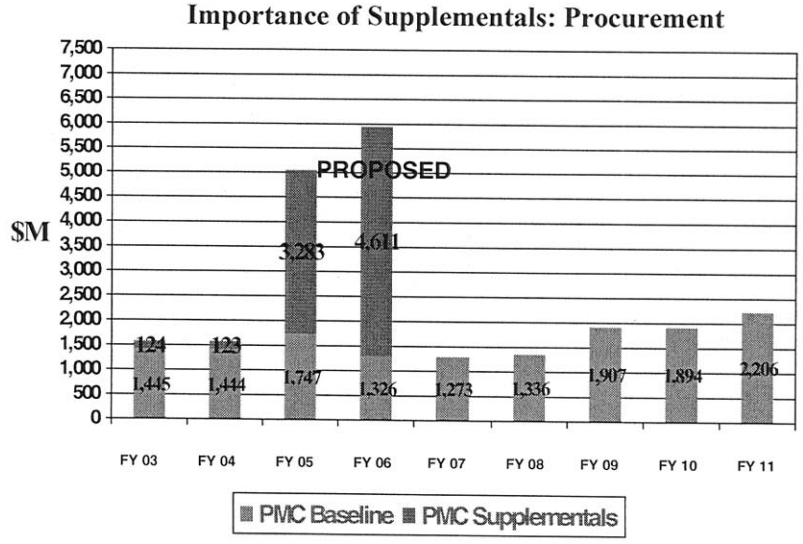


Figure 2

Where there are equipment shortages, we equip units preparing to deploy at the expense of our non-deploying units. Maintaining the readiness of our forward deployed units remains our top priority, and their readiness remains high. The equipment shortages experienced by non-deploying forces are exacerbated by the requirement to source the Iraqi transition teams (advisors). Although the overall readiness of our remain-behind units is suffering, it will improve when sufficient quantities of equipment procured via supplemental funding becomes available. Until then, sustaining the Corps' readiness requires that our remain-behind units continue cross leveling equipment with each force rotation.

Reset of Strategic Prepositioning Programs

Equipment from the Marine Corps' two strategic prepositioning programs (the Maritime Prepositioning Force and Marine Corps Prepositioning Program—Norway) has been employed in support of the global war on terror. Maritime prepositioning ships squadrons 1 and 3 are fully reconstituted. The majority of Maritime

prepositioning ships squadron 2's equipment was employed during Operation Iraqi Freedom II. This squadron will complete its initial reconstitution in April 2006, but will only be partially mission capable until all ground equipment is delivered. The Marine Corps Prepositioning Program—Norway currently possesses approximately 35 percent of its ground equipment, and the other classes of supply are at 98 percent or better. The majority of the other maritime prepositioning ships squadron capabilities range between 92–100 percent.

III. PREPARING FOR THE FUTURE: THE LAST YEAR

Recent Modernization and Transformation Initiatives

Componency

Over the last year, we have restructured our service components to meet the requirements of the Unified Command Plan, National Strategy, and combatant commanders. This effort has resulted in four major changes to our componency construct. First, we established Marine Forces Command as the Marine Corps component to the joint force provider, U.S. Joint Forces Command. Second, U.S. Marine Corps Forces, Central Command is now a stand-alone component staff of approximately 100 Active-Duty marines. Third, the Commander of Marine Forces Reserve and his staff have assumed the service component responsibilities for U.S. Northern Command. Finally, on 24 February 2006, we established a Marine component within Special Operations Command (MARSOC). The new Marine component will provide approximately 2,600 USMC/Navy billets within U.S. Special Operations Command (SOCOM), lead by a marine major general. The MARSOC will provide additional capability and capacity to SOCOM by adding forces that will conduct direct action, special reconnaissance, counterterrorism, and foreign internal defense.

Force Structure Review Group

In 2004, we conducted an extensive total force structure review recommending approximately 15,000 structure changes to improve the Marine Corps' ability to meet the long-term needs of the global war on terror and the emerging requirements of the 21st century. This effort was end strength and structure neutral—offsets to balance these increases in capabilities come from military to civilian conversions and the disestablishment and reorganization of less critical capabilities.

We are currently implementing these changes. Additionally, we will stand up a capabilities assessment group in the first part of March 2006 to take a focused look at our operating forces in order to ensure we have properly incorporated lessons learned on the battlefield, Quadrennial Defense Review guidance, and the MARSOC standup.

The Marine Corps continues to examine other opportunities to augment needed capabilities. For example, we are assigning each artillery regiment a secondary mission to conduct civil military operations (CMO). To do this, each regiment will be augmented by a Reserve civil affairs capability. By assigning a secondary CMO mission to artillery units, we have augmented our high-demand/low density civil affairs capability while retaining much needed artillery units. We will continue to look for additional innovative ways to maximize our capabilities within our existing force structure.

Regionalization of Bases and Stations

The Marine Corps is transforming its bases from singularly managed and resourced entities to ones strategically managed in geographic regions. With the exception of our recruit training depots, our bases and stations will fall under the purview of five Marine Corps installation commands with the majority of the installations under the oversight of Marine Corps Installation Command—East and Marine Corps Installation Command—West. Regionalization goals include providing optimal warfighter support, improving alignment, enhancing the use of regional assets, returning marines to the operating forces, and reducing costs.

Programmatic and Organizational Developments

MV–22

VMX–22 completed operational evaluation in June 2005, and the operational test report was completed and released in August 2005. The report found the MV–22 Block A to be operationally effective and suitable. All key performance parameters met or exceeded threshold requirements, and on 28 September 2005, the V–22 program defense acquisition board approved Milestone B and authorized the program to begin full rate production. Twenty-nine block A aircraft have been delivered and are supporting training at Marine Corps Air Station, New River, North Carolina.

The first CH–46E squadron stood down in June 2005 to begin transition to the MV–22 and is scheduled to deploy in the fall 2007.

KC–130J

In February 2005, the KC–130J attained initial operational capability (IOC). The aircraft has been continuously deployed in support of Operation Iraqi Freedom since IOC and has provided the warfighter a state of the art, multi-mission, tactical aerial refueling, and fixed wing assault support asset that has exceeded expectations. The introduction of the MV–22, combined with the forced retirement of the legacy aircraft due to corrosion, fatigue life, and parts obsolescence, significantly increases the requirement for the accelerated procurement of the KC–130J. The Marine Corps is currently in a multi-year procurement program with the Air Force to procure a total of 34 aircraft by the end of fiscal year 2008. This number is 17 aircraft short of the inventory objective of 51 necessary to support the Marine, Joint, and Combined Forces.

M777A1 Lightweight Howitzer

The new M777A1 lightweight howitzer replaces the M198 howitzers. The howitzer can be lifted by the MV–22 tilt-rotor and CH–53E helicopter and is paired with the medium tactical vehicle replacement truck for improved cross-country mobility. The M777A1, through design innovation, navigation and positioning aides, and digital fire control, offers significant improvements in lethality, survivability, mobility, and durability over the M198 howitzer. The Marine Corps began fielding the first of 356 new howitzers to the operating forces in April 2005 and expects to complete fielding in calendar year 2009.

High Mobility Artillery Rocket System

The high mobility artillery rocket system (HIMARS) fulfills a critical range and volume gap in Marine Corps fire support assets by providing 24-hour, all weather, ground-based, indirect precision and volume fires throughout all phases of combat operations ashore. We will field 40 HIMARSs (18 to 1 artillery battalion of the Active component, 18 to 1 battalion of the Reserve component, and 4 used for training/attrition). When paired with the acquisition of Guided Multiple Launch Rocket System rockets, HIMARS will provide a highly responsive, precision fire capability to our forces in conventional as well as unconventional operations.

Expeditionary Fire Support System

The Expeditionary Fire Support System (EFSS) will be the principal indirect fire support system for the vertical assault element of Marine Air-Ground Task force executing ship-to-objective maneuver. The EFSS is a rifled-towed 120mm mortar paired with an internally transportable vehicle, which permits the entire mortar/vehicle combination to be internally transported aboard MV–22 and CH–53E aircraft. EFSS-equipped units will provide the ground component of a vertical assault element with immediately responsive, organic indirect fires at ranges beyond current infantry battalion mortars. IOC is planned for fiscal year 2006 and full operational capability is planned for fiscal year 2010.

Explosive Ordnance Disposal Equipment Modernization

Explosive ordnance disposal equipment is undergoing major configuration changes and modernization. Our current modernization focus is towards neutralization and render-safe of unexploded ordnance/IED. The following robotic systems were tested and approved for joint explosive ordnance disposal usage: Bombot, Manual Transport Robotic System, Remote Ordnance Neutralization System, and RC–50.

Force Service Support Group Reorganization

The force service support groups were redesignated as Marine logistics groups in August 2005 as the initial step in the logistics modernization effort's reorganization initiative. The Marine logistics group will be reorganized/realigned with standing Direct and General Support subordinate units and include the Combat Logistics Regiment Forward, Direct Support Combat Logistics Regiment, and General Support Combat Logistics Regiment. Reorganization to the Marine Logistics Group facilitates rapid and seamless task organization and deployment operations, experienced logistics command and control, operations and planning support, and strong habitual relationships between supported and supporting units.

Equipping Marines

Force Protection

Unable to match our conventional force in like fashion, our enemies have resorted to asymmetric tactics such as the IED. Thanks to your support, we completed the

installation of the Marine armor kits on all A2 HMMWV last year. We will complete the transition to an all M–1114 fleet by July 2006. The Medium Tactical Vehicle Replacement Armor System for our 7-ton trucks is scheduled for completion in May 2006. Additionally, we continue to bolster our force protection capabilities through explosive device jammers, additional vehicle armoring efforts, personal extremity protective equipment, and a host of unmanned ground vehicles.

Tactical Wheeled Vehicle Armor

We have joined with the U.S. Army to look at the M–1151/2 as a mid-term replacement for our base HMMWV and A2 models that have reached the end of their service life. The M–1151/2 is the bridge to the next generation of combat tactical vehicles. The Joint Light Tactical Vehicle Program will define this next generation vehicle. This program is a Joint Army-Marine effort to establish the requirement and way-ahead for the upcoming Fiscal Year 2008 Program Objective Memorandum. The design of this vehicle will incorporate the recent lessons learned from Iraq and technical advances in survivability, energy management, and network operations to provide the survivability, mobility, and tactical flexibility.

Individual Marine Initiatives

We have been able to address the highest priority capability gaps of our deploying forces associated with the individual marine. The issue of protection, however, must be balanced with agility, weight, and heat retention. An infantryman going into today battle carries nearly 100 pounds of equipment and ammunition—much of this for individual protection. This is too much. In combat lives can just as easily be lost due to an inability to move swiftly across a "kill zone," or from mental and physical fatigue, as from bullets and shrapnel. We will never stop searching for ways to better protect the warrior of tomorrow by taking advantage of emerging technologies, but we must strike a balance between individual protection and mission accomplishment.

The lightweight helmet provides improved ballistic protection capability over the existing helmet while reducing weight by one-half pound and introducing an improved suspension system to increase comfort. We have fielded over 74,000 lightweight helmets to date, and we plan to procure 43,145 more in fiscal year 2006. The Enhanced Small Arms Protective Insert (E–SAPI) provides increased ballistic protection over the existing SAPI plate. The plates weigh approximately 1.5 pounds more than the standard SAPI per plate depending on size. Delivery of E–SAPI plates began in September 2005. In addition, the procurement of side SAPI plates further enhances the warfighters' protection, survivability, and armor options. In April we will complete delivery of 37,000 side SAPI plates.

The QuadGard (QG) system was designed to provide ballistic protection for arms and legs in response to blast weapon threats and combat casualty trends in Operation Iraqi Freedom. This system is an additive capability that integrates with existing armor systems. We procured 4,500 QG systems with initial delivery beginning in first quarter, fiscal year 2006. The Individual Load Bearing Equipment (ILBE) is a direct replacement for the Modular Lightweight Load Bearing Equipment system that integrates an assault pack and hydration system. We have fielded over 96,000 ILBE packs to date and this effort continues.

Transforming, Training, and Education

One of our fundamental tenets—every marine a rifleman—continues to prove its worth in the global war on terror. This serves as the solid foundation for all of our training, and provides the common core that defines every marine. Over the past year, we have refined our training and education programs. Our goal remains the same, to prepare and sustain Marine Air-Ground Task Forces enabled by small-unit leaders directing small, enhanced units, which have a bias for action, are more lethal, and are better able to operate across the spectrum of conflict.

Culture and Language

An individual understanding of local culture and languages is a force multiplier in irregular operations, such as those we are conducting in Iraq, Afghanistan, and Africa. Our cultural awareness and language training programs accomplished several milestones this past year. The Marine Corps graduated its first class of new lieutenants with formal training in the operational aspects of foreign cultures. During February 2005, we opened our new Center for Advanced Operational Culture Learning, and it is already proving its value. The Center has distributed its first basic tactical language training programs, preparing individuals to serve in Iraqi Arabic and Pan-Sahel French cultures (Pan-Sahel French is a predominant language in the former French colonies of Northwest Africa). The Center also provided training to our newly established foreign military training unit, as well as to ma-

rines selected to serve as advisors to the Iraqi security forces and Afghan National Army. In the future, we look to build a permanent facility to house the Center as well as establishing satellite sites for sustaining language and culture training in our career force.

Pre-deployment Training Today

We have embarked on a concerted effort to improve our pre-deployment training. At the center of these efforts is our revised pre-deployment training program conducted at the Marine Air Ground Combat Center, at Twentynine Palms, California, at Marine Corps Air Station Yuma, Arizona, and at the Mountain Warfare Training Center, Bridgeport, California. The real-time and continuous connectively with forward forces enables our units in training to apply combat lessons learned directly into their pre-deployment training. During this past fiscal year over 21,000 marines received combined arms and urban operations training at Twentynine Palms. In addition, over 4,000 marines and coalition partners trained in the mountain operations course at Bridgeport, and another 11,000 marines participated in the adjacent Desert Talon exercise series at Yuma. The success of our marines in Iraq and Afghanistan is due in large measure to the demanding training that they experience at these three sites.

Modernization of Training Ranges

In the past 2 years, and again taking advantage of combat lessons learned from Iraq and Afghanistan, we have initiated an unprecedented investment in our training range capabilities. We built a robust urban and convoy operations training program at our major desert training base at Twentynine Palms, California. Marine Corps battalions deploying to Iraq are provided a realistic training venue to hone their urban and convoy skills and to heighten their awareness of both IEDs and the complexities of stability operations.

To better prepare your marines for this "graduate level" training at Twentynine Palms, we are also providing essential building block capabilities in urban warfare at their home stations. Camp Lejeune, North Carolina has recently completed fielding a suite of urban and convoy training systems on their ranges and with your continued support, we hope to do the same at Camp Pendleton, California and the Marine Corps bases in Hawaii and Okinawa. We also intend to upgrade our aviation urban training facility at Marine Corps Air Station, Yuma and to provide an enhanced aviation urban training environment.

Infrastructure

Encroachment Partnering

In fiscal year 2005, the Marine Corps completed six projects to acquire development rights over 1,227 acres at a cost of $8 million, which was split between the Marine Corps and our partners.

The Marine Corps continues to use legislation that allows the Secretary of the Interior to accept integrated natural resources management plans as suitable substitutes for critical habitat designation to protect and enhance populations of these species while continuing to conduct essential training.

Public Private Venture Family Housing

Our efforts to improve housing for marines and their families continue. Thanks to previous congressional action that eliminated the budgetary authority cap on public private venture investments in military family housing, the Marine Corps will have contracts in place by the end of fiscal year 2007 to eliminate all inadequate family housing.

Military Construction

Our military construction plan now focuses on housing for our single marines. Barracks are a significant critical quality of life element in taking care of single marines. We are committed to providing adequate billeting for all our unmarried marines by 2012. We tripled the amount in bachelor housing from fiscal year 2006 to 2007. We will triple it again in fiscal year 2008. We are also committed to funding barracks' furnishings on a 7-year replacement cycle and prioritizing barracks repair projects to preempt a backlog of repairs.

Energy Efficiency in Transportation

The Marine Corps has exceeded the Energy Policy Act requirements for the past 5 years and has been a leader in the Department of Defense (DOD) and among other Federal agencies in the adoption of alternative fuels. Through use of biodiesel neighborhood electric vehicles, we have reduced petroleum use 20 percent from a 1999 baseline, and are expanding the deployment of hybrid vehicles in our garrison

fleet. We are also supporting future use of hydrogen-powered fuel cell vehicles with the establishment of a refueling station aboard Marine Corps Base Camp Pendleton, California.

IV. MANNING THE FORCE AND QUALITY OF LIFE

Though we embrace the advances of technology, we believe that the most important asset on any battlefield is a well-equipped, well-trained, and well-led United States marine—our people make the difference. We hold that today's marines are unique and special individuals, and the character of their service throughout the global war on terror has rivaled that of any preceding generation. Recruiting and retaining a force of this quality requires the dedicated efforts of our recruiters, career retention specialists, manpower experts, and leaders throughout the Corps. Ours is a force of Active-Duty, Reserve, and civilian marines, as well as thousands of marine families who share in the sacrifices to our Nation. Though the mission must always come first, we continue to search for opportunities to improve the experience of serving as a marine both during and after their active service—once a marine, always a marine.

Retention

Retaining the best and the brightest marines is a top manpower priority. Our future officer and staff noncommissioned officer ranks are dependant on our successful accomplishment of this mission.

We have two enlisted retention measures to ensure healthy service continuation rates. The First Term Alignment Plan (FTAP) involves the first reenlistment of marines and we consistently achieved our goals over the past 13 years. The Subsequent Term Alignment Plan (STAP) involves the subsequent reenlistments of marines, those who likely remain in the Corps for a career, and we have consistently attained our goals since creating the STAP in 2002. In fiscal year 2005, we exceeded the FTAP requirement by achieving 103 percent of this retention mission, with notable success in the infantry community; we also exceeded the STAP retention mission. The substantial increase in the infantry reenlistment rate during fiscal year 2005 was influenced by higher selective reenlistment bonuses (SRBs).

Certain military occupational specialties perennially suffer high attrition, such as those involving highly technical skills or extensive security clearances. Contributing factors include lucrative civilian employment opportunities for those marines who attain these specialized skills and qualifications. We address this challenge by targeting these military specialties with higher SRBs. Retaining high quality and the proper skills in our ranks necessitates military compensation that is competitive with the private sector. Sustainment of SRB funding remains a crucial element to our ongoing efforts to retain these valuable skills.

The retention forecast for the officer corps in the near term is positive and consistent with our historic average of 90.8 percent. The close of fiscal year 2005 saw officer retention at 91.3 percent. The Marine Corps has active programs in place, both monetary and non-monetary, to ensure that officer retention remains high. All of these programs provide incentives to officers for continued service even in the face of significant operational tempo, while allowing flexibility for manpower planners to meet requirements across the Marine Corps total force.

Selected Reserve enlisted retention for fiscal year 2005 continued to be strong at 79.5 percent, well above our historical norm. Reserve officer retention of 80.1 percent was also above the historical norm of 75.3 percent

Recruiting

An equally important factor in sustaining a viable force is continuing to recruit tremendous young men and women with the right character, commitment, and drive to become marines. In fiscal year 2005, the Marine Corps overcame unprecedented recruiting challenges and achieved over 100 percent of our Active component accession goal with no degradation in quality.

The Marine Corps Reserve achieved 101 percent of its enlisted recruiting goals. We achieved our officer accessions goals as well, but Reserve officer numbers remain challenging, as our primary accession source is from officers that are leaving Active-Duty. We appreciate the continued authorization for a selected reserve officer affiliation bonus in the National Defense Authorization Act for Fiscal Year 2006. It continues to make a significant contribution in this critical area.

We anticipate that both Active and Reserve recruiting will remain challenging in fiscal year 2006, and we welcome the continued support of Congress for a strong enlistment bonus and other recruiting programs, such as recruiting advertising, which will be essential to us in meeting these challenges.

Reserve Marines

To date, more than 37,500 Reserve marines have served on Active-Duty in the global war on terror. As part of an integrated total force, our Reserve marines and units receive the same pre-deployment training and serve alongside their Active component counterparts. Currently, over 7,000 Reserve marines are on Active-Duty, and the Marine Corps Reserve expects to provide approximately 4,250 marines in support of operations in Iraq in 2006. Overall, our Reserves provide personnel for a wide-variety of operations and activities, including Iraq military transition, Afghan National Army embedded training, civil affairs, and personnel recovery and processing. They also perform anti-terrorist and humanitarian duties in the Horn of Africa, Afghanistan, Central America, and the Caribbean. The strength of integrating our Active and Reserve components into a total Marine Corps force epitomizes the warrior concept of "one team, one fight."

Civilian Marines

Civilian marines continue to provide an invaluable service to the Corps as an integral component of our total force. Working in true partnership with marines, civilian marines will continue to play in important role in supporting the mission of the Marine Corps and the global war on terror. Our commitment is to define for them what the Marine Corps will offer its civilian marines, and what the Corps expects from this select group who support our marines.

Military-to-Civilian Conversions

The Marine Corps continues to pursue sensible military-to-civilian conversions in support of Marine Corps warfighting initiatives. These conversions are important because they increase the number of marines in the operating force and help reduce stress on the force. Funding remains a critical issue to the success of this initiative. Congressional cuts in both the Fiscal Year 2005 Appropriations Bill ($35 million) and Fiscal Year 2006 Appropriations Bill ($20 million) has impacted our ability to execute our planned fiscal year 2005 program and will reduce our planned fiscal year 2006 conversions.

National Security Personnel System

The Marine Corps is committed to successful implementation of the National Security Personnel System and creating and maintaining an innovative and distinctive civilian marine workforce capable of meeting the ever-changing requirements of today and the challenges of tomorrow. The Marine Corps is actively participating with the DOD in the development and implementation of this new personnel system. Following an intensive training program for supervisors, managers, human resources specialists, employees, commanders, and senior management, we will begin implementation.

Quality of Life for Our Marines and Their Families

For marines, success has always been measured first on the battlefield, but part and parcel to this is the health and welfare of marines and the families who support them. As an expeditionary force, marines are accustomed to frequent deployments, yet the current environment contains increased elements of personal danger and family risk that must be addressed with appropriate and timely support. We have been careful to monitor our programs to ensure our marines and their families receive the necessary care to sustain them throughout the deployment cycle. In this regard, our Marine Corps Community Services organizations' combined structure of family services, morale, welfare, and recreation programs, voluntary off-duty education, and exchange operations has positioned us to efficiently and effectively leverage and direct community services assets to help marines and their families meet the challenges associated with the Marine Corps lifestyle and current operational tempo.

For marines in theater, few things are more important than staying in touch with their loved ones at home. To keep communication open between deployed marines and their families, we provide phone service, mail service, and our internet-based mail service, "MotoMail," which has created more than half a million letters since its inception in December 2004.

Combat and Operational Stress Control

While our marines and their families have proven to be resilient "warriors," combat and operational stress is not an uncommon reaction. We closely interact with marines and their families to reassure them; we provide many services and programs for help and urge servicemembers and their families to seek the help they require.

To integrate our combat and operational stress control (COSC) programs and capabilities properly, we have established a COSC section within our manpower and reserve affairs department. To gain clarity of mission, we instituted a tracking system that allows commanders to monitor COSC training and decompression requirements. As a component of COSC, we created a Web-based information and referral tool that leaders at all levels can readily access. The "Leader's Guide for Managing Marines in Distress" provides specific guidance on 40 distress areas.

The Marine Reserves, through their chaplain corps, have developed Marine and Family Workshops, which are a post-deployment program designed to assist marines and their family members with return and reunion stressors and adjustment difficulties. The goals and objectives of the workshop are to: 1) provide an opportunity for marines and their family members to strengthen their coping skills; 2) mitigate the impact of traumatic events and war zone stressors; 3) accelerate the normal recovery process; and 4) identify those who might need additional help and provide resources.

Casualty Support

Our support and dedication to the families of our fallen marines and their survivors is especially strong. Casualty support is a duty and honor. It is also a human process requiring a measured and thoughtful engagement by our casualty assistance calls officers (CACOs). As with our other deployment-related programs, our casualty process has evolved and improved significantly. Our CACOs monitor the survivor's transition through the grief process—from casualty notification, to burial, to ensuring survivors receive the appropriate benefits. CACOs connect families needing extended support to a long-term survivor case manager who personally monitors and communicates with them to ensure they receive the support they need for as long as it is required.

Critical Incident Stress Management Teams

In cases of mass casualties experienced by a command or unit, whether combat, natural disasters, training, or missions, we use a DOD-sponsored managed health network capability where trained critical incident stress management teams provide crisis management briefings to family members and friends of the unit. During the briefings, Marine Corps personnel, chaplains, and managed health network counselors provide information and answer questions concerning the casualties. These crisis response teams provide support at remote sites throughout the country, making them highly useful in situations where Reserves are involved. In particular, after Lima Company, 3rd Battalion, 25th Marines experienced mass casualties in Iraq last summer, crisis management briefings were conducted at various cities in Ohio where questions about the unit were answered, briefs were provided on helping children cope, individual counseling was offered to family members, and materials on support services were distributed.

Marine for Life—Injured Support

Built on the philosophy "once a marine, always a marine" and fulfilling our obligation to "take care of our own," the Marine For Life program offers support to approximately 27,000 honorably discharged marines transitioning from Active service back to civilian life each year.

Leveraging the organizational network and strengths of the Marine for Life program, we implemented an injured support program during January 2005 to assist combat injured marines, sailors serving with marines, and their families. The program essentially seeks to bridge the gap that can exist between military medical care and the Department of Veterans Affairs, providing continuity of support through transition and assistance for several years afterwards.

The program recently assigned two full-time Marine Corps liaison officers to the Seamless Transition Office at the Veterans Affairs. These liaison officers interface between the Veterans Health Administration, the Veterans Benefits Administration, and the Marine Corps on individual cases to facilitate cooperative solutions to transition issues.

Additionally, the injured support program conducts direct outreach to injured marines and sailors via phone and site visits to the National Naval Medical Center, Walter Reed, and Brooke Army Medical Centers. On average, 30 percent of our seriously injured marines requested and received some type of assistance.

Lastly, the program continues to work closely with Office of the Secretary of Defense (OSD) on Marine Corps-related injury cases. Information sharing between the program and OSD contributes to developing capabilities for the Military Severely Injured Center (formerly known as the Military Severely Injured Joint Support Operations Call Center).

Healthcare

Marines receive high quality, state-of-the-art care from a worldwide Military Health System. We enjoy the lowest disease, and non-battle injury rates in history and our marines know that if they are injured or wounded in action they have an unprecedented, better than 97 percent survival rate once they arrive at one of our forward resuscitative surgical units. The Military Health System provides a superb care and health benefit program for our marines, their families, and our retired population—services we must sustain. Unfortunately, at its current rate of cost growth, the program is unsustainable. We fully support changes in legislation that would allow the DOD to "renorm" the cost of health care.

Sexual Assault Prevention and Response

The Marine Corps has maintained vigilance in engaging marines to prevent sexual assault, to care for the victims, and to punish offenders. Our actions included establishing a sexual assault prevention office to serve as the single point of contact for all sexual assault matters, such as victim support and care, reporting, training, and protective measures. We have also instituted extensive sexual assault awareness training into all entry-level officer and enlisted training, provided procedures to protect a victim's privacy, and trained hundreds of uniformed victim advocates to support our deployed marines. Lastly, to ensure victims receive appropriate and responsive care with timely access to services, we have appointed command level sexual assault response coordinators to serve as the single point of contact for sexual assault matters.

V. CAPABILITIES DEVELOPMENT

For 230 years, the Marine Corps has answered the Nation's call to arms without fail, but we do not intend to rest on those laurels. To remain the world's foremost expeditionary warfighting organization and preserve our tradition of being most ready when the Nation is least ready, the Marine Corps is steadfastly focused on the fundamental tenants of our success—a maneuver warfare mindset and a warfighting construct built around combined-arms air-ground task forces. We are forwarding and expanding these capabilities through aggressive experimentation and implementation of our seabasing and distributed operations concepts. These transforming concepts will increase our agility and tempo in operations, from cooperative security to major combat, and perpetuate the unrivaled asymmetric advantage our Nation enjoys in its ability to project and sustain power from the sea.

Warfighting Concepts

Seabasing

Seabasing is a national capability for projecting and sustaining power globally, using the operational maneuver of sovereign, distributed, and networked forces operating from the sea. Seabasing will provide unparalleled speed, access, persistence, and is recognized as the "core of naval transformation" (Naval Transformation Roadmap). Seabasing breaks down the traditional sea-land barrier, allowing us to use the sea as maneuver space. It enables us to rapidly deploy, assemble, and project joint and combined forces anywhere in the world, sustaining these forces during operations and reconstituting forces for employment elsewhere. Seabasing assures access by leveraging the operational maneuver of forces from the sea and by reducing dependence upon fixed and vulnerable land bases. This concept will provide our combatant commanders with unprecedented versatility in operations spanning from cooperative security to major combat. Seabasing also represents a present capability that can be tailored and scaled to meet a broad range of requirements.

The Nation invests tremendous resources with the full understanding that the ability to project power from the sea is a prerequisite for defending our sovereignty. As demonstrated by the Navy/Marine Corps response to hurricanes Katrina and Rita, seabasing is a relevant and adaptive capability possessing the flexibility to meet our countrymen's needs around the world and at home. Marines and sailors embarked from such platforms as the U.S.S. *Iwo Jima* (LHD 7) provided an asymmetric and sustainable solution to the storm ravaged Gulf Coast, and in several hundred instances saved the lives of their fellow Americans. In short, seabasing is both a real-world capability and a transformational future concept. Realization of the future seabasing potential is dependent upon an investment in ships and other seabasing platforms.

Distributed Operations

The attributes of sea power are extremely useful to the combatant commanders. However, this operational capability must also be matched by increased tactical ca-

pabilities that enhance the effectiveness of our "boots on ground" to enable operational maneuver and to create stability, especially in irregular and counter-insurgency operations. After a quarter century of unwavering commitment to our maneuver warfare philosophy, we are harvesting a generation of junior officers and noncommissioned officers who are better prepared to assume much greater authority and responsibility than traditionally expected at the small-unit level. As a complementary capability to our seabasing concept, distributed operations describes an operating approach that will create an advantage over an adversary through the deliberate use of separation and coordinated, interdependent, tactical actions enabled by increased access to functional support, as well as by enhanced combat capabilities at the small-unit level. The essence of this concept lies in enhanced small units gained through making advances on the untapped potential of our marines and the incorporation of emerging technologies which will support them.

Once implemented, a networked Marine Air-Ground Task Force operating in a distributed operations manner will disperse or mass to exploit opportunities the enemy offers. The integration of new doctrine, force structure, training, equipment, personnel policies, and leader development initiatives will afford our tactical and operational commanders a significantly enhanced weapon in the increasingly sophisticated global war on terror.

Experimentation, Technology, and Concepts

The Marine Corps Warfighting Laboratory develops innovative concepts and conducts concept-based experimentation in support of the Marine Corps Combat Development Command's mission. By examining future warfighting concepts, the Lab identifies capability shortfalls and matches them with potential solutions that can be effectively addressed by the experimentation process. In support of current operations and the global war on terrorism, the Lab rapidly identifies transformational solutions in the areas of training, equipment, organization, and doctrine needed to resolve critical short falls and gaps. Experiments have resulted in modified and new tactics, training, and procedures for marines operating in Iraq.

The Marine Corps Warfighting Laboratory is specifically developing methods to defeat IEDs, provide superior body amour, improve vehicle armor, counter the urban sniper, and to counter attacks with rockets and mortars. The Marine Corps exploits the investment of the Defense Advanced Research Projects Agency (DARPA), other Services, and industry while focusing our Marine Corps' unique investment to mature Marine Corps combat development and future materiel needs. This effort is highlighted by the lab's interaction with DARPA in the successful testing and assessment of improved armor, small-unmanned aerial vehicles, and the deployment of extended user assessment in Iraq of small numbers of acoustic sniper location systems. These successful programs will result in early deployment of systems that will contribute to force protection and survivability.

Sea Viking 06 Advanced Warfighting Experiment

The Sea Viking 06 Advanced Warfighting Experiment culminates years of planning, study, and experimentation. With a focus on Marine infantrymen, the experiment aims to revolutionize Marine Corps warfighting capabilities. By testing and examining our current training, organization, and equipment against new warfighting initiatives (e.g., Distributed Operations), rooted in real-world lessons from Iraq and Afghanistan, we have adapted and overcome deficiencies, allowing the Marine Corps to actualize its experiment data and outcomes. Results have produced changes in, training, equipment, and responsibilities of infantry small unit leaders. Such innovation has inspired the establishment of the distributed operations implementation working group, which socializes the changes and implements the changes across the doctrine, organization, training, materiel, leadership and education, personnel, and facilities pillars.

Because of Sea Viking 06's first limited objective experiment, Training and Education Command (TECOM) developed new courses and curriculum to formalize the training culture of marine infantry noncommissioned officers. TECOM and the Lab collaborated to establish "mobile training cadres" to institute a train the trainer course and a tactical small unit leader course to support company-level leaders in the development of their small unit leaders, as they will always remain our most critical assets in the global war on terror. Concurrently, Marine Corps Systems Command, through its project managers and Marine Expeditionary Rifle Squad program at the forefront, remains acutely attuned to all equipment aspects of the Sea Viking experiments, ensuring that our marines have the best equipment available. These same innovations, when applied Marine Corps wide, will ensure that Marine Forces remain the force of readiness in response to our Nation's future needs.

Countering Irregular Threats

Consistent with the emerging challenges laid out in the National Defense Strategy, we are developing new concepts and programs to address the rising salience of irregular threats to our security especially that posed by protracted, complex insurgencies and terrorism. The rise of irregular and catastrophic challenges to international order could potentially include the use of weapons of mass destruction by non-state actors seeking to blackmail U.S. leaders and foreign policy. Exploring this challenge is a major aspect of our annual Expeditionary Warrior wargame this year.

Enabling Programs

Amphibious Warfare Ships

Amphibious ships are the centerpiece of the Navy/Marine Corps' forcible entry and seabasing capability, and have played an essential role in the global war on terror. Not only must our Naval forces maintain the ability to rapidly close, decisively employ, and effectively sustain marines from the sea, they must also respond to emerging global war on terror requirements, crisis response, and humanitarian assistance missions on short notice. The Nation would be hard pressed to satisfy both requirements with separate forces. Fortunately, we possess the ability to conduct both forcible entry and persistent global engagement with the same naval force package.

The current DOD force-sizing construct requires the capability to respond to two major "swiftly defeat the efforts" events—each of which could require a minimum of 15 capable amphibious ships. One of these crises may further necessitate the use of a Marine Expeditionary Force requiring 30 operationally available amphibious ships. Ten of these ships should be large-deck amphibious ship capable of supporting the operations of the air combat element of a Marine Expeditionary Force. Today's 35 amphibious warships can surge the required 30 operationally available warships and provide the peacetime rotation base for Marine Expeditionary Units in up to three regions.

In part due to the recognized flexibility of these platforms, as well as the projected need to enhance their power projection capabilities to support stability operations and sustained counter-terrorism efforts, many of our coalition partners are planning to acquire amphibious shipping with the capacity to support both surface and aviation maneuver elements. Such efforts acknowledge the great utility of a robust amphibious capability in the face of growing anti-access threats.

Amphibious Transport Dock (LPD)

The LPD 17 San Antonio class of amphibious ships represents the Department of the Navy's commitment to a modern expeditionary power projection fleet and will assist our naval forces across the spectrum of warfare. The lead ship was successfully delivered in January 2006. The LPD 17 class replaces four classes of older ships—the LKA, LST, LSD 36, and the LPD 4—and is being built with a 40-year expected service life. The LPD 17 class ships will play a key role in supporting the ongoing global war on terror by forward deploying marines and their equipment to respond to crises abroad. Its unique design will facilitate expanded force coverage and decreased reaction times of forward deployed Marine Expeditionary Units. In forcible entry operations, the LPD 17 will help maintain a robust surface assault and rapid off-load capability for the Marine Air-Ground Task Force far into the future.

Amphibious Assault Ship (Replacement) (LHA(R))

Our *Tarawa*-class amphibious assault ships reach the end of their service life during the next decade (2011–2015). An eighth *Wasp*-class amphibious assault ship is under construction and will replace one *Tarawa*-class ship during fiscal year 2007. In order to meet future warfighting requirements and fully capitalize on our investment in the MV–22 and Joint Strike Fighter, ships with enhanced aviation capabilities will replace the remaining LHA ships. These ships will provide increased jet fuel storage and aviation ordnance magazines, and an enhanced hanger to support aviation maintenance. The first ship, designated LHA 6, is a transitional ship to the succeeding ships in the class that will be transformational in capability and design. This lead ship is on track for a detailed design and construction contract award in fiscal year 2007 with advanced procurement funds provided in the fiscal year 2005 and 2006 budgets.

Maritime Prepositioning Force

Our proven maritime prepositioning force—capable of supporting the rapid deployment of three Marine Expeditionary Brigades (MEBs)—is an important com-

plement to this amphibious capability. Combined, these capabilities enable the Marine Corps to rapidly react to a crisis in a number of potential theaters and provide the flexibility to employ forces across the battlespace.

Maritime Prepositioning Force (Future)

In addition to the 30 operationally available amphibious ships needed to employ a Marine Expeditionary Force (MEF) during a forcible entry operation, the Maritime Prepositioning Force (Future) (MPF(F)) is the key enabler for seabasing, providing support, and sustainment for early entry Marine Expeditionary Brigades. MPF(F) enables four new capabilities: (1) at-sea arrival and assembly of the sea base echelon of the MEB; (2) projection of one surface and one vertically delivered battalion landing team in one 8–10 hour period of darkness; (3) long-term, sea-based sustainment; and (4) at-sea reconstitution and redeployment. These capabilities will be invaluable in supporting joint forcible entry operations, forward engagement, presence, and relationship building operations with allies and potential coalition partners by our forward deployed forces, as well as support of disaster relief and humanitarian operations. Additionally, this flexible asset can remain in support of post-conflict activities and forces ashore from a relatively secure location at sea. Each future Maritime Prepositioning Squadron will include one LHD, two LHA(R), three cargo and ammunition ships (T–AKE), three fast logistics ships (T–AKR), three mobile loading platform ships, and two legacy maritime prepositioning ships. This mix of ships will be capable of prepositioning critical equipment and 20 days of supplies for our future MEB.

High Speed Connectors

High-speed connectors will facilitate the conduct of sustained sea-based operations by expediting force closure and allowing the persistence necessary for success in the littorals. Connectors are grouped into three categories: inter-theater, intra-theater, and sea base to shore. These platforms will link bases and stations around the world to the sea base and other advanced bases, as well as provide linkages between the sea base and forces operating ashore. High-speed connectors are critical to provide the force closure and operational flexibility to make seabasing a reality.

Joint High Speed Sealift

The Joint High Speed Sealift (JHSS) is an inter-theater connector that provides strategic force closure for continental U.S.-based forces. The JHSS is envisioned to transport the Marine Corps' non self-deploying aircraft, personnel, and high-demand/low-density equipment, as well as the Army's non self-deploying aircraft and personnel, and brigade combat team rolling stock and personnel, permitting rapid force closure of this equipment. Additionally, the JHSS will alleviate the need to compete for limited strategic airlift assets, and reduce closure timelines by deploying directly to the sea base rather than via an intermediate staging base or advanced base. The JHSS program is currently in the early states of capability development and has merged with the Army's austere access high speed ship program. Current fielding of the JHSS is projected in fiscal year 2017.

Joint High Speed Vessel

The Joint High Speed Vessel (JHSV) will address the combatant commanders' requirements for a forward deployed rapid force closure capability to support the global war on terror. The JHSV will enable the rapid force closure of fly-in Marine Forces to the sea base from advanced bases, logistics from pre-positioned ships to assault shipping, ship-to-ship replenishment, and in appropriate threat environments, maneuver of assault forces to in-theater ports and austere ports. Army and Navy programs were recently merged into a Navy-led program office with an acquisition strategy intended to leverage current commercial fast ferry technology, and acquisition of a modified nondevelopmental item. Contract award for new vessels is expected in fiscal year 2008, with delivery in 2010. To meet the current and near-term combatant commanders' requirements, the Department of the Navy continues to lease foreign built vessels until the JHSV is delivered.

Westpac Express (WPE) is providing support to III MEF and other Okinawa-based forces, enabling III MEF to expand off-island training and engagement while reducing battalion-training days spent off island. Additionally, WPE played a key role supporting the Indian Ocean tsunami relief effort. HSC–2 "Swift" (picture below) provides a test bed for research and development prototypes as well as an operational platform in support of current real world requirements. Most recently, HSC–2 played a key role in support of Joint Task Force Katrina, providing high-speed delivery of supplies, equipment, and personnel to ships and ports along the U.S. Gulf Coast.



HSV 2 (SWIFT)

Joint Maritime Assault Connector

The Joint Maritime Assault Connector (JMAC), previously known as the sea base to shore connector, will replace the venerable legacy landing craft air cushion (LCAC) as a critical tactical level platform supporting Marine Corps assault forces, as well as joint forces operating within the sea base. In comparison to the LCAC, the JMAC is envisioned to have many enhanced capabilities, such as the ability to operate in higher sea states, increased range, speed, and payload, increased obstacle clearance, and reduced operating and maintenance costs. The JMAC is planned for fleet introduction in fiscal year 2015.

Aviation Transformation

Marine aviation will undergo significant transformation over the next 10 years as we transition from 13 types of legacy aircraft to seven new platforms. We developed a new transition strategy to better balance numbers of assault support and tactical air aircraft based on operational requirements. This strategy supports our seabasing concept and enables ship-to-objective maneuver utilizing the Joint Strike Fighter, MV–22, and Heavy Lift Replacement, recently designated CH–53K. At a distance of 110 nautical miles, a squadron of MV–22s will lift a 975 Marine battalion in four waves in under 4 hours. Similarly, the CH–53K will replace our aging, legacy CH–53E helicopter, lifting more than twice as much over the same range and serving as the only sea-based air assault and logistics connector capable of transporting critical heavy vehicles and fire support assets. An Assault Support Capability Analysis is underway to determine the optimal mix of MV–22 and CH–53K aircraft required to support ship-to-objective maneuver and distributed operations. Similarly, the short takeoff and vertical landing variant of the Joint Strike Fighter represents a transformational platform that will generate 25 percent more sorties and provide a multi-spectral engagement capability for the expeditionary strike force.

Ship-to-Shore Mobility

CH–53K

The CH–53K is our number one aviation acquisition priority. Consequently, the CH–53K received full funding in 2005 and has reached "Milestone B" status—initiation of system development and demonstrations. Our current fleet of CH–53E Super Stallion aircraft enters its fatigue life during this decade. The CH–53K will deliver increased range and payload, reduced operations and support costs, increased commonality with other assault support platforms, and digital interoperability for the next 25 years (Figure 3).

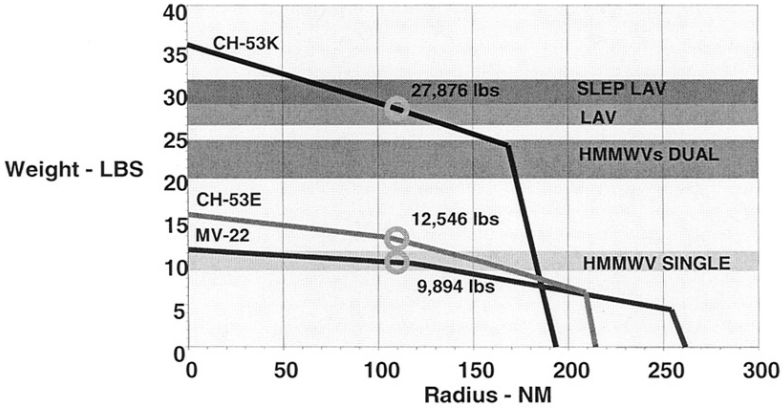


Figure 3

The CH–53K program will both improve operational capabilities and reduce life-cycle costs. Commonality between other Marine Corps aircraft in terms of engines and avionics will greatly enhance the maintainability and deployability of the aircraft within the air combat element. The CH–53K will vastly improve the ability of the Marine Air-Ground Task Force and joint force to project and sustain forces ashore from a sea-based center of operations in support of expeditionary maneuver warfare, ship-to-objective maneuver, and distributed operations.

Expeditionary Fighting Vehicle

The Expeditionary Fighting Vehicle (EFV) is our number one ground acquisition program, and it replaces the aging Assault Amphibious Vehicle that has been in service since 1972. It will provide Marine surface assault elements with better operational and tactical mobility both in the water and ashore, and will exploit fleeting opportunities in the fluid operational environment of the future. Designed to launch from amphibious ships stationed over the horizon, it will be capable of carrying a reinforced Marine rifle squad. The EFV will travel at speeds in excess of 20 nautical miles per hour in a wave height of 3 feet. This capability will reduce the vulnerability of our naval forces to enemy threats at sea and ashore. Our surface assault forces mounted in EFVs will have the mobility to react and exploit gaps in enemy defenses ashore. Once ashore, EFV will provide marines with an armored personnel carrier designed to meet the threats of the future. The EFV has high-speed land and water maneuverability, highly lethal day/night fighting ability, and enhanced communications capability. It has advanced armor and nuclear, biological, and chemical collective protection. These attributes will significantly enhance the lethality and survivability of marine maneuver units.

Supporting Capabilities

Logistics Modernization

Logistics modernization is the largest coordinated and cross-organizational transformation effort ever undertaken within Marine Corps logistics. It is a Marine Corps-wide, multi-year, three-pronged improvement and integration initiative focusing on Marine Corps people, processes, and technology dimensions. This will produce a far more effective and efficient logistics chain management process to include: supply, maintenance, and distribution processes, integration of emerging information technology, and the introduction of new occupational specialties to support these advancements.

Global Combat Support System-Marine Corps

Global Combat Support System-Marine Corps (GCSS–MC) is the Marine Corps' member of the overarching Global Combat Support System Family of Systems as designated by the Joint Requirements Oversight Council and the Global Combat Support System General Officer Steering Committee. GCSS–MC is designed to provide logistics information technology capabilities to satisfy the Marine air ground task force and combatant commander/joint task force requirements, as well as sup-

port the Marine Corps logistics modernization strategy. The goal of GCSS–MC is to provide modern, deployable information technology tools for both supported and supporting units. Achieving this goal requires the establishment of a shared data environment so that GCSS–MC data and information may be shared across the Marine Corps enterprise and with other Services and agencies. GCSS–MC is being implemented in phases, or "blocks." Block 1 provides logistics chain management and basic planning tools, while blocks 2 and 3 will see the expansion of block 1 capabilities and provide major upgrades to the Oracle software. The focus will be on logistics planning, command and control, and asset visibility.

VI. CONCLUSION

Your marines are fully dedicated to serving and protecting this Nation. Their bravery, sacrifice, and commitment to warfighting excellence have added new chapters to our Corps' rich legacy. We recognize we have an essential mission, and that we have the solid backing of the American people. The Marine Corps fully understands that our greatest contribution to the Nation is our high level of readiness across the spectrum of conflict. That readiness is predicated upon your sustained support, for without it your marines will not enter the coming battles as the well-equipped, well-led, and well-trained fighting force you have come to expect. We face the unprecedented reality of overlapping and competing fiscal priorities—resetting the force from an extended war while undertaking a comprehensive modernization plan to prepare for the challenges of tomorrow. Marines and their families greatly appreciate the unwavering support of Congress, which is material to achieving our high level of success and securing the Nation's interests.

Chairman WARNER. I thoroughly enjoyed the statement, Commandant. Well spoken, from the heart.

We will now proceed with rounds of questions. Why do we not just do, say, 8 minutes for the first round.

To both the CNO and the Commandant: The pace of operations in support of global commitments, particularly Iraq and Afghanistan, have placed a heavy strain on manpower, equipment, and other things. What are the key indicators that you most closely watch and what trends are you observing as you assess the force's OPTEMPO, readiness, and posture for continued sustained operations? Admiral, would you lead off.

Admiral MULLEN. Thank you, Mr. Chairman. In the first almost 8 months since I have been here, I have been able to travel a lot to really try to better understand what is on the minds of our young sailors. They are out doing the work for our country that we have described. I spend a fair amount of time in interaction with them, both in large groups and small, to try to get at the state of their morale, the state of their support, what is on their mind. Almost to a person, the sailors are focused on their mission, delighted to be here, eager to participate, and enthusiastic about their future.

That does not mean they do not ask challenging questions, but by and large, and whether it has been in Japan or Hawaii or in San Diego, Jacksonville, Pensacola, the Horn of Africa, the Gulf area, or up in Iraq, I get basically the same response. So they are very focused and I am very comfortable that in the kinds of things that you have described we are in good shape.

That said, I do not take a day of their service for granted. I am concerned about the high OPTEMPO for our Special Operations Forces in particular. They have been turning at a high rate since September 11. The corpsmen that are supporting the marines, the Fleet Marine Force (FMF) corpsmen, have a particularly high OPTEMPO. We are calling them up for additional duty while they are ashore. So I am anxious about that rate and making sure we have it right for them in the future.

The face of deployed Navy medicine is changing as we speak, sometimes so quickly it is hard to see exactly what it is going to be, but it is going to be different because of the deployments that they are on. That said, they are excited about what they are doing. In the battlefield, this is what many of them trained to do and they feel challenged and extremely satisfied in what they are doing.

The OPTEMPO for the rest of the Navy in some areas is up. I am supporting many more forces on the ground through mostly individual augmentees and so we are working our way through the difficulties that that creates in units. But there is a lot of talent in this Navy. This is a war for the Nation, not just one Service or two Services, and I am anxious to see the Navy pitch in as much as we can.

My wife, Deborah, has also spent a lot of time on the road with me and with Navy families, and there are certainly concerns there. But again, the families have been incredibly supportive. It is one of the reasons I focus so hard on family readiness for the future, to make sure their needs are met. Our retention numbers are up. They continue to be up at a very high rate. Again, I do not take that for granted. We work that very hard. I want to hedge against any possibility those numbers would go down in the future.

So those are some of the things that I see right now. But it is summed up by saying your Navy is in good shape.

Chairman WARNER. We are going to the Commandant. I am particularly struck, and I am glad we provide the record with the number of naval personnel on the ground in Iraq. My understanding is that you are assigning all types of experts to the IED force over there; am I correct in that?

Admiral MULLEN. Yes, sir, we have.

Chairman WARNER. In other words, you have actually got ship handlers and people who have experience with weapons and the like working alongside the Army and Marine Corps?

Admiral MULLEN. Sir, we have had the lead on the technological part of the IED task force for some time now, because we have experts in that area, in explosives in particular. But we have some other expertise which we have also stepped up and contributed to and will continue to do that to try to solve this problem.

Chairman WARNER. I am sure there is no fixed table, but what is the turnaround time for a person who has done a tour in the Iraq-Afghanistan theater, come back to continental U.S. (CONUS), and then undertake another tour?

Admiral MULLEN. Mr. Chairman, we are actually going through setting that up. It varies based on what part of the Navy you are talking about. For the sea, air, land (SEALs) it is about a two-to-one turnaround, meaning in for a period of 3 or 4 months and out for a period of about 4, 5, or 6 months. That rotation has been going on for some time by and large.

Chairman WARNER. Are they mostly with the Special Operations Forces?

Admiral MULLEN. It is about a two-to-one turnaround for our Seabees. That is another area that is running very hard and performing magnificently, as both I have seen them and General Hagee has seen them for several years now in the desert in support of the Marine Corps.

I talked about that concern with some of the medical personnel, regarding the corpsmen in particular. That is probably my tightest turn right now, the FMF corpsmen. They want to go back. They love their marines. At the same time, we need to make sure that that balance is right for the long haul with respect to our corpsmen.

Chairman WARNER. What about your aviators?

Admiral MULLEN. The aviation turnaround right now is reasonable. It is about 3.0.

Chairman WARNER. You better translate that to the person who is uninitiated in this.

Admiral MULLEN. For 6 months in, they would come back for 18 months and then they would turn again. So three times what they spent in they come back for, and then they would turn around again. That is the carrier aviation side.

Some of our oldest airplanes, particularly the P–3s, are working the hardest and that is a concern. That is a longer-term concern I have with making sure our maritime patrol aircraft are here for the future. We are starting to replace them, in the multi-mission aircraft (MMA) program that we have before Congress this year. So they are working very hard.

It is varied in various parts of the Navy. But there are many parts of the Navy that are pushing very hard to support this long war.

Chairman WARNER. Those are extraordinary figures. In the face of that, your retention rate—that means those people now in uniform who decide to re-up for another tour of duty—is above expectations?

Admiral MULLEN. Yes, sir. We have had 50 to 60 percent retention since 2000. It has been extraordinary. Again, I do not take it for granted. We work it very hard.

Chairman WARNER. Sure.

Admiral MULLEN. When I talk to sailors about going to Iraq, going on the ground, there are many of them that put their hands up and say: Throw me in, coach; that is where the fight is; that is what I signed up for; I want to participate.

Chairman WARNER. Even aviators who are willing to forego the cockpit——

Admiral MULLEN. Yes, sir.

Chairman WARNER.—to go onto the ground billets?

Admiral MULLEN. Yes, sir.

Chairman WARNER. Remarkable.

General?

General HAGEE. Mr. Chairman, I have a similar story to what the CNO laid out. You can use several metrics, but actually the most important one is to get out there and talk with the marines and talk with their families, to get that feel on how their morale is and how they are doing and what they need.

Like Mike and Deborah, Silke and I travel a great deal to talk with marines and talk with families. In fact, she is actually probably more important because they will tell her things that they will not tell me, with full knowledge that she is going to report to me on what is really going on. Like in the Navy, morale is unbelievably, unbelievably high.

Some of the metrics: Our retention is very good. In fact, a recent Center for Naval Analyses (CNA) study indicated that over the last 2 to 3 years we have retained higher quality marines than we have before. Right now, for fiscal year 2006 we are at 86 percent of our retention goal and we are matching the military occupational skills that we need, so individuals are staying.

Another metric is how often does an individual serve or what is the turnaround ratio. If you are in the operating forces and if you stay with one battalion, you are going to be over in Iraq or Afghanistan for about a 7-month period, you will come back for about 7 months, and then you will go back. So we are about on a one to one.

We do not have stop-loss or stop-move. So most of them after a couple rotations, for a few of them after a third rotation, they will leave the operating forces and they will go to, to use the Navy term, shore duty somewhere, and so they will not be exposed to another rotation.

I do an informal, unscientific poll wherever I travel, especially in Iraq and Afghanistan, and I ask individuals to raise their hands to indicate how many rotations they have made. For a normal battalion, I would say well over half are on their first rotation, there is about a third who are on their second rotation, and then a relatively small group who are on their third rotation.

Back here, one of the metrics we look at is do they have a chance to take leave when they want to take leave and do we have enough time and equipment to ensure that if they are training to go back in that they can accomplish the training that is needed. As far as equipment is concerned, obviously the main effort is to ensure that the troops in Iraq have the equipment that they need and in fact they do.

Two years ago, we took equipment out of our prepositioned stocks in order to ensure that they had the proper equipment in Iraq and that we had sufficient equipment to train with back here. Because of the supplemental, we are now replenishing those stocks. For example, last year at this time two of our three prepositioning squadrons were down to around 30 percent capability. We kept one ready to go at 100 percent. Today we have two of those prepositioning squadrons at 100 percent. The other is at over 90 percent on all equipment except for major end items like vehicles, and we are just waiting for them to come off the line. That is what the supplemental has been able to do in order to ensure that we are ready to address other contingencies.

Chairman WARNER. You mentioned your equipment. Take us through the various chapters of body armor. There have been some high points and some points that cause us great concern. Where are we today on that progress?

General HAGEE. First off, as I mentioned in my opening statement, this is a dynamic, changing battlefield. We are going against a smart and lethal enemy. As we change our tactics, he changes his tactics. We are trying to stay inside of his decision cycle to anticipate what he would do.

When we initially went over there, we went over with outer tactical vests and with small arms protective insert (SAPI) plates fore and aft, and obviously with a helmet. We have learned. We have

increased the protection provided by the SAPI plate. We have added side armor. We have added groin protection. We have added throat protection. We have reduced the weight of the helmet and now they have a lightweight helmet.

There is a tension, there is a balance between encasing the individual to where he cannot do his job and giving him enough protection to where he is protected and he or she can accomplish that particular mission, and we are constantly trying to balance that.

I think in the future we need to look at new technologies to reduce the weight of the equipment that we are asking these marines and soldiers to carry right now. But right now I am very happy with the personal protection that we have provided to those marines. But we are not looking back. We are trying to determine where the next threat will come from and how to use technology better.

Chairman WARNER. Your armored vehicles which you are operating?

General HAGEE. Yes, sir. As far as the Humvees are concerned, we are a mixed fleet right now. We have the M–1114, which is the factory-produced up-armored Humvee, and we have the Marine Armor Kit (MAK), which is just about as good as the up-armored Humvee except for undercarriage protection. By July we will have a full 1114 up-armored fleet. The MAK vehicles that we are using right now are actually quite good and we have already offered some of them to the Army, if they need to supplement their fleet.

As far as the 7-ton truck is concerned, the medium tactical vehicle replacement (MTVR) we are armoring that, with a Marine Armor System (MAS). We have close to 900 of those vehicles armored, and that is the requirement there, in theater by May of this year.

Chairman WARNER. Thank you very much.

Colleagues, I ask those questions because each of us are getting so much mail, and understandably, from concerned people, particularly among the retirees. I heard from my colleagues who a half century ago I served with in the Marine Corps, very concerned about it. I am going to have your answer reproduced and send it back to a number of very important inquiries that I have received.

Thank you very much.

General HAGEE. Yes, sir.

Chairman WARNER. Senator Levin.

Senator LEVIN. Thank you, Mr. Chairman.

First, General Hagee, the recently released QDR proposes that the Marine Corps end strength be stabilized at 175,000 Active-Duty personnel. I believe you stated that you believe that the Marine Corps' end strength probably needs to be at 180,000 marines and you are launching your own study to reexamine the issue. Where are you on this? Is it your current assessment that 175,000 will do the job and allow you to meet all of your assigned missions, or do you feel it likely that you are going to need 180,000?

General HAGEE. Sir, based on the battlefield the way it looks today, the current environment, both the operational environment and training environments, I believe we need around 180,000 marines.

I would like to step through just a little bit of how we got to where we are. We are funded, our baseline program is 175,000. Congress authorized an additional 4,000 over the past couple of years, with funding to come from supplementals. The law also allows us to go 3 percent above the authorized level in times of war, once again the difference between paid by supplementals.

That is approximately where we are right now, at about 180,000. Our last Marine Corps structure review was in 2003. Several significant things have changed since then or really happened since then. One, our major war plans are undergoing an extensive review. Two, of course the QDR was issued. Just last month, we stood up MARSOC, which will ultimately have 2,600 marines.

So with those changes and after discussions with the Secretary of Defense, I stood up a capability assessment group. They are working right now. They are headed by Major Steve Johnson, who just returned from a year in Iraq. He was the senior marine in al-Anbar Province. They are going to report out late spring, early summer on the capabilities and capacities that the Marine Corps could provide to the joint force commander.

Senator LEVIN. In this respect, though, the recently-issued QDR did not reflect your current view; is that accurate?

General HAGEE. That is correct.

Senator LEVIN. On reset funding, you have made reference to the need to repair and replace Marine Corps equipment that has been either destroyed or damaged or used to its life expectancy. You indicate, I think, that your current reset requirement is $11.7 billion?

General HAGEE. That is correct, sir.

Senator LEVIN. How much of that is covered in the 2006 and 2007 request?

General HAGEE. $5.1 billion is covered in the current supplemental request for 2006. The balance of that was deferred to 2007 and the bulk of that deferment was because of execution problems. Industry just could not—we could not obligate and execute it in the year.

Senator LEVIN. Are you able to obligate or execute more than $5.1 billion?

General HAGEE. Yes, sir, we are.

Senator LEVIN. How much more?

General HAGEE. Probably around $1 billion.

Senator LEVIN. So that is basically an unmet requirement right now?

General HAGEE. Yes, sir. We could execute it, but, as I said, it has been deferred to 2007.

Senator LEVIN. Right. Okay, that is something we obviously will want to take a good look at. I think one of the highest duties we have is to fulfill that requirement and to do it on time. Thank you as always for your direct answers.

Admiral Mullen, the 2007 budget request funds a level of 36 steaming days per quarter for deployed ships, which is below the Navy's goal of 51 days per quarter. First of all, do you agree with that decision to reduce the steaming days? How would this reduction in the availability of deployed ships affect the regional combatant commanders' ability to execute their missions?

Admiral MULLEN. Yes, sir. Clearly I support what we submitted from a budget standpoint with respect to the readiness, and I made a conscious decision to take the resources from deployed steaming days. What sometimes is not as clear is that we have invested a lot of resources in the last several years in our readiness accounts and we now routinely sustain the availability of delivering six carrier striking groups within 30 days.

We did not in any way, shape, or form touch the ability to sustain or surge and sustain that requirement. We made a conscious decision to hold that investment steady so that we can respond should we be called to.

Clearly, we need to work our way through those deployed steaming days, some of which it has happened in the last couple years that there will be supplemental funds which will be supplied tied to unanticipated requirements that will add to that. Last year it was about 4 or 5 days. Then should the requirement and the combatant commanders' demand deem it necessary in terms of operations, I would be put in a position to have to adjust resources and execution to meet that requirement.

Senator LEVIN. Does the 2006 supplemental contain additional steaming days?

Admiral MULLEN. Yes, sir, some is in the request. But this was not "go get it in the supplemental." The consistency of request with respect to the supplemental has been those operations which we anticipate will be tied specifically to the war, as opposed to anything that would be normal.

Senator LEVIN. Is the goal of 51 steaming days per quarter changed?

Admiral MULLEN. No, sir, it is still there.

Senator LEVIN. It is not going to be met?

Admiral MULLEN. Under the current budget as it sits right now, no, sir. Clearly the deployed days, those days in theater will not change. What will change will be days at sea. The other piece that is starting to come into discussion is the fact that there will be important engagement opportunities in places around the world that will not require steaming, basically at-sea days as we engage with our partners and future partners around the world.

Senator LEVIN. What effect is there on readiness from this proposed——

Admiral MULLEN. From an overall readiness standpoint, it goes back to training, we have not affected the training, we have not affected the preparation or the overall readiness per se.

Senator LEVIN. Did the combatant commanders concur in this decision?

Admiral MULLEN. I did not actively seek their concurrence, although they have concurred in the budget, I guess is how I would put it.

Senator LEVIN. General Hagee, do you have any underfunded or unfunded force protection items?

General HAGEE. Unfunded force protection items? No, sir.

Senator LEVIN. Mr. Secretary, let me ask you about the recent press articles relative to the number of sexual assault allegations at the Naval Academy. Apparently it has risen sharply over the last 4 years, despite the June 2005 report of the Defense Task

Force on Sexual Harassment and Violence at the Service Academies. We at this committee, as a matter of fact, have obtained very strong commitments to take appropriate action in order to overcome hostile attitudes and illegal and inappropriate actions towards women.

What actions are you taking now to overcome these actions?

Secretary WINTER. Sir, there were a number of actions that are being taken by the Superintendent and the Commandant to improve the overall environment at the academy. This is an area that concerns me greatly. It is an area where we need to continue to maintain a very high degree of focus and attention. It encompasses a number of aspects, including educational efforts as well as support to victims.

The whole Sexual Assault and Victim Intervention (SAVI) program has been established to ensure that we are able to deal with such cases in an appropriate manner. We have pushed to get increased reporting rates and to some extent we are not sure how much of the increase is representative of a greater flexibility or a greater willingness, if you will, on the part of victims to report those incidents and how much of that has to do with the actual increases in incidents at the academy.

This is something that we will continue to take a look at very aggressively. It is an area that I have reviewed already on several occasions and continue to look into this matter.

Senator LEVIN. Let me just conclude by saying I know that this committee, Chairman Warner, and every committee member has expressed very deep feelings about these events over the last few years. Our committee has held a number of hearings on this subject.

If you want to expand on your answer for the record, I think it would be welcome. Tell us what specific actions are under way now and what additional actions are contemplated relative to the academy.

Secretary WINTER. I would be pleased to do that, sir.

[The information referred to follows:]

Over the past few months I have made multiple trips to the Naval Academy and it is clear that there is a strong commitment by the Academy's leadership to address sexual harassment, misconduct, and assault prevention and response. This commitment is illustrated through an aggressive program of education, by dramatically increasing the number of females in leadership roles at the Academy, by implementing a tough new alcohol education and accountability program, and by holding midshipmen accountable for their actions while actively assisting victims.

In the education area, the focus is to improve the overall culture within the brigade with respect to gender issues, and to prevent sexual harassment, misconduct, or assault. Education initiatives include expansion of focused prevention and response awareness training in multiple venues including academic classrooms, guest presentations, and company-level training sessions. The Academy Board of Visitors, the Secretary of the Navy Executive Steering Group, and Senior Leadership have been analyzing feedback from midshipmen, parents, faculty, and alumni surveys in order to adjust the curriculum and keep it current. Additionally, national experts and the Academy's leadership are conducting a review of the academic curriculum to increase the focus on leadership, ethics, and gender issues while developing evaluation measures to assess progress across each of the issues.

Over the past several years, the Academy's leadership, with the full support of the Navy's leadership, has undertaken an active program to increasing the number of female role models at the Academy with fleet experience. Currently, with a student body comprised of 17.6 percent female midshipmen, 29 percent of the Acad-

emy's officer staff are women. This talent pool of professionals serves as mentors and advisors for both male and female midshipmen.

In the last month, the Academy's leadership has implemented a very aggressive and forward-looking alcohol education and accountability program. This forceful approach to what is often a causal factor to sexual harassment, misconduct, or assault is a key element of the holistic approach to address these issues. The program sets very specific expectations for the midshipmen with respect to alcohol use and holds them accountable if they violate the regulations. The range of options to address violations goes from counseling, to medical treatment, to punishment that can include discharge from the Academy. The Academy's leadership has demonstrated that it does not tolerate sexual harassment, misconduct, or assault. They aggressively investigate charges and hold midshipmen accountable for their actions in accordance with regulations and the Uniform Code of Military Justice. Additionally, the Academy has an aggressive Sexual Assault and Victim Intervention program with educators and victim advocates throughout the Academy's chain of command, from the superintendent's office to the company level in the brigade of midshipmen.

Lastly, any effort designed at instilling dignity and respect into midshipmen must build a culture of honor and personal integrity that the midshipmen can carry to the fleet and the Fleet Marine Force. The Brigade Honor System, and recent changes to the execution of this system, increasingly empowers midshipmen to discuss, train, and respond to honor violations in a more personal manner in order to develop and refine their leadership skills across the wide array of challenges facing today's young officers.

I absolutely share your commitment to ensure that all sailors and marines serve in a workplace free from racial, ethnic, religious, and gender discrimination and in an environment where honor, courage, and commitment are embraced and revered. I am convinced that the Academy, through the above initiatives, is moving in the right direction but I also recognize that this is a process of continuous improvement. I assure the committee that I will be actively engaged to ensure improvement does occur.

Senator LEVIN. Thank you, Mr. Chairman.

Chairman WARNER. I would only add to my colleague's observations, he is quite correct, but when we had a serious problem with the Air Force Academy I think the committee as a whole authorized me as chairman to say we have a zero tolerance on this issue. Repeat: zero tolerance. Unless the military departments come to grips on that basis, then we in Congress will exercise every right we have under the Constitution, because there are specific directives under the Constitution to Congress with respect to the care and treatment of the uniformed people.

Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

Mr. Secretary, I would just like to add my corroboration to the comments made by Senator Levin and Senator Warner. I think maybe you ought to get down to the Naval Academy pretty quick and find out what is going on. I have the highest regard for the Superintendent and the personnel who are in charge down there, but there is an obvious problem and, unfortunately, as Senator Warner mentioned, we have seen this in the other service academies and we need to stop it quickly. So I urge your personal involvement along with Admiral Mullen.

General Hagee, how is marine enlistment and reenlistment?

General HAGEE. Sir, we are doing very well in both areas. As far as recruitment is concerned, we are about 101, 102 percent through the end of February. We are entering the most difficult months—February, March, April, and May—and all of our projections show that we are going to make our number this year, and not only are we going to make our number, but we are recruiting really high quality young men and women into the Marine Corps.

Senator MCCAIN. Retention?

General HAGEE. On retention, we are about 86 percent of our fiscal year 2006 goal today. We also have a very good military occupational skill match, so we are retaining the right individuals. We are very optimistic that we are going to make our goal just like we did last year. Actually, last year we went over slightly. I would not be surprised to see us go over slightly this year.

Senator MCCAIN. Reenlistment is highest in the combat areas?

General HAGEE. It is, sir.

Senator MCCAIN. Remarkable, is it not?

General HAGEE. Yes, sir.

Senator MCCAIN. Admiral Mullen, I understand you have provided us with a very detailed plan for the Navy. Ultimately you see a sustained 313-ship Navy, 11 aircraft carriers, 62 *Arleigh Burke* destroyers, 7 DD(X)s, 19, et cetera. There are reports from the Congressional Research Service (CRS) and CBO that it will cost $20 billion a year in order to maintain that 313-ship Navy. Yet the Navy estimates $14 billion a year. How do you account for the differential there?

Admiral MULLEN. The analysis that we did—I took that on when I came back here to look at that first and looked at the last 20 years of shipbuilding in terms of the amount of the investment, and in 2005 dollars it comes out to about $11 billion. To look at getting to 313, with validated assumptions about inflation and cost growth, I estimate that it is about another $2.5 billion. So my estimate is $13.5 billion. You said $14 billion, but $13.5 billion in 2005 dollars throughout.

That is really, I believe, within reach. We have worked with CRS and the other analysts who have criticized this and actually narrowed our differences in terms of assumptions, and there were some assumptions that were different that get to that level, and I do not concur with some of those. At the same time, I recognize that affordability is a real challenge. I have to control costs in these major accounts. I am committed to doing that.

The goal initially was to get a plan on the Hill to try to stabilize, have a number, everybody understand it, establish a relationship with the Hill, a strategic relationship with the Hill and with the industry, so that we are all on the same page and we can move forward.

Senator MCCAIN. Let me tell you, the major thrust of this committee for a while now is going to be procurement costs. The escalation in procurement costs, if it in any way approximates what it has been over the last 5 to 10 years, there is not a snowball's chance in Gila Bend, Arizona, that we are going to be able to maintain this 313-ship Navy at $14 billion a year. It is not going to happen.

So I would be glad to look at your cost estimates as far as inflation is concerned. I never thought I would live so long as to see a destroyer that cost $2 or $3 billion, CVN at $13-plus billion each. These are staggering numbers, Admiral.

Admiral MULLEN. Yes, sir.

Senator MCCAIN. You have to also take into consideration that if history proves any guide, and it does, that you see cycles of increased defense spending and decreased defense spending. So I would like to see some kind of assurance that we are getting the

inflation associated with procurement under control. Then, in all due respect, your numbers will be a lot more credible to me, because the past 10 to 15 years the cost escalation has been astronomical.

You know what is frustrating is that the people that build these weapons systems will come and say: "Well, it was not any fault of ours; it was the Navy or Army or Air Force requirements for technological changes." Stop the technological changes, stop.

Admiral MULLEN. I have given that guidance.

Senator MCCAIN. Fire somebody that did not plan on the technological changes that somehow increased the costs of a Future Combat System from $90 billion to $130 billion, and we have not seen the first piece of equipment yet.

So procurement is going to be, and is actually, one of the major focus of this committee's deliberations. I do not know how we impose cost controls, but I know that you will never see a 313-ship Navy if these inflations in costs that have taken place over the last 10 years prevail, and that saddens me because I am old enough to remember when we were going to have the 600-ship Navy, as my dear friend the former Secretary of the Navy knows.

So I cannot emphasize enough getting these cost escalations under control. Frankly, the other thing I worry about: We always take care of the high end, the JSFs and the F–22s and all of the very expensive pieces of equipment. When you look at the threat today, we may not be doing enough at the low end of the threat, which does not benefit defense contractors nearly as much as the high end does. So I think we ought to look at that as well.

Secretary Winter, please, I want to allow you to respond.

Secretary WINTER. I am committed to that. I recognize if it keeps going like it is going we will never get there. That is why I put the plan here and to control those costs is goal one inside these programs.

Senator MCCAIN. Again, I hate it when old people recall golden days of yesteryear, but the fact is that during the 1980s we had fixed cost contracts. Now we seem to have done away with fixed—you are leaving in the middle of this diatribe? [Laughter.]

Chairman WARNER. There is a small problem with the floor, in case you have not heard.

Senator MCCAIN. You hurt my feelings, Mr. Chairman. I will get the tape for you.

So, Admiral, you see my point. Mr. Secretary, you see my point. Really, I do not know why we have had to get away from fixed cost contracts. I do not get it. So if I had a very, very high priority—and I know you do, I know you do. But I would hate for us to not be able to afford what we need just because the cost escalations associated would not allow us to procure enough of this equipment to get the job done. All of us appreciate how thin our forces are spread today.

So I would be glad to hear any answer. Mr. Secretary, I would be glad if you would like to make a response.

Secretary WINTER. Yes, if you could, sir.

Senator MCCAIN. First, we should shut down the Electric Boat Company, is the first thing, Senator Lieberman. [Laughter.]

Senator LIEBERMAN. You meant Newport News, did you not? [Laughter.]

Secretary WINTER. Sir, as a former systems engineer and program manager of large activities, one of the experiences that I took from that is that critical to any cost containment activity is getting real control over the requirements process and the configuration management process. It is because of this that I have been really encouraged by what I have seen at the CNO's direction within the Operational Navy (OPNAV) staff in terms of the standup of the Naval Characteristics Board. I am personally working with the OPNAV staff, as well as with the research, development, and acquisition (RDA) staff, to be able to evolve that board into one which has the power to really control the requirements process.

I think if we do that we will go a long way to being able to provide some real stability in the overall shipbuilding processes here. That is one part of what we have to do.

There are also a number of elements that the contractors are going to have to do in terms of making the appropriate investments, in terms of the capital plant, investments in the workforce, and investments in the processes. Part of what I have taken on is to make sure that we communicate to the industrial base our expectations in those regards.

Senator MCCAIN [presiding]. Also you call in some smart people as to what the threat is and figure out whether we are addressing the low end of the threat as well as the high end of the threat.

Just one more question, Mr. Secretary. Last week we heard testimony from the Air Force concerning the decision to cancel the JSF alternate engine contract, leaving just one source, Pratt and Whitney, to provide engines for the entire life cycle of the JSF. When the Chief of Staff of the Air Force was asked why the decision was made to terminate the F136 JSF alternate engine program, he answered that the Navy did the analysis, they could not afford it, and so Navy asked that the alternate engine program be terminated. Is that your version of events?

Secretary WINTER. Sir, I am not in a position to comment on the specifics of the process that went on last year before I came into this office. But I will say that in conversations with both Navy and Air Force personnel within the building there does appear to be a common view that this is a reasonable risk to take, that the maturity of the——

Senator MCCAIN. Yes, but my question is was it the Navy that made the decision?

Secretary WINTER. I am not——

Senator MCCAIN. Go back and look and find out.

Secretary WINTER. Yes, sir. We will get back to you on that.

Senator MCCAIN. Give me a written answer as to whether it was the Navy that made the decision that drove the process here.

[The information referred to follows:]

Air Force and Navy participated in a number of reviews during the fiscal year 2007 budget formulation process where the benefits, risks, and costs of maintaining the F136 alternate engine were considered. The proposal to cancel the Joint Strike Fighter alternate engine originated in Navy, was not objected to by Air Force, and was approved by the Department of Defense incident to the submission of the fiscal year 2007 budget.

Admiral MULLEN. I can comment on that, sir.

Senator MCCAIN. Go ahead, Admiral.

Admiral MULLEN. It was not the Navy. It was a joint decision. I think Secretary Wynne's comment, if I read it correctly in the paper, that it was proposed by Navy may have been accurate. This has been something we have been considering in the two Services, not just this cycle, but in previous cycles, and we think that from a risk standpoint it is low. We are trying to recapitalize. It is not an insignificant amount of money, and the analysis that underpins this in my view supports the decision.

So I considered it to be a joint decision.

Senator MCCAIN. I do not want to drag this out, but you run the risk of a noncompetitive situation, number one. Number two, we never should have assured our allies and friends, the British, that they would be part of this effort, and it is going to cost us in our relations with the British. They are taking this very hard. These are the people that are helping us in Iraq and whose young people are fighting and dying, and they feel with some justification that they were very badly misled on this issue, particularly their investment in the JSF.

So I would like to look into this a little further. Again, you run the risk if there is only one game in town, you are either going to impose cost controls on it or costs are going to run out of control. So it is a risky business, I think, particularly given the history we have in the development of aircraft engines.

I thank the witnesses. Senator Lieberman of Electric Boat Company. [Laughter.]

Senator LIEBERMAN. Thank you, Mr. Chairman, for that unsolicited and unwelcome plug.

I was about to say that I agree with what Senator McCain said about the focus that we need on acquisition costs. I talked in my opening statement about the fact that we have too few ships and submarines in the Navy and we have to help you get up to that 313 you want. There is a gap in funding that Senator McCain's questions pointed out.

I appreciated, Admiral Mullen, that you said that basically by your numbers, comparing the $11.1 billion you have given now and the $13.5 billion you think you need, that we are still about $2.5 billion short in helping you achieve the goal of a 313-ship and submarine Navy in 5 years. I think we ought to try the best we can on this committee to close that gap.

The other side of it obviously is acquisition costs and what we can do to bring them down. I do want to certify for the record for my friend from Arizona that I have been to Gila Bend, Arizona. It is a very hot place, so snowballs do not stand much of a chance there. I think that is exactly the point.

I do want to focus a bit on the submarine program. Obviously it is of great not only concern but pride to us in eastern Connecticut and western Rhode Island.

Senator REED. All of Rhode Island.

Senator LIEBERMAN. All of Rhode Island, that is true. It is a small State, but there are those of us who love it. The same is true of Connecticut.

We have now 56 attack subs in our fleet. The QDR states a minimum force requirement of 48. Am I right Admiral?

Admiral MULLEN. Yes, sir.

Senator LIEBERMAN. Maybe people will say the combatant commanders always ask for more, as much as they could possibly use. But their requests are up, a total of something like 70 attack subs. We are on a program now to build one attack sub every year until 2012 and I fear that you are being squeezed into this because we are not giving you enough resources.

At that rate, as I look at the charts that the Navy itself has prepared, at one a year in 2018 we go to 46 subs in the fleet. I think you know that a bunch of us here would like to see if we can get to two a year, which by your proposal, the Navy's current proposal, occurs in 2012, earlier than that, optimally in 2009.

Incidentally, in regard to Electric Boat (EB), we are proud of the fact that EB really has achieved great efficiencies and of course maintained high quality in production of submarines. I know you have set a goal here to take the cost of the *Virginia* class submarine from $2.5 billion down to $2 billion. I am real proud that the folks at EB have not said no to that. In fact, they have pretty much said: We think we can do it, but we need two submarines a year to achieve those numbers.

I hope we can work together on that to achieve both the cost savings you want and to keep our submarine fleet at the numbers it needs to be, particularly as the Chinese grow their fleet of submarines and get more sophisticated.

The question is a subpart of this and it is an immediate crisis. For the first time in over 40 years, there is no new submarine design on the drawing boards and current design programs are near completion. The effect of this is a pressure on EB, which is the center of design and engineering for the submarine fleet, to begin to lay off engineers and designers. They have announced that almost half of their design and engineering force will be laid off by 2008 unless something happens.

My first question is, is that threat to the submarine industrial base of concern to you? Secretary Winter, maybe I will start with you on this one.

Secretary WINTER. Certainly, sir. This is an area of great concern. There are certain unique aspects, obviously, of nuclear submarine design and construction that we need to be concerned about maintaining for the long-term. I am very concerned, not only in the immediate future, but out in the out years, if you will, making sure that we have the ability to do the design work that is going to be needed for a variety of submarine activities, whether they are missile-capable submarines or fast attacks.

To that end, this is an area that I am spending a good bit of time looking into. I want to understand better the critical skills that really are needed, that are unique here to the nuclear submarine business, that need to be preserved. I need to understand the various options that exist to be able to preserve those critical skills, how we can deal with that through design modifications, updates, and the investments that we are making right now in the *Virginia* class and to improve the cost efficiency of the production process.

I need to be comfortable that we are dealing with this not only in the short-term, but in the long-term. This is an area where I have started an interaction with the folks at EB, and intend to continue it on over the next several weeks, and already have set up several meetings with the leadership there and also with the corporate leadership, to make sure that we are communicating effectively and that the Navy's interests are well-understood.

Senator LIEBERMAN. I appreciate that very much. Obviously, your own background prepares you well to deal with these kinds of questions and I look forward to working with you on it and seeing if there is a way. Obviously, if we move to two submarines earlier that creates more work. But there may be other ways to take advantage in a really productive way of this extraordinary and unique capacity that we have, and not lose it, because we are going to need it again.

Admiral Mullen, let me ask about the other part of our center of submarine excellence, and that is the submarine base. As you well know, the Base Realignment and Closure (BRAC) process was a near-death experience for Submarine Base New London. But, praise the lord and the BRAC Commission, we are alive, and we want to stay well. We think that is good for the Navy and good for the Nation's security.

Recently you announced a decision to meet the 60–40 Pacific-Atlantic recommended split in the submarine fleet to move three subs from New London. I must tell you that around the area there is a concern—I want to give you a chance to respond to it—that this reflects that, though the BRAC Commission overturned the Navy's recommendation to close Submarine Base New London, in some sense you are not valuing Submarine Base New London and that it may be squeezed as time goes on.

I want to give you this opportunity to just speak a little bit about the place you see Submarine Base New London having in the Navy in the years and years ahead.

Admiral MULLEN. New London is a critical base to us and, as you have described it and I agree with you, it is the center of excellence for submarine warfare and for our submarine force. As we previously discussed, the decision to move the submarines off the east coast was one we looked at throughout the QDR and really I believe that focus on the Pacific with what we have and what potentially could be there in the future, is the right focus.

Clearly, and you have specifically spoken about the submarine threat, the potential, the submarine build, if you will, that the Chinese are on right now and the need to be able to respond to that. It is just the physical dimensions of the Pacific, the long legs, the kinds of capability that needs to be there, and that is why we went to 60–40.

But the commitment to New London and the commitment to that as a base is unwavering from me as the Chief, and it will be in the future. This is not about what BRAC looked at or what BRAC did any more. It is about where we are and what we need to commit to for the future. That is exactly where I am.

Senator LIEBERMAN. I appreciate that very much.

Is it reasonable for Submarine Base New London and the area to have some optimism about the future homeporting of additional attack submarines?

Admiral MULLEN. Yes, sir, I think it is reasonable. There are expectations that the *Virginias* will be on the east coast, that the *Virginias* that are commissioned, will be homeported there, for much the same kind of reason that you and I talked about with the SSN–21. All located in the same place, there are great efficiencies tied to that. So expectations are clearly in that direction.

Senator, if I could just speak briefly to the two submarines a year.

Senator LIEBERMAN. Yes.

Admiral MULLEN. I am well aware that this plan has been initiated. One of my concerns as we generate the plan and try to create the stability is that we start to unravel it. I am committed to two submarines a year. We built them at a great number. We are not going to build them at the same kind of number, which is fundamentally why the size of the force is reduced.

I face this issue on the cruiser-destroyer side down the road as well, when we start decommissioning cruisers that we built at a larger number and we will have to replace most likely at a smaller number.

So I am anxious to get to two a year. Were I to go to two a year starting literally in 2007 to get to the 2009, that would generate a $6 to $7 billion movement inside my program, which would potentially destabilize what we have right now. What I will commit to you is in my review this year I will look at doing it as early as I possibly can. But I do not want to raise false hopes that I think I can move that to 2010 or 2009 at this particular point in time.

That is just where I am. Clearly I will carry out the will of Congress and the will of the people should it be determined. That is what I have decided I am going to do. But that is the instability.

To Senator McCain's comments, I am anxious to take the Navy off the table in this discussion because we change requirements, because we have to have the next best widget on whatever it is. When I am convinced that *Virginia* in particular is as close as it can be—and I will work my way through that to get to this $2 billion. I need to be that, but I have been very clear that $2.1 billion is not going to work for me. I have drawn that line to get at the kinds of cost control issues that we are all trying to achieve here.

Senator LIEBERMAN [presiding]. Fair enough. We will continue the discussion about how soon we get to two a year. But I want to thank you for your reassurance on Submarine Base New London and I will take it back home with me.

What an honor it is—it makes me feel as if I am in the other committee we are on—to turn the chair over to Senator Collins.

Senator COLLINS [presiding]. Thank you. It is a great honor to be temporarily chair of the Senate Armed Services Committee. I want to assure my friend and colleague from Connecticut that that is good news for submarines, it is good news for destroyers, it is good news for shipbuilding in general. General, in case you are concerned, I also take care of the Marines.

General HAGEE. I was getting concerned.

Senator COLLINS. I think we are going to be fine on all fronts.

Senator McCain jokingly said that he is old enough to remember when we were talking about a 600-ship Navy. But in fact it was not that long ago. I certainly remember it, and in fact the naval fleet has shrunk by more than 50 percent in the past 15 years, to just 281 ships today. That is an issue of great concern to me, to many members of this committee, and to Congress.

So, Admiral Mullen, I want to start my comments by commending you for your impressive effort to produce a consensus shipbuilding plan for the future that calls for a 313-ship fleet. I am also pleased to see that the QDR recognizes and endorses the need for a larger naval fleet.

I am concerned, however, about the funding issue because, as my colleagues have talked about, we really should be funding shipbuilding at $13.5 billion a year and I want to help you get to that goal. Senator McCain brought up the cost growth in a lot of procurements and indeed we have seen cost growth. But is not the instability and lack of predictability in funding a major contributor to cost growth? What the shipbuilders tell me is if they cannot plan the work effectively or if we have uneconomical procurement rates, whether it is in submarines or destroyers, that drives up the cost. Would you agree with that, Admiral Mullen?

Admiral MULLEN. Yes, ma'am, I would. I think that is part of the goal of trying to stabilize the account, invest in it every year, get to—we are at $9.7 billion in new construction this year—the $13.5 billion. I am now in a position for the most part as the Chief to be able to put the money in from the Navy's perspective and hold it there. I think that is really important, so that the shipbuilders can plan in the future and will take their money and invest in efficiencies that they know will be there because there is going to be a plan and it will not change year to year.

So I understand that and am very much committed to that. That is part of this discussion about taking the instability the Navy has created in recent years off the table. Controlling the costs, as the Secretary has described, is also mandatory, and putting us in a position where I seek threshold values in capabilities as opposed to objective values in capabilities, because objective values are very difficult to achieve, very expensive, or almost unachievable, yet we can put enormous resources to them.

So it is that kind of cost avoidance and oversight of what we are doing with our resources that is different than what we have had in the past in the Pentagon.

Senator COLLINS. Secretary Winter, we have discussed this issue numerous times also and I know you understand very well the need for a predictable funding stream and that if we have that it will help lower costs. But it also is important because it helps us maintain a skilled industrial base. If we have to keep letting designers and construction people go and then hire them back later, that increases training costs and also leads to questions about whether we can sustain the capability to meet future threats as well.

That leads me to bring up an issue that affects not only Bath Iron Works in my State, but also the Portsmouth Naval Shipyard in Kittery. Again, when we look, when we project to the future, we

see workloads that go up and down, cause layoffs, and then hiring people back. It is an inefficient way to operate.

What do you think we can do to try to smooth out the workload so that we can have more efficiencies and lower costs?

Secretary WINTER. Senator, I think there are two elements that I would really want to focus on here right now, one of which is to further the CNO's construct of laying out a plan and sticking to it. I think this is very important. I think that if we communicate to the industrial base what the expectations are and can in fact affect those, so that we can in fact do what we say we are going to do, then I think it is reasonable to expect the industrial base to make the investments that are necessary in the physical plant, in the processes, and in the people to make sure that we have the capability that we want, not only now but in the future.

In a similar sense in terms of the public yards, one of the things that I have asked for is a more structured process associated with the selection of yards, the work allocation function, if you will. It is just, if you will, my predilection or my preference for formalized processes for these things, and I have asked that that process be established. I expect that they will be getting back to me shortly within the next month or two.

I hope that when we go through that process we will have a mechanism of decisionmaking and communication which will help both the public sector and the private sector as well to understand what they can expect in terms of future activities at these various facilities.

Senator COLLINS. I think those are excellent efforts and I look forward to continuing to work with you on that issue. I would also encourage the Navy in deciding the allocation of workload at our four public yards to always keep in mind the fact that the Portsmouth Naval Shipyard has the most efficient low-cost record. The Maine and New Hampshire delegation last year produced for you a suggested way to even out the workload. Actually, it was produced originally for your predecessor. We have updated it this year and shared that document with you. So we hope to hear back from you on that as well.

Admiral Mullen, in the time that I have remaining I want to talk a little more about the DD(X). There has been a lot of criticism or suggestions that there are too many bells and whistles, if you will, on the DD(X) that have driven up the cost. Certainly I believe that there is a point where you simply have to draw the line and say we have the cutting edge technology we need and we cannot keep trying to get that marginal improvement at a large cost.

But in fact, a lot of the increased technologies that are on the DD(X) are absolutely essential. The Marines are counting on the increased firepower. We know that its stealthier design is critical. An important aspect of the DD(X), an advantage that has not been discussed that much, is it allows for a dramatically reduced crew size, and that in the long run reduces the life cycle cost.

So could you comment for the committee and for the record on the technological advances that the DD(X) offers?

Admiral MULLEN. Yes, ma'am. I think DD(X) is a tremendously important and critical investment for future ships, not just destroyers but for future ships in the United States Navy. There are sig-

nificant warfighting capabilities it brings. You mentioned the fires piece, but it will bring great capability in air defense, great capability in undersea warfare, with the investment in technologies that are going into that.

It will be a much more integrated ship than any ship we have fielded to date. As you said, it will have a reduced crew. One of the things that gets lost in the discussion about DD(X) is that because of the reduced crew and other investments, the life cycle costs for this ship versus others are significantly lower. Sometimes we have a tendency here to just focus on what it costs to get it out the door. I am dealing with life cycle costs of many platforms that were not considered many years ago on a regular basis. I want to try to minimize those for my reliefs down the road, and DD(X) will take steps, significant steps, in that direction.

The crew is dramatically smaller. The technical investments in the kind of computer networks that it has, the kinds of stealth technologies that it will bring, all of that does not just benefit DD(X); it will benefit investments in future amphibious ships, investments in CVN–21, and investments in our submarine force. I am seeing more and more of that across all of the platforms that we are investing in.

So it is a vital investment, not just because we need another destroyer, but really for shipbuilding. It is the research and development base in the ship world that we did not have 10 years ago.

Senator COLLINS. Thank you very much.

Senator Akaka.

Senator AKAKA. Thank you very much, Madam Chairman.

Mr. Secretary, according to your testimony, winning the global war on terrorism is the Navy's number one strategic priority. Toward that end, I see that the Navy has taken on a number of operations designed to enhance homeland security. I have asked questions about Pacific Command (PACOM) and also Northern Command (NORTHCOM) in regard to Hawaii and homeland security. I know the Navy and the military have played a huge part in that kind of security.

My question to you, Mr. Secretary, is how does the Navy plan to balance its manpower requirements for homeland defense and its more conventional operations, as has been discussed, during this time of force reductions? Do you envision a more expanded role for the Navy Reserve in that regard?

Secretary WINTER. Senator, we are in fact adjusting the Navy to be able to play a more extensive role in terms of the global war on terror. When you take a look at the expeditionary security aspects that we are dealing with around the world right now, everything from riverine forces to maritime security activities, visit, boarding, and search and seizure efforts, focused to some extent in the Persian Gulf right now, but all being prepared to support those on a worldwide basis, that is an ongoing effort that we are going to have to continue to look at in terms of ensuring that we are able to deal with the broad spectrum of threats that may come at us, not just in the currently defined area of responsibility (AOR) in Iraq and Afghanistan, but on a worldwide basis.

This is an aspect that is going to continue to receive a lot of attention and continue to evolve as Fleet Forces Command evolves

the overall capabilities that they are in a position to provide to the various combatant commanders (COCOMs).

CNO, would you care to comment further on that?

Admiral MULLEN. Thank you, Mr. Secretary.

Just a brief comment, Senator Akaka. We are gradually reducing our numbers and my next—we talked about 313 ships. I have about 357,000 sailors on Active-Duty right now, and my next challenge in terms of numbers is to determine the right end strength for the United States Navy. I am comfortable that we are coming down about 10,000 per year. The 2007 budget is the fourth year, so we will have come down from about 380,000 to 340,000 over these 4 years.

But I am not going to go any lower until I understand fully the number that is required and I expect to be able to defend that in the 2008 budget a year from now.

We are heavily invested within the capability I think we have already in the United States Navy in homeland defense, certainly the expansion to riverine, the kinds of investment with our sister Service, the Coast Guard. I have here just a very small brochure that talks about the Navy and the Coast Guard together that Tom Collins and I just signed, and it refers to the national fleet, which is not a new idea. It was originally signed in the 1990s, but it is updated, and it is very much committed.

[The information referred to follows:]

Two Vital Services...
The National Fleet

...One Powerful Fleet

A Common Vision for Maritime Security

"The United States has a vital national interest in maritime security. We must be prepared to stop terrorists and rogue states before they can threaten or use weapons of mass destruction or engage in other attacks against the United States and our allies and friends."

—from the National Strategy for Maritime Security

The Navy and Coast Guard share a rich history marked by more than two centuries of close cooperation and joint operations in peace and war. As challenges to U.S. sovereignty grow increasingly complex and ambiguous, the Navy and Coast Guard have adapted their approach to defend the nation against the full scope of today's threats at sea and in the nation's ports and waterways.

Under the National Fleet Policy, the two services have agreed to work together to plan, acquire and maintain forces that support and complement each service's roles and missions. To the extent permitted under existing laws, the Navy and Coast Guard coordinate or integrate many of their efforts, including:

- Research and development
- Acquisition of ships, boats, aircraft and command-and-control facilities
- Information systems
- Planning of personnel and assets
- Concepts of operations, intelligence, logistics, training, exercises and deployments



A 21st-Century Maritime Security Environment

The National Fleet embodies the President's vision for a coordinated interagency approach to the full spectrum of today's national defense and maritime security requirements, as laid out in the National Strategy for Maritime Security. It does this by creating a wholly coordinated, on-demand "super fleet" that leverages Coast Guard and Navy assets according to threat and proximity to the threat. The resulting National Fleet is more powerful, efficient and agile than the sum of its parts, yet more economical to build.

The Fleet's three key benefits:

- Affordable, adaptable and interoperable, with complementary capabilities
- Designed, when possible, around common equipment and systems, with coordinated operational planning, training and logistics
- Capable of supporting the broad spectrum of national security requirements, from power projection to homeland security and defense

Unique Missions Require Distinct but Complementary Capabilities

Although each service uses distinct, threat-based platforms tailored to their primary operating environments, the underlying technology and systems use interoperable components to facilitate joint operations. For example, the Navy's Littoral Combat Ship is a high-speed, networked combatant with capabilities optimized to assure naval and joint force access into contested littoral regions, while the Coast Guard's Deepwater system is designed for long-range independent missions in lower-intensity environments. Yet both programs share common infrastructure ranging from communication systems to weapons.

A Wide Range of Threats with Varying Levels of Intensity

During normal operations, each service conducts complementary missions, with little overlap. Additionally, as part of the National Fleet, Navy and Coast Guard assets are ready to integrate their capabilities into a joint naval force able to respond to crises and conflicts worldwide.

Environmental Response

Search and Rescue

Alien Migrant and Disaster Assistance Ops

Counter Drug Ops

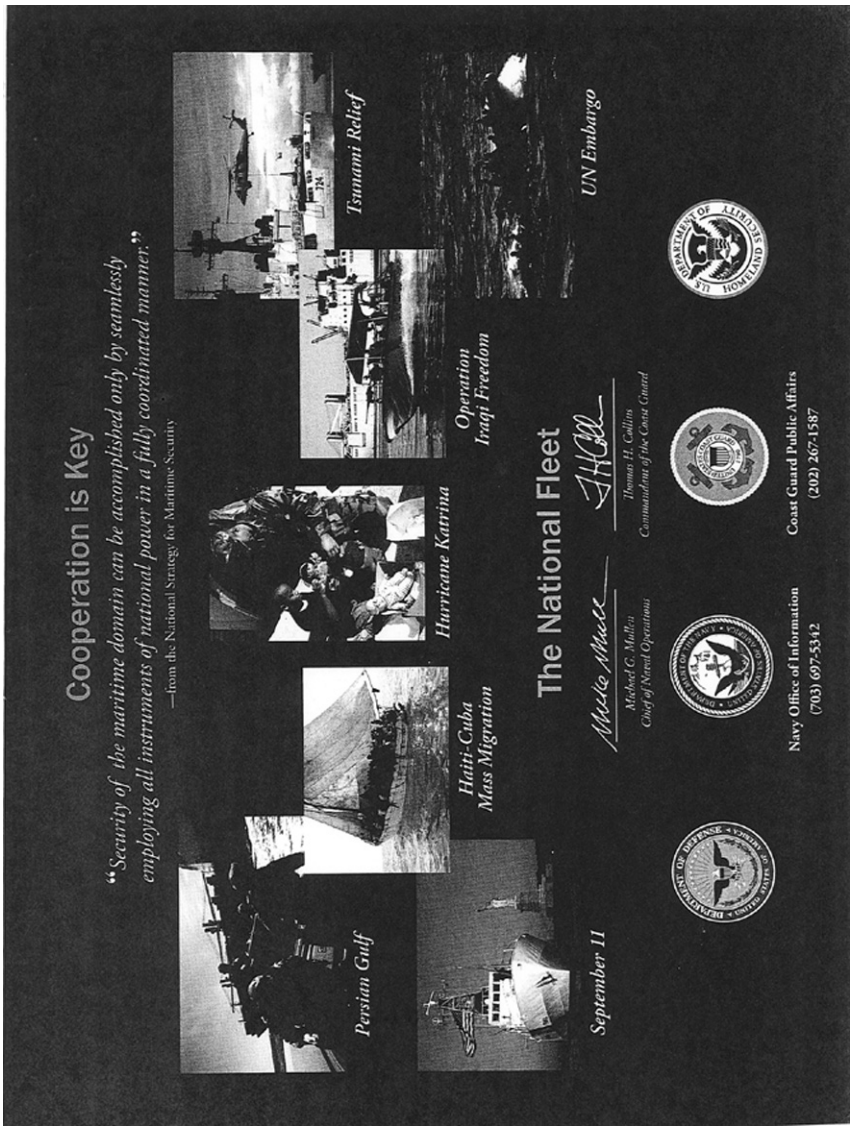
Theater Security and Stability Ops

Counter-Terrorism Ops

Coastal Sea Control and Mine Countermeasures

Show of Force and Flexible Deterrent Options

Major Combat Operations



Admiral MULLEN. The President's National Strategy for Maritime Security, which he signed last year, is the overarching directive for us to support the requirements in the maritime domain. So I am very encouraged by that. We are working very closely with the Coast Guard and leveraging each other to get this right for the future, to increase what we call the maritime domain awareness that we have to have both here and overseas.

Senator AKAKA. In the maritime domain, the Navy Reserve of course will be playing a part.

Secretary WINTER. Yes, sir.

Senator AKAKA. Can you comment on that?

Secretary WINTER. The Navy Reserve is becoming—I believe we started a couple years ago the more complete integration of the Active and the Reserve Forces inside the Navy. Admiral John Cotton, who leads the Reserve part of my Navy, is very active to make this integration happen as quickly as possible, to support the fleet, what I call the fleet concentration areas in these missions, and to move into support for the global war on terror.

Our Navy Reserves are in Afghanistan. They are in Iraq, they are on the Horn of Africa. They are in Guantanamo Bay. They are doing all these new missions as well, and I could not do it without them.

Senator AKAKA. Admiral Mullen, for nearly 100 years now Pearl Harbor Navy Shipyard has been supporting our Nation's defense and the Navy has been an integral part of the community of Hawaii and has served so well. The shipyard continues to see that our Navy ships and submarine forces are fit to fight.

How does Pearl Harbor Navy Shipyard fit into the Navy's future plans? Given the DOD's plans to build up the military's presence in the Asian Pacific region, do you foresee an expanded role as a forward repair facility for Pearl Harbor?

Admiral MULLEN. Senator, as you and I have discussed before, Hawaii is a very special place for me. I have lived out there. I have actually commanded a ship out there which went through the shipyard, and recently I was reminded again because I was out there for the December 7 celebration of what a special place it is and how supportive the people of Hawaii are to all of our Services, not just the Navy. But it is a special place indeed for the Navy.

Consistent with the strategic shift towards the Pacific, I cannot help but think that the future importance of all of our assets in the Pacific is not just validated, but becomes more critical. That shipyard is a key piece to that. But not unlike some of the other things that we are talking about, cost control is really a concern for me. It is a concern everywhere. It is not just in shipbuilding. There were discussions here earlier about how much of the overall budget was allocated to defense. But I am trying to work very hard to control costs across the full spectrum of everything that the Navy is involved in, and cost controls in the shipyards are very important as well.

I am anxious to see all my shipyards work in that direction, including Pearl Harbor. Senator Collins talked earlier about the best value, the most effective, the most efficient kind of thing. I am anxious to have all of us move in that direction.

But as far as vitality for the future, importance for the future, I think the shipyard will continue to be.

Senator AKAKA. Admiral, I have a final question. I understand the Navy is still reviewing the possibilities of forward homeporting an aircraft carrier in Hawaii. How imperative do you feel that it is to have a carrier homeported, given the DOD shift in emphasis to the Pacific region, and what are the potential negative outcomes of continuing not to have a carrier homeported in the Pacific, particularly with regard to the Navy's potential response time in an emerging crisis out in that area?

Admiral MULLEN. The QDR supported, as I am sure you are aware, Senator, having six operational aircraft carriers in the Pacific. I am very committed to that. The issue of where they will live is not uncontroversial, nor is it a critical decision that needs to be made. We have, as I know you are aware, we have submitted a budget for 2007 which recommends 11 aircraft carriers for the future. The decision on all things aircraft carriers, the decisions will come in time, if you will, in terms of where they will live. But the focus and the outcome within, certainly within the Future Years Defense Program (FYDP), within the next 4 or 5 years, we will have six operational carriers in the Pacific. I am confident of that. Inside that, obviously, we still have a determination of where they will live.

That said, putting an aircraft carrier in Hawaii and an air wing is not an inexpensive investment. Several billion dollars is what it would take, and I am back to the tension of investment for the future and how do I best place my resources. In the end, I think that decision will be made based on strategic imperatives as best we understand them at the time.

Senator AKAKA. Thank you very much. Thank you for your responses.

Senator TALENT [presiding]. Admiral, I have one question for you and then one for you and the Secretary. The committee has received, of course, your unfunded priorities list and the list includes items that range from a few million dollars to over a billion. I want to make certain that we understand the relative priority of the list. Is the list in the right priority order? If not, what would be your top unfunded priority?

Admiral MULLEN. My top unfunded priority—and the list is focused on areas that are, I believe, particularly critical. But my top priority would be for recapitalization in ships and airplanes. That is my biggest challenge and that would be the top priority if I rolled that list up.

Senator TALENT. So for example, moving up the landing platform dock (LPD) would be a priority for you?

Admiral MULLEN. If you made me pick a line item to put it on top, the LPD would help me most, and the F–18s would probably be next.

Senator TALENT. That is a good segue for me. I think, Mr. Secretary, you and the Admiral know that I am concerned about whether we have a sufficient number of F–18s to smoothly transition to JSF. I am concerned whether there is a shortfall being caused by the higher usage rates on the older As and the Cs because of the war and whether the size of the shortfall and the procurement cost to avoid major cuts in the air wing force structure is dependent on when the Navy determines that the As and Cs are at the end of their service life.

So is there an update on the magnitude of a potential shortfall and what is the time line for making decisions to make sure we avoid any operational impact?

Admiral MULLEN. There is no update. I think the number that you have, Senator, is 46 F–18s and I have no update. I am embarking on the same kind of review I did in shipbuilding now in aviation to understand what capabilities we need to deliver, how many

airplanes of what kind it is going to take to do that, and when that would occur.

Part of that is obviously the evaluation of this shortfall. What I am concerned about, though, is I need the JSF. I need it for its stealth, I need it for its range, I need it for its payload in the future. That is where this finds me is in a situation—and I need JSF on its current schedule.

What I worry about is getting into a cycle where I start buying more F–18s, therefore I need fewer JSF, therefore JSF costs more, therefore I buy fewer, and I end up far below what I need with that aircraft. So I have to seek a balance here and I do not know what that—I need to come back and tell you after, really after this program build, on exactly my assessment of that situation, particularly from a warfighting standpoint. That is what is really driving me here, combined with I have to consider the affordability issue.

So that is where I am as we speak. It is a big concern and the answer at this point for me is not, do not just go buy more F–18s. I just do not know if that is exactly the right answer. Some more, yes, but within the affordability piece and with the critical path being I have to get to that JSF.

Senator TALENT. Fair enough. In other words, the accelerated depreciation, if you will, is causing some need for attrition aircraft, but right now you are not in a position to determine that, especially since you are looking not just at short-term operational impact, but the long-term affordability of JSF?

Admiral MULLEN. Yes, sir. We are working our way through, are there ways to make the F–18s more viable longer? That assessment is ongoing right now in terms of whether that is possible. It is a high priority issue for us and to some degree it is work in progress and I owe you more answers on that as I understand it better.

Senator TALENT. I want you to comment, Mr. Secretary, but it is a high priority. When we have crashes, we have a high priority. I cannot think of a thing that is higher.

Secretary WINTER. With the crashes I have two concerns, one of which is obviously the very unfortunate nature of those crashes and what we can do in the near term to try to get to a better safety record. This is a very high priority for me and we are putting a lot of attention on it.

The other thing I am trying to understand in this is what is this telling us about the life-limiting characteristics of this airframe? Are there other mechanisms that we need to employ to be able to extend the life? Are there additional part inspections, replacements? What do we need to do? That is an ongoing investigation right now.

Senator TALENT. All fair enough. I want to thank all three of you for your service at a particularly crucial time for the security of the country. I am grateful that you are willing and able at working through all these difficult decisions.

Thank you, Mr. Chairman.

Chairman WARNER [presiding]. Thank you very much, Senator.

We will now go to another round of questions. I regret my absence, but I am working on something that is fairly critical. This is critical also, so I apologize. I just have to balance the timing of situations.

I asked Senator McCain to go into the engine issue and I understand that he did that, this announcement by the Department to drop the second General Electric (GE)/Rolls-Royce engine after just having signed a $2.8 billion contract to continue it. I must say I have grave concerns, and consequently I initiated the steps to have this committee hold two extensive hearings at a time when we have more hearings than we have time for. But we are going to do it because of the importance of the possibility of perhaps as many as 3,000 of these aircraft being put into the inventories around the world.

When I was privileged to be Secretary of the Navy, we had problems with the F–14 engine. I do not know if anybody around here remembers that besides myself. Fortunately, we were able to work our way through that. I have seated behind me—I do not know whether he is still here or not—a naval aviator who used to fly the F–14. He made in his tours of duty four carrier landings with just one engine going in that plane.

Now, all of this is to say that, given the extreme importance of this aircraft not only to the United States but to our allies—and in the consultations I have had with the allies I feel that somehow they may not have been full participants in the decision to drop this engine. So I am going to give them the opportunity to express their views and that is scheduled, as I said, for next week.

But the concept of a standdown of aircraft—all of us have seen where airplanes simply develop problems with their engine or other components and they have to standdown the fleet of aircraft, and that is a safety and operational measure. But it is important that those steps be taken, and to think that we would worldwide have to standdown up to 3,000 planes at some time to work on an engine problem—it just seems to me that a significant part of the inventory of 3,000 should be with the other engine so that they can remain operational in the event there is a problem with the first engines.

Lastly, our relationships with our allies abroad are so important now as this industrial base in America continues to shrink because of the downsizing of our military over a period of 2 decades now, that we have to make sure that our partners overseas perceive that we are listening to them, working with them, taking into consideration their views in those matters where we are trying to jointly do programs. So enough said on that point.

Admiral, the question before the Senate here is this United Arab Emirates (UAE) contract to manage some of our ports. I do not want you to get into the politics or the questions of the security of the ports, but this is a contract which has global ramifications, ramifications to our diplomacy abroad, our economic viability as a partner to work transactions with a number of nations, some of which want to come to our country, invest money, others that want to do joint contracts.

I just think that this thing has to be handled in a very careful manner to show that we are treating the UAE as a full operating partner. The President has said they are a vital ally. In all the analysis that I have and indeed in consultations with senior military officers, it has been reaffirmed that they are a vital ally.

But the Navy, in particular, has relied upon the UAE port facilities to take our carriers and a number of other ships, which they have been doing. I am told that possibly in the last calendar year there have been as many as over 500 ship visits. I hope I am not going over the same things that my good friend went over or maybe he did not touch on this. He was on the engine.

But we have to get your professional judgment as to the ability to conduct these ship visits and conduct them in a manner where the ships are safe from terrorist attacks in their ports, where the sailors that go inland for whatever purpose as they disembark the ships for periods of time before reembarking and going out—just give us your military perspective of what the UAE has given and how the UAE ties into Qatar, where CENTCOM has its headquarters, Bahrain, another nation where the Navy—way back when I was Secretary we put in some of the facilities to care for our ships and now it is expanded—and of course with Kuwait.

We cannot look at the UAE in isolation as it relates to our overall dependence really on their support in conducting operations in Afghanistan and Iraq. Equally important is to look into the future. In the war on terrorism it is essential that we strengthen in every way our ability to forward project our forces, our infrastructure, to deter terrorism in every instance we possibly can, and if deterrence fails then we have to resort to force of arms.

We do need, in my judgment, these forward areas, particularly in the Gulf region. We need these four nations aligned with us in this war on terrorism.

I just wondered if you would have a few professional observations. Step back from the politics. I do not want you involved in that. Just what is your professional view with regard to the importance of these, say, four nations in our current operations and the future operations as you foresee them on the war on terror?

Admiral MULLEN. Senator, I learned as a young naval officer that having allies around the world has always been critical, and places that we can go and engage. Certainly, in that part of the world and to speak specifically of Bahrain, where we have had naval forces there since the late 1940s and they have been a very important friend of ours for a long period of time. In my experience, and this is really my personal experience in recent years, having the access to a port like Jebel-ali, where our aircraft carriers go—and many other ships go there—and I think that is an accurate number that you cited. We have had many ship visits there.

Chairman WARNER. To the UAE?

Admiral MULLEN. To Jebel-ali in the UAE.

We also use another port, Al-Fujeira. We have for years, and they have been very supportive.

Chairman WARNER. That is in the UAE?

Admiral MULLEN. That is in the UAE. In particular, our Military Sealift Command ships in and out of Al-Fujeira. So having that and support from other countries clearly that are in that region, Qatar and Kuwait, are all very important in my experience in terms of creating the kind of opportunities that we need to create in order to engage in whatever activity we think is important, and as you suggested certainly to support the global war on terror.

Specifically with respect to UAE, they have been, again from my perspective, a good ally in that region from the Navy's standpoint for many years.

Chairman WARNER. I thank you, Admiral. I certainly associate myself with your views, and I am hopeful that this matter can be resolved in such a way that there is no injury to our relationships present and long-term in that region.

I am going to yield to Senator Reed. You have not had an opportunity.

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

Thank you, gentlemen, not only for your testimony this morning, but for your service to the Nation. Both Admiral Mullen and General Hagee, that goes back to 1964 as plebes?

General HAGEE. As plebes, yes, sir.

Senator REED. So I cannot do the math, but it is impressive.

General Hagee, some of this might have been covered. I apologize for my absence periodically. But what level of funding did you request for the most recent supplemental for the Marine Corps?

General HAGEE. We have covered it a little bit. We need $11.7 billion total.

Senator REED. For the reset?

General HAGEE. For the reset. What came over here was $5.1 billion. As I testified to Mr. Levin, we could execute $6.1 billion in this fiscal year.

Senator REED. Let me just be clear. This roughly $12 billion is for reset of Marine Corps equipment principally? That is what your need is in the supplemental?

General HAGEE. That is correct, sir. The cost of war would be in addition to that and we project the cost of war for this fiscal year to be about $5.3 billion.

Senator REED. Just again, I want to get an understanding. This year you have an $11 billion bill for reset of equipment, and then you have an additional delta for personnel cost of war, operations tempo, et cetera. Are those costs fully covered in the supplemental or what are you missing in terms of personnel costs and equipment costs?

General HAGEE. Cost of war is completely covered in the supplemental. Out of the $11.7 billion, $5.1 billion is covered, the balance being deferred to fiscal year 2007.

Senator REED. What is the annual rate of accumulating these costs for equipment? Next year, if your operations are as intensive in Iraq and Afghanistan, you are going to incur costs. What are these costs?

General HAGEE. My sense is, Senator, that our burn rate right now is about $300 million a month, cost of war. Assuming that that does not change one way or the other, we will have somewhere around $5 billion next year in cost of war.

Our total cost for reset right now is, as you said, just about $12 billion. Unless something significant happens, I do not see that going up significantly. Let me give you an example of what we are doing with some of those——

Senator REED. Is that an annual cost?

General HAGEE. No, sir. That is a total cost today to reset the Marine Corps, $12 billion.

Senator REED. Let me try and again to understand it. I guess the appropriate question would be, how much are you building up in this unfunded account? You say you can execute $6 billion this year. You have $5 billion. So roughly you have about $6 billion that is not being funded this year and that gets rolled forward. Next year, if you have $5 billion again how much more would you roll forward?

In other words, are you going to keep going forward with $6 billion a year unfunded?

General HAGEE. No, sir. No, sir.

Senator REED. Does it go up or down?

General HAGEE. My sense is it will stay just about where it is.

Senator REED. So, at this point, we are looking at an indefinite obligation of $6 billion. It is a contingency. We know it is there. We have to fund it eventually, and it is not funded; is that accurate?

General HAGEE. Accurate, but I think there needs to be a footnote there. Even if we had the $11.7 billion this year, we could not execute it.

Senator REED. I understand that. But I am saying we are looking at a hole that, if we do not keep putting supplementals up, if we do not keep funding at a level, and this is a rather robust level of funding, at some point the Marine Corps is going to have to go and look within its own budget lines to cover these costs?

General HAGEE. That is correct, sir.

Senator REED. Thank you.

Senator LEVIN. Senator Reed, are you leaving that subject?

Senator REED. Yes, I am. Go ahead. I will yield.

Senator LEVIN. If you do not mind, if you would yield just for two questions just to finish that subject, because we got into it with General Hagee before.

I do not think you were here when he also said that it is not executable this year. He does acknowledge that about a billion dollars of that $7 billion is executable this year, but not in the supplemental.

General HAGEE. It is not in the current supplemental. It is deferred to next year, yes, sir.

Senator LEVIN. Right. It is deferred, although it could be executed if the money were there.

General HAGEE. It could be executed this year.

Senator LEVIN. That is one thing, just to finish.

But there is one other question that you are probing. I would like to understand it myself. If the war ended tomorrow and if we brought home all the troops tomorrow, you still have $12 billion in reset costs, right?

General HAGEE. Yes, sir, that is correct.

Senator LEVIN. But the war is not going to end tomorrow. So I am trying to understand what Senator Reed was going after. Since the war is not going to end tomorrow and there is going to be additional damage and wear to equipment, why would not that $12 billion go up? That is what I am trying to understand and I think what Senator Reed was getting after.

General HAGEE. I probably did not express it very well. It will not in my opinion. Unless the environment changes significantly, it will not go up dramatically. As I testified earlier, last year at

this time we had two of our three maritime prepositioning squadrons down very low. That is because in the first couple of years of supplementals the rule set was that we could not use it for procurement. However, over the last 2 years we have been able to use it for procurement and so we have completely refitted one maritime prepositioning squadron, we are in the process of refitting another one.

I do not see us using those right now, based upon how I see the future. So the total reset of $11.7 billion, which is a large amount, yes. Will we continue to expend equipment over there? Yes, sir, we will. Will it be as dramatic as it has been over the past couple of years? No. Because the rules are such now that we can use the money for procurement, we do not have this big bow wave in front of us.

Senator LEVIN. It is in the regular budget. Your reset costs are now in your regular budget request?

General HAGEE. Not from the war.

Senator LEVIN. I am not going to interrupt Senator Reed any longer, but I still do not understand how that $12 billion does not grow. It may grow at a slower rate.

General HAGEE. It will grow at a slower rate. It will grow at a slower rate.

Senator REED. Again, I asked the question because it is kind of difficult, given the supplemental appropriations, bridge funds. But my sense is that we know if you stopped everything now you would have a $12 billion reset cost.

General HAGEE. Yes, sir.

Senator REED. We have applied $5 billion in the supplemental, got it down roughly to about $6 billion. Are you assuming that next year, if the war goes on, you get another $5 billion? Is that part of your assumption?

General HAGEE. I am assuming with the war going on we would get cost of war——

Senator REED. Reset costs?

General HAGEE.—and reset costs, yes, sir.

Senator REED. So I think implicit in this is that every year you are assuming $5 billion, so the delta, the missing money, is this $6 billion that is not funded today. It is catch-up.

General HAGEE. It is catch-up, but, as I said, the reset cost will go down because we have $12 billion right now. It will be another $6 billion because we have a bow wave. But there will not be another $6 billion on top of that.

Senator REED. Thank you.

Let me ask another, related question. That is, in previous supplemental funding has the timeliness in the release of these funds to the Marine Corps fully supported your needs? Are there checks in the mail that you need to get in your hands?

General HAGEE. The timeliness has presented us some challenge, sir. If I could just speak to this year——

Senator REED. Yes, sir.

General HAGEE. We will run out of bridge supplemental somewhere around the end or the middle of April. We can forward fund for about 30 days and if the full supplemental is not passed by that time then we will have some significant challenges.

Senator REED. Let me change this topic slightly, Commandant. The Secretary of Defense directed the Marine Corps to establish a component under special operations, and I think this is obviously a logical effort, given the threats that we face today in the world. But there are some issues, I think.

MARSOC, as I understand it, was activated last month. We all know it takes a long time to create a force, to grow it, to develop it. How many marines do you currently have at MARSOC?

General HAGEE. Currently right now, probably a couple hundred.

Senator REED. A couple hundred.

General HAGEE. That is close.

Senator REED. What is the projected planning, fully operational?

General HAGEE. Around 2,500 to 2,600.

Senator REED. How long do you think it will take to get to that?

General HAGEE. My sense is that we will be very close in fiscal year 2008, maybe into fiscal year 2009.

Senator REED. We have had discussions all morning long about end strength. Are these marines accounted for in that end strength number? Are you going to have to take these marines out of your hide from maneuver units and deployable units to fill this?

General HAGEE. Sir, a combination of capabilities. One example where we would not replace the marines, in other words reconstitute that capability, would be our foreign military training unit. We stood that up last year. These are teams of marines that can go and train foreign militaries at the tactical level. We are taking that capability and moving that down to SOCOM. They can work with their Green Berets down there. We will not reconstitute that capability.

With other capabilities like signals intelligence and intelligence analysts, we will have to reconstitute those capabilities.

Senator REED. Very good.

With respect to embassies, do you have increased force protection requirements that will require you to put more marines there? Again, are these marines in your budget any place?

General HAGEE. The marines in the embassy are paid for by the State Department.

Senator REED. So you are fine in that regard?

General HAGEE. Yes, sir.

Senator REED. My time is expiring, but I do not want to discriminate in favor of the Marine Corps and against the Navy, so I will ask the CNO a few questions too. Mr. Secretary and Admiral Mullen, the Navy has been on a downward slope in terms of end strength. Authorized strength has really been significantly reduced from 2003 to 2006, by about 23,000 sailors.

Now you are looking at taking reservists out of the end strength numbers and it raises the question, I think, whether this at some point will impact on the Navy's ability to operate. So can you comment, Admiral, in terms of naval end strength?

Admiral MULLEN. Yes, sir, and it is a fair question. The 2007 budget is the fourth year of roughly 10,000 a year. 2007 I think has 12,000 in it. I am comfortable with the gradual decline from what was 382,000 down to about 340,000–342,000. If you looked in my program in the out years, it is flat at 336,500.

As I said when I testified for confirmation, I have three things I am focused on: keeping the readiness up, getting the balanced fleet built in the fleet for the future, and the third piece is the right manpower and personnel strategy. So over the course of the next 12 months, what I need to determine on the Active and the Reserve side is what is the right number.

We are coming down from a Reserve Force as well to about 58,000. At least that is the target right now. But what we request doing internal to Navy is looking at this from a capabilities standpoint and literally what are the numbers that we need. Before I come down any further on either of those marks, I have to really understand that.

So my goal is to be able to sit here a year from now, determine the number, and then defend it specifically because of the capabilities that we have. That is where we are in the process.

Senator REED. One final question, Admiral Mullen, and that is the supplemental—and you might have covered this before—does it meet all your needs and is there a shortfall that you requested in the supplemental and were denied, or you would have wished you could have gotten in even if it was not an explicit request?

Admiral MULLEN. Sir, the supplemental, which for Navy is about $7.5 billion and as we have tried to do each year, it focuses on what we see out there. From that standpoint, it supports where we are going.

But not unlike the discussion that you just had with the Commandant, for us—and it goes to Senator Talent's question as well about F–18s—I am looking internally at where clearly we need to recapitalize in the future based on some of the high usage items that I have, in addition to items which are wearing out, like P–3s, and how I make that work in the future.

That is not embedded in the supplemental, but it is something I am pressing inside the Navy right now and want to look at for the future.

Senator REED. Would you also agree with the Commandant with respect to potential cash flow problems if the supplemental does not——

Admiral MULLEN. For me it is later in the year. I am in August as opposed to March-April.

Senator REED. I am going to wait until Senator Levin or Senator Warner returns. They might have additional questions. But let me ask this question. I was out in Iraq my seventh time about a month ago, and visited two provincial reconstruction teams (PRTs) out of the three in Mosul and al-Hillah. I am interested in your comments, Admiral Mullen, that now the Navy is going to lead these teams that are going forward, or at least some of these teams, which I think is a wise use of resources.

But there is an issue, I think, that is appearing with respect to the security of these teams by DOD. Are you involved with that? I mean, there is some question of whether the military is going to provide force protection, or whether it is private security contractors or whether it is just still up in the air. Without good security, these PRTs will be inhibited. So could you comment on that?

Admiral MULLEN. Sir, I have not been involved in the security aspects of the 12 U.S. PRTs in Afghanistan.

Senator REED. Oh, I am sorry. Forgive me.

Admiral MULLEN. That is a commitment to basically pitch in there. But there also is a selfish motive here. I am sending some of my best people into those jobs and I think that we will learn as an institution a great deal, not just about what is going on now, but about the future. So from that standpoint that is a really important piece here.

We are working through—as I talked earlier—about the number of sailors who are on the ground in Iraq and in other places, and we have worked through and, to the great credit of both the Army and the Marine Corps, but particularly the Army, has worked hard to help us train those people before they get ready to go in—train and equip them so that they have what they need going in there. So I am not specifically involved in the PRTs in Iraq.

Senator REED. Thank you very much and thank you for that clarification. I must say, when I was visiting there, my 43rd Military Police Brigade of the National Guard is in charge of the facility and when they showed me the chart, which became more purple with each month going forward with Navy and Air Force operating under the command of an Army military police brigade, I will confirm your testimony.

Thank you very much, gentlemen.

Chairman WARNER [presiding]. Senator Levin.

Senator LEVIN. Thank you.

Secretary Winter, I want to raise with you the issue of incremental funding of our ships. The 2007 shipbuilding request for DD(X)s includes incremental funding to build two lead ships in the same year. Now, there are two problems with this. One is the incremental approach problem, which is a bad precedent generally. We have tried to avoid it. We have made a rare exception, but it creates a lot of budgeting problems downstream. It commits future year budgets in ways that we have tried to avoid. That is number one.

But number two is the history of having problems when you have the first ships built simultaneously and you cannot get the advantage of learning from the first lead ship. There is experience with that. When we last built more than one ship of a class in the first year of production, which was in 1970, we ordered three SSN–688 attack submarines. Two shipyards experienced major difficulties in starting the program. The Navy had to pay for those difficulties several times over.

Now, why are you proposing to use incremental funding for these two combatants, number one? Number two, why do you want to undertake the risk of not having the advantage of learning from the first ships' shipbuilding?

Secretary WINTER. Senator, if I could answer those in inverse order perhaps, because the question of the dual lead ships really leads us to the question of how to fund the dual lead ships. There are two factors that really have to be balanced here, one of which is associated with the ability to capture lessons learned from a first lead ship into the second ship being built in a second yard, versus the advantages associated with the competitive factors that occur when you have two yards both building a ship of a given class being able to engage in competition, which for a program of record

of seven ships is going to result in one yard at least building one more ship than the other yard. So there is a significant competitive factor there that we are able to take advantage of by having the two yards operating on an even keel, if you will, where both of them are proceeding at a constant pace from a given start.

This situation is a bit different, I believe, from the 688 class in the sense that both yards are involved in the design activity and there has been extensive effort put in to ensure that the data communication between the two yards is maintained during the design process and will be maintained during the construction process.

Further, I will tell you that in the attempts that I have made to try to see the cost savings as we go from a first lead ship to a second ship cross-yard, in other words a first lead ship in one yard and the second ship in another yard, I cannot find a good story there that says that there is a significant savings associated with having that second ship in the second yard trail the first ship.

So that gives us the question of how much savings we would really get from going to a staggered start, absent the competitive factors. The competitive factors are what we are banking on right now to try to drive the cost of this ship down. That is something that we really want to see happen. We want to see the two yards motivated to make the investments in terms of the capital, in terms of the process improvements, and in terms of the personnel that are going to be engaged in building these ships.

Once we get to that point of saying that we would like to go to a dual lead ship approach, the question then becomes one of how do we avoid perturbing the budget, the Shipbuilding and Conversion, Navy (SCN) account, in a material way, given the significant costs that would be incurred without incremental funding. Quite frankly, that is the reason why we went to the split funding concept. It was to even out the account over the 2 years. We do not view this as a precedent-setting activity and we do recognize that such activities should be engaged in only in rare exceptions.

Senator LEVIN. I do not know how you avoid setting a precedent, I have to tell you. You can say it is not a precedent, but I do not know why it will not be cited as a precedent in the future. So I am glad you are taking the position it is not going to be considered one, but I do not see how you prevent the obvious from happening.

Secretary Winter, the Navy has proposed to replace nuclear warheads with conventional warheads on two D5 Trident sea-launched ballistic missiles on at least some and possibly all of the 14 Trident submarines. Now, this creates some real arms control issues because of the ambiguity which is going to exist as to whether or not a missile is a conventional missile or a nuclear missile.

We have avoided those kind of ambiguities in the past, but when you are talking about missiles rather than airplanes, since an airplane is recallable and a missile is not, you are talking about a very potentially dangerous situation. Have you consulted with the arms control experts both in the DOD and at State on the Strategic Arms Reduction Treaty implications of this proposal?

Secretary WINTER. I have not, sir. I believe this is an issue that is properly the responsibility of Strategic Command (STRATCOM) and would respectfully request that any further discussions along these lines include STRATCOM, and preferably in a closed session.

Senator LEVIN. Just a couple more questions. Admiral, the Navy has a Joint Unmanned Combat Air System which is underway. Now, how is that going to be affected by the Air Force's program cancellation?

Admiral MULLEN. We mutually agreed to moving forward in these programs as they exist in the 2007 budget. I have spoken with General Moseley about this. First of all, the Navy is committed to get this unmanned system right for the future in terms of the carrier capability, and General Moseley has committed in our discussions to certainly share from a joint perspective his development as it matures over time.

Senator LEVIN. Thank you.

Secretary Winter, there have been some continuing cost problems with the program to buy new utility helicopters and attack helicopters to replace the existing fleet of those systems. There have been some problems with the cost, as I have indicated. Have those problems been successfully addressed?

Secretary WINTER. Senator, I am not satisfied that we have addressed those problems adequately. There is an ongoing 30-day study being conducted under the auspices of the Assistant Secretary for Research, Development, and Acquisition. That is taking a look at both the extent to which the current contractor has been able to address the issues that you have raised as well as taking a look at programmatic alternatives.

Senator LEVIN. Will you you keep us informed?

Secretary WINTER. Most definitely, sir.

Senator LEVIN. Finally, General, there are a number of Marine acquisition programs which saw a decrease in the 2007 budget request as to what was programmed in the FYDP in 2006 for 2007. That was probably confusing the way I stated it, but it was expected that there would be more money for these acquisition programs just last year than turns out now to be the case in the 2007 budget request.

The High Mobility Rocket System was programmed last year for $213 million in 2007, but now the budget request for 2007 asks for about one-quarter of what we said that program was going to be funded at just last year. So can you comment on what the reason is for the reduction? Is it higher priority programs and, if so, what are those higher priorities?

General HAGEE. It is really balancing the entire program against the fiscal environment. Senator, we have to make choices all the time on priorities. I am not sure that I can identify one program as higher priority than the other. Given the money that was available and the fiscal environment, we feel comfortable with the budget that was submitted over here.

Senator LEVIN. Thank you.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you, Senator Levin.

On the question of IEDs, in 2003 the Army created the IED Task Force in recognition of this growing threat and I think they did some very fine work. Subsequently, because of the seriousness and the depth of this problem, I wrote to the Secretary of Defense and suggested that this office be enlarged and upgraded in rank, and I think pretty much at the same time he was considering that

proposition and it was done. I commend the Secretary of Defense for that step.

But I am just concerned now that it has expanded to a four-star rank, and I commend the officer who came back from retirement to take that on. I do not want to see the valuable contributions that have been made by the Marine Corps and the Navy throughout this process in any way be given less than full opportunity to go on. I note with interest that the Office of Naval Research (ONR) will spend $15 million per year from 2006 to 2011 on long-term IED work. In addition, the Naval Research Laboratory (NRL), an organization I was privileged to be in a half century ago, is reportedly investing $15 million from 2005 to 2007 in long-term IED projects. Now, those are two of the Navy's finest and most able organizations. I know that the Marine Corps has its own organization down at Quantico that is working on this.

I am just going to ask that both of our senior officers under the supervision of our distinguished new Secretary, watch this situation and make sure that the Navy and the Marines continue to have input into this situation. Have you made any judgment thus far with the new four-star office as to whether you are still considered partners in this?

General HAGEE. Yes, sir, we absolutely are. I have had several conversations with General Meigs.

Chairman WARNER. He is the new four-star?

General HAGEE. He is the new four-star. I knew him previously.

Chairman WARNER. Technically, he is an old four-star that has come back to regain his position.

General HAGEE. But he still has the energy of a second lieutenant.

Chairman WARNER. Yes, I know.

General HAGEE. He is the right individual for that job.

We are continuing to go forward looking at various technological solutions. We are coordinating very closely with his task force and I have talked with him several times since he came on board. So I can give you my assurance that we are going to do that, plus we are going to coordinate with him.

Chairman WARNER. CNO?

Admiral MULLEN. Sir, I have Seabees doing combat duty and providing protection—not just Seabees that are being convoyed—and have been very engaged to make sure that we have the right training, the right gear, et cetera.

I mentioned earlier from a technical standpoint we have some of the leads in the country on explosives. You have mentioned NRL and ONR as examples. I have a one-star who is assigned to the technical lead of this. I spent a fair amount of time personally when I was there with Joint Task Force (JTF) Troy, which is the task force in Iraq that is overseeing this, and General Meigs was the first person I met with when I got back. So this is killing our people and I am indebted.

Chairman WARNER. Thank you very much.

Mr. Secretary, I hope that you find time to monitor this program in your capacity.

Secretary WINTER. Most definitely, sir. This is an area of extreme importance and interest. It is an area that I focused on on my trip

over to Iraq. It is an area that I really do believe needs some very good focused attention and systems engineering. This is a complex problem with multiple parts.

Chairman WARNER. They draw on your background.

Secretary WINTER. Yes, sir.

Chairman WARNER. That has been your life's work, systems engineering.

Secretary WINTER. Most definitely, sir. I appreciate the opportunity to engage on this and I have been trying to make sure that we are bringing the proper experts into the area, not just in terms of the specific technical disciplines and areas of specialty, but also the overall integration of those activities into an appropriate response.

Chairman WARNER. Thank you. Thank you, gentlemen.

Last, the riverine force. Yesterday I told the Deputy Secretary of Defense, Gordon England, of my pleasure to see that the Naval Expeditionary Combat Command is being formed, 29,000 sailors strong, which includes the riverine force. Admiral Mullen, could you describe your vision for this requirement and how it originated and what you see its future to be? I am very pleased and supportive of it.

Admiral MULLEN. I think it is a very important capability that we need to develop for the future. Also, as an organization it will capture the 30,000 sailors or so that we have in existence—the Seabees, our explosives personnel, and our security personnel. Pre-September 11 we had about 1,000 master-at-arms, security force personnel, in the Navy. We now have over 10,000. We did not have an organization that was solely focused on these kinds of capabilities and so that is one of the reasons we stood that up.

We have embedded in that this new riverine force which we are developing and will develop over the next couple of years—3 squadrons at 12 boats per squadron. We think that is really important. Senator McCain talked of being in close to shore and having littoral ships in addition to the LCS, having forces which will make a difference in the future, not just to fight but to engage in places around the world.

So I am excited about this. We actually will relieve the Marines in the security of Haditha Dam in Iraq north of Baghdad 1 year from this month. We are committed to that. That will be the first mission that we execute with this squadron. To be fair—I would like to say it was my idea—it was Vern Clark's idea. I liked it. He showed it to me when I got here. I liked it, and he sent out the execution order, if you will, and it is a concept for which I am fully on board.

Chairman WARNER. I am delighted that it was Admiral Clark, who was a most distinguished CNO. I enjoyed my work with him over the years. He began the focus with the littoral concept with the new littoral ships, because he recognized that terrorism has no boundaries and very often no state sponsorship. We have to have small, highly-trained units to take them on wherever we find them.

Gentlemen, I have thoroughly enjoyed this hearing. I apologize for the intermittent periods I had to deal with another problem. But I wish you well.

Senator Levin, do you have anything to say?

Senator LEVIN. No, thank you.

Chairman WARNER. Thank you very much. The hearing is concluded.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JOHN WARNER

FORWARD BASING ATTACK SUBMARINES IN GUAM

1. Senator WARNER. Admiral Mullen, the Navy has announced that it will focus 60 percent of the attack submarine force on operations in the Pacific, and the recent force structure study makes aggressive assumptions regarding Guam-based submarines in determining the size of the submarine force. What is the Navy's plan for basing additional attack submarines in Guam?

Admiral MULLEN. The Navy plans to homeport three attack submarines in Guam. Presently, two attack submarines, the U.S.S. *City of Corpus Christi* (SSN 705) and U.S.S. *Houston* (SSN 713) are homeported in Guam. The U.S.S. *Buffalo* (SSN 715) will shift her homeport to Guam in fiscal year 2007. The Navy's Force Structure Assessment assumed three attack submarines were homeported in Guam. This is a sufficient number to meet both warfighting and peacetime presence requirements.

2. Senator WARNER. Admiral Mullen, what assessments are being conducted to address vulnerabilities, facilities, and quality-of-service to support additional forward-based submarines?

Admiral MULLEN. The Navy is in the process of developing a global submarine infrastructure plan (GSIP) covering the next 25 years. Embedded within the GSIP are assessments that address facilities, force protection, and quality of service for the submarine force worldwide. All submarine homeports, ports of call, maintenance and repair facilities, and crew swap locations will be included in the plan. The GSIP will enable the Navy to better manage the submarine force ashore infrastructure both at home and at forward bases for years to come.

MARINE CORPS LIFT REQUIREMENTS

3. Senator WARNER. Admiral Mullen and General Hagee, the last Marine Corps lift study dates to the 1990s, and defined a forcible entry requirement to support three marine expeditionary brigades (MEBs)—subsequently "fiscally constrained" to two and a half brigades. The Navy's program for the past decade has called for 12 expeditionary strike groups (ESGs) with sufficient warfighting capability and survivability features to "storm the door," to provide this lift. Today's plan reduces to nine ESGs while bolstering sea-based forces.

Significant changes have occurred to the ships, the assault craft, the force structure, and the operating concepts since the last definitive lift study, however, the lift requirement does not appear to have changed. Does the Department plan to update this lift study to define forcible entry requirements for the expeditionary force, or does the reduction from 12 to 9 expeditionary groups represent an unfunded requirement?

Admiral MULLEN. The Department of the Navy (DON) Lift II study to which you refer was done against a range of specific threats, and is dated. Since that study was completed, DON has continually evaluated total lift requirements for the expeditionary force for forcible entry, as well as lesser missions accomplished by forward presence forces. There is currently no plan to update the DON Lift II study. The maximum requirement for forcible entry is seen today as being 2.0 MEBs. This reduced lift requirement, as well as the demand for forward presence, is currently being met with the present inventory of 34 amphibious ships and does not represent an unfunded requirement. The current shipbuilding plan will also support these requirements.

General HAGEE. Building upon the DON Lift II study, the Navy and Marine Corps are jointly conducting a seabasing capabilities study to:

1. Inform U.S. Navy (USN) and U.S. Marine Corps (USMC) force structure and force posture requirements for seabasing upon current force structure decisions, and identify necessary supporting requirements through the 2024 timeframe.

2. Inform USMC and USN program objective memorandum (POM) decisions on force development and investment regarding seabasing well beyond the Future Years Defense Program (FYDP) (up through the 2024 timeframe).

3. Integrate joint capabilities and requirements, where applicable, identified in the seabasing joint integrating concept (JIC) capabilities-based assessment process.

This study will be conducted within the context of OA–06, the seabasing JIC, and other related studies/concepts, and will be based initially on a designated force structure and posture for amphibious and prepositioning ships through 2024. After analysis of the baseline force structure and posture, the study will explore alternative force postures, concepts of operations (CONOPs) and other possible solutions to address the gaps or excesses, within the constraints of the baseline force structure.

Based on the Strategic Planning Guidance and the National Defense Strategy, the current force-sizing construct requires the capability to respond to two swiftly defeat the efforts (SDTE), each of which requires a MEB size force. One of these crises may become a decisively defeat campaign, bringing our most powerful force, the Marine Expeditionary Force, to bear, for highly capable, lethal, mobile and sustained operations. In support of joint forcible entry operations, the Marine Corps requires 30 operationally available amphibious ships, of which 10 must be operationally available big-deck aviation-capable ships to support two MEB assault echelon (AE). In reference to the ESG discussion in the question above, 30 operationally available amphibious ships can form 10 ESGs. The Marine Corps does not have an ESG unfunded requirement.

SEABASING

4. Senator WARNER. Admiral Mullen and General Hagee, the seabase has long been an element of the Navy's SeaPower 21 vision, and has emerged in this FYDP as one of the centerpieces of the future force. The seabase is essentially a high-order expeditionary "system-of-systems". How is the Department structured to manage the development and procurement of the seabase to ensure the range of end-to-end capabilities are fully integrated and also support joint operations?

Admiral MULLEN. The Deputy Chief of Naval Operations for Integration of Capabilities and Resources determines warfighting capability requirements, including those associated with joint seabasing, using the Navy capability development process. This process involves rigorous analysis driven by Strategic Planning Guidance. This organization integrates and prioritizes these requirements to ensure that naval capabilities are developed, as well as ensuring joint issues are addressed.

The Navy is also sponsoring the Seabasing JIC through the Joint Capabilities Integration and Development System (JCIDS) process to ensure platforms associated with the seabasing concept are developed in a joint, integrated context. Maritime Prepositioning Force (Future) and programs such as the Joint High Speed Vessel, the Joint High Speed Ship, and the Joint Modular Intermodal Containers, each at various stages of development within JCIDS, are examples of our efforts to ensure seabase joint interoperability.

General HAGEE. The Marine Corps has established a Joint and External Matters Department at the Pentagon and a Seabasing Integration Division (SBID) located at Quantico, Virginia, under the auspices of the Deputy Commandant for Combat Development and Integration to meet these requirements. Their functions consist of:

Joint and External Matters Division (Pentagon):

- Support the Deputy Commandant for Combat Development and Integration (DC, CD&I).
- Represent DC, CDI on the Headquarters, Marine Corps (HQMC) staff, the Office of the Chief of Naval Operations (OPNAV) staff, the Army and Air Force staffs, the Joint and Office of the Secretary of Defense (OSD) staffs in matters related to the development of operational concepts and required combat capabilities for the Marine Corps.
- Facilitate, coordinate, and synchronize Marine Corps CONOPs and combat development activities with the joint, naval, and inter-Service combat development processes.
- Ensure proper consideration of Marine Corps CONOPs, requirements, and capabilities in the development of joint, naval, and inter-Service combat capabilities.
- Support the Assistant Commandant of the Marine Corps (ACMC) in his capacity as the Marine Corps representative to the Joint Requirements Oversight council (JROC).

Seabasing Integration Division (Quantico, Virginia):

• Ensure Marine Corps amphibious program requirements and capabilities are effectively communicated and coordinated with the OPNAV staff and platform program managers. To this end, the SBID maintains engagement with the OPNAV resource sponsors and platform program managers to support and influence all JCIDS-related working groups, analyses, and documents. In support of this goal, SBID effectively communicates Marine Corps amphibious requirements in public and private venues that range from local briefs to visiting international officers to congressional staff and three/four star level officers within the Department of Defense (DOD) and DON.
• Develop future Marine Corps seabasing warfighting requirements and collaborate with naval capabilities development process Seapower 21 pillars (Sea Strike, Seabasing, Sea Shield, and ForceNet) to ensure OPNAV resource sponsors understand and accurately convey those requirements to appropriate platform program managers.
• Represent the Deputy Commandant for Combat Development and Integration on all seabasing-related joint doctrinal matters, including amphibious warfare ships, prepositioning ships, and other craft/connectors.
• Ensure the Marine Corps is appropriately supported by the Navy's Long-Term Plan for Shipbuilding (30-year plan) and is capable of accomplishing title 10 mandated amphibious warfighting functions.
• Represent the Marine Corps in OSD, joint, naval, combatant commanders, and operating forces fora in development, experimentation, and refinement of Marine Corps Seabasing capabilities.
• Integrate future and evolving seabasing concepts with identified capabilities, requirements, and supporting programs to synchronize Marine Corps initiatives and shape naval and joint seabasing-related initiatives within the JCIDS process.
• Coordinate with OPNAV resource sponsors and platform program managers to support JCIDS-required functional area/needs/solution analyses (FAA/FNA/FSA), and initial capabilities document (ICD), Capability Development Document, and Capability Production Document development.

FLEET RESPONSE PLAN

5. Senator WARNER. Admiral Mullen, the Navy's future force structure relies heavily upon the effectiveness of the Fleet Response Plan (FRP). This initiative has shown great promise, but as reported by the Government Accountability Office (GAO) in November 2005, there are concerns regarding the management plan governing the FRP. How does the Navy plan to address the GAO's concerns; specifically, to establish readiness goals for the FRP, and to regularly stress test ("no notice" evolutions) and evaluate the FRP to ensure readiness for surge and surge-sustained operations?

Admiral MULLEN. The Navy has reviewed the GAO report and concurs with most of the findings. Specifically, the Navy is in the process of developing guidance, performance measures, and a methodology to determine FRP efficiencies to provide the properly sized and trained force to meet mission tasking. We continue to expand the FRP to include all Navy forces in order to adapt the concept to meet the challenges associated with the war on terror and global maritime security issues.

The Navy intends to create adaptive and dynamic force packages that can be scaled in size and level of training to meet operational demand across the spectrum of conflict.

Under this construct, for example, if a force of two or three ships and embarked detachments is required for low risk missions, those ships or detachments would train to the specific levels of proficiency required, vice conducting a fully integrated workup. Our "high end" forces, carrier and ESGs, would still train to the level of proficiency needed to conduct major combat operations.

The Navy disagrees with the GAO report's recommendation to conduct no notice surges to test the construct. The Navy has already monitored all "surged" forces in the last 18 months and captured critical lessons learned, including those related to the FRP response to hurricanes on the Gulf Coast. Additional "no notice" surges to prove the operational construct would compete with operating funds needed to respond to crisis or real-world tasking. That having been said, I remain committed to ensuring a "surge capable," rotational, flexible yet unpredictable Navy that applies flexible force packages to achieve desired effects through the world.

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

ACQUISITION REFORM

6. Senator MCCAIN. Secretary Winter, one of the recommendations of the recently released Defense Acquisition Program Assessment (DAPA) report is to establish a new acquisition command lead by a four-star general or flag officer for each Service, who would report to the Service Chief and Senior Acquisition Executive of the military department. What are your thoughts regarding the recommendations of the DAPA panel, especially on the recommendation to create this new general or flag officer position?

Secretary WINTER. The Office of the Secretary of Defense (OSD) is currently evaluating the DAPA panel recommendations in conjunction with the Quadrennial Defense Review (QDR) recommendations. The Navy and the other Services are supporting OSD in this process.

In enacting acquisition reform, we should ensure that any changes to the current law not create undesirable side effects, such as a more cumbersome bureaucracy, higher costs, or longer development and procurement times. Furthermore, it is my belief that within the current structure, there are a number of changes that may be made to promote the collaboration of senior uniform leadership and acquisition officials in efforts to control requirements, provide stable resources, and expand the use of specific contract incentives to produce the best value for the taxpayer. These changes should be explored as a first step towards acquisition reform.

7. Senator MCCAIN. Secretary Winter, Dr. John Hamre of the Center for Strategic and International Studies advocates for the Service Chiefs to have a greater role in the acquisition process. The Service Chiefs now have responsibility for the budgets and requirements generation process; how will adding the Service Chiefs into the acquisition process control costs and reduce delays?

Secretary WINTER. The Service Chiefs must work with the acquisition community to ensure stability of funding, controlled requirements growth, and an optimum investment strategy.

This collaboration of senior uniform leadership and acquisition officials in the effort to control requirements, provide stable resources, and expand the use of specific contract incentives will produce the best value for the taxpayer.

It is my belief that within the current structure, there is opportunity to significantly enhance the involvement of the Service Chiefs in the acquisition process.

8. Senator MCCAIN. Secretary Winter, what are your impressions on the DAPA panel recommendation to fix the service acquisition executive at a two-term 10-year position?

Secretary WINTER. It has become difficult to recruit leaders of the appropriate experience and proven performance to serve in acquisition positions within the DOD. It is very unusual in the private sector for senior executives to spend 10 years in any position due to the impact on future career options.

Uncertainties due to the changing of administrations and the generally lower compensation for these positions serve to further increase the recruiting challenge and would make such a term unattractive. While a 10-year position may seem to offer improved stability to the acquisition process, my experience leads me to believe individuals would be either unwilling or unable to agree to remain for such a long term of service in these demanding positions given personal considerations and other competitive pressures.

9. Senator MCCAIN. Admiral Mullen and General Hagee, the QDR stated that the DOD focused on delivering needed capabilities to the joint force more rapidly by fashioning a more effective acquisition system and associated set of processes. One of the DAPA recommendations is to integrate the combatant commanders (COCOM) more fully into the acquisition process. What are your thoughts regarding the increased role of COCOM in the acquisition process?

Admiral MULLEN. I believe the Services must respond to the capability and capacity demand signals generated by the COCOM and their component commands. It is therefore vital that feedback from the COCOMs be considered in our planning, programming, budget, and execution process. I do not see this representing as much an "increased role" in the process as perhaps a need for the Services to be more attentive and responsive to COCOM input.

General HAGEE. We absolutely want input from the regional COCOMs to help inform our decisionmaking. We also use the strategic underpinning for our future from the administration, Congress, the DOD, and other Government agencies to in-

form and help shape our decisions. But ultimately, we must fulfill our obligation to our Nation to provide a Corps of Marines that is ready to perform COCOMs assigned missions in any region of the globe.

As a Service, we are responsible to support multiple COCOMs. We have embraced the Defense Department's transformation program by transitioning from requirements based planning to "capabilities based planning" utilizing a top down approach starting with DOD guidance (to include strategic planning guidance and joint planning guidance) and integrating the needs of our COCOMs into our combat development process through their respective integrated priority lists (IPLs).

Our recently revised combat development process emphasizes the need to "map" our current and future capabilities development activities to both the joint fight (supporting COCOMs requirements) and our title 10 responsibilities with respect to manning, training, and equipping our Corps to be most ready when the Nation is least ready. In doing so, we can readily tie national strategies, joint war plan requirements (articulated by the COCOMs), and our Service requirements to materiel/nonmateriel solutions with respect to our acquisition and combat development activities. Although indirectly involved in Service acquisition activities, our Nation's COCOMs have great influence in guiding and providing input to our combat development activities.

10. Senator MCCAIN. Admiral Mullen and General Hagee, what are your recommendations of how the Department should develop and address joint requirements?

Admiral MULLEN. I believe that the JROC and the JCIDS process adequately address the development of joint warfighting capabilities for the Services. Additionally, with the ongoing development of tier one and tier two joint capability areas (JCAs), the Services will have a common language to compare capabilities across the DOD enterprise. By using capability based planning and JCAs, the Services are better able to identify capability gaps and redundancies for the joint warfighter. Based upon strategic guidance that identifies where we must reduce risk and where we are prepared to accept risk, the Joint Chiefs and the JROC are now better able to compare capabilities for final validation across the Services prior to seeking a material solution via the acquisition process.

I have also established the Naval Capabilities Board (NCB) and the Resource Requirements Review Board (R3B) to ensure senior Navy leadership has early and full visibility into future capabilities requirements, as well as the resources necessary to provide them. We will use these tools to resolve cross-enterprise issues and ensure that new capabilities are "born joint" at an affordable cost.

General HAGEE. The Marine Corps has embraced the JCIDS, which was developed through collaboration between the Joint Staff, the Services, and OSD, to facilitate identification and development of joint warfighting requirements. This capabilities-based construct enables joint force planning in an uncertain environment and identifies the broad set of capabilities that will be required to address the challenges of the 21st century. Additionally JCIDS employs a synchronized, collaborative, and integrated approach involving senior leadership, including the Secretary of Defense, earlier in the joint warfighting capabilities decisionmaking process. Though JCIDS is relatively new, the impact is already evident in areas such as command and control systems and in our current effort to jointly define requirements for the Joint Light Tactical Vehicle as the replacement for the High Mobility Multipurpose Wheeled Vehicle (HMMWV). The Marine Corps also utilizes the Army/Marine Corps Board, established in October 2003, to develop and resolve issues and policies of mutual interest to include the development and harmonization of requirements and acquisition programs.

Considered a national capability, the development of seabasing requirements is inherently joint; and is not envisioned as a strictly naval solution. All seabasing programs in various stages of development by the DON are joint in nature. The Maritime Prepositioning Force (Future) program is the next generation in naval afloat prepositioning capability and this capability will also support at-sea arrival and throughput of selected joint forces, as well as enable joint command and control at sea. The Joint Maritime Assault Connector, Joint High Speed Vessel, and Joint High Speed Sealift programs are currently in development with the Army. Each of the concepts of employment for these seabasing platforms has been integrated with the Seabasing JIC, which has been approved by the Joint Chiefs of Staff. Additionally, the Navy/Marine Corps team has already demonstrated interoperability with joint/coalition forces and other agencies during Operation Enduring Freedom and Tsunami relief, and most recently during the hurricane Katrina relief effort. For these reasons, we see seabasing as both a present and future capability that will continue to evolve as concepts and technologies mature.

11. Senator MCCAIN. Secretary Winter, defense acquisition is cyclical and history shows that we are heading toward a periodic trough in defense spending. Acquisition reform is critical as well as the need to make hard choices concerning major weapon system procurement. This committee has expressed concern that even with the increase in defense spending during this administration, there will not be enough money to pay for the four dozen or so weapon systems currently under development. In the QDR it appears that we have avoided making some of the hard choices that we will inevitably have to face. CVN–21 is $13+ billion each, DDX is $3+ billion each, new attack submarines are $2+ billion each, and Littoral Combat Ship (LCS) is over $300 million each—the list goes on and on. During the downward cycle of defense spending—there will be a procurement bow wave—when difficult budget decisions have to be made because there are not enough funds for every program in the budget and the FYDP. As fewer defense dollars squeeze naval programs, what is going to be on the chopping block?

Secretary WINTER. The DON's fiscal year 2007 budget submission reflects the resources we believe necessary to pace the range of security challenges we face in the 21st century. The careful analysis of the QDR provided the Department with a transformation roadmap for our future.

In our budget, we have requested funding to sustain and expand our capabilities as part of the joint force consistent with the QDR. The Navy and Marine Corps' FYDP provides for a diverse set of capabilities ranging from blue water to green and brown water. The Department is committed to transforming to a capabilities set that ensures its ability to establish superiority across the entire spectrum of maritime environments.

It remains an imperative for the Chief of Naval Operations (CNO), the Commandant, and I to exert the discipline and commitment necessary to reduce acquisition costs. We are actively working with our partners in industry and Congress to alleviate the cost pressure on many of our acquisition programs, including shipbuilding. We must recognize the need to build a Navy and Marine Corps with the capabilities our Nation needs at a cost that is sustainable over time.

Should we have to make programmatic trades to accomplish our transformation, we will target for reduction programs that only marginally increase our advantages against traditional challenges, marginally improve existing capabilities in non-traditional areas, or that do not contribute to the development of a joint, net-centric force.

12. Senator MCCAIN. Secretary Winter, how do you intend to keep industry involved and doing its part to keep cost in check?

Secretary WINTER. The health of the defense and commercial industrial base is critical to our Nation's national security. My intent is to clearly communicate to industry our future acquisition plans, actively work to control requirements growth, and provide the stability of resources to allow our industry partners to develop the business case for their corporate investment strategies.

To control costs, we will encourage investments in new manufacturing technologies through such programs as Capital Expenditure, and work with industry to identify improvements to their facilities and industrial processes to reduce manufacturing costs. Expanding the use of specific contract incentives is critical to achieving the goal of motivating industry investments in their workforce, future technology, and cost performance on current programs.

13. Senator MCCAIN. Secretary Winter, what specific changes do you recommend in the area of acquisition reform, to ensure that we can get the best equipment at the best price for the taxpayer?

Secretary WINTER. Improving the DON's acquisition performance is a priority for me.

As acquisition reform is considered, care must be taken to ensure changes to current law do not create undesirable side effects. It is also my belief that within current structure, there exists sufficient flexibility and authority for the Department's senior civilian and uniformed leadership to collaborate in efforts to control requirements, provide stable resources, and expand the use of specific contract incentives to produce the best value for the taxpayer.

Within existing law, the Department is actively working with our partners in industry and with Congress to alleviate the cost pressure on many of our acquisition programs, including shipbuilding. We must recognize the need to build a Navy and Marine Corps with the capabilities our Nation needs at a cost that is sustainable across time.

The Department is responsible for recommending to Congress requirements and capabilities such that stable funding can be planned and provided for industry

across the FYDP. The Department is off to a good start with the analysis that underpins the recently submitted 30 Year Shipbuilding Plan, a plan that identifies a Navy of 313 ships at an average annual cost of $13.4 billion (in fiscal year 2005 dollars) to achieve that plan. We need to extend that level of analysis to aviation and other key program areas as well.

The Department is also responsible for controlling requirements/capabilities: both in new programs and in programs already in production. This is an area where, clearly, we must do better—and it will take strong leadership on the part of both the senior civilian and uniformed leadership to curb the Department's appetite for increased requirements/capabilities. Within the Department, we must improve the ties between the CNO and Assistant Secretary of the Navy (Research, Development, and Acquisition) throughout the course of the acquisition cycle to ensure an optimum investment strategy and stability of requirements. To this end, the CNO has already reconstituted the Naval Characteristics Board to oversee requirements changes in our platforms and systems.

The Department will support industry by developing incentives for construction and integration of platforms at low rates of production. The Department will work with industry to motivate and implement rigorous process improvements such as Lean Six Sigma, investments in capital improvements and technology that support low rates of production of high capability systems, and workforce investments which will ensure the composition of skill sets within the industry. Finally, the Department will tailor contracts and business arrangements with industry to motivate these desired behaviors that are in the national interest.

14. Senator MCCAIN. Secretary Winter, Admiral Mullen, and General Hagee, fixed-price contracts shift the risk to the contractor and incentivize the contractor to increase the reliability of the system components. What can the Navy and Marine Corps do to return to more common use of fixed-price contracts?

Secretary WINTER. Fixed price contracts are appropriate contracting vehicles when the risks and unknowns have been reduced to acceptable levels, and therefore when those fixed prices will properly motivate effective contractor performance. In this regard, the Department's efforts to rapidly stabilize and hold to requirements will facilitate a quicker shift to fixed-price and cost-incentive contracts.

In the shipbuilding arena, our practice is to use cost-reimbursement contracts for the lead ship of a class, and usually the first production ship, allowing the design to mature and the configuration to stabilize before shifting to fixed-price type contracts for the rest of the class.

In the sustainment arena, the Navy and Marine Corps are using fixed-price contracts for performance-based logistics with excellent results; in this context, contractors are motivated to increase component reliability, since doing so leads to greater profitability. We are sharing best practices and lessons learned through our "Virtual Systems Command" across all our lines of business.

In some circumstances, fixed-price contracts have the unintended consequence of providing an incentive to the contractor to manufacture systems with the lowest cost components available, or taking other shortcuts to reduce cost. It is the responsibility of the Department to ensure we are getting the requisite quality and maximum effect for each dollar spent and do not prematurely impose a fixed-price contract.

Admiral MULLEN. I believe fixed-price contracts are appropriate contracting vehicles when the risks and unknowns have been reduced to acceptable levels, and therefore when those fixed prices will properly motivate effective contractor performance. In this regard, the Navy's efforts to rapidly stabilize and adhere to requirements will facilitate a quicker shift to fixed-price and cost-incentive contracts.

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General HAGEE. Fixed-price contracts provide for a price that is not subject to any adjustment on the basis of the contractor's cost experience in performing the contract. The fixed price contracts place upon the contractor maximum risk and full responsibility for all costs and resulting profit or loss. Fixed price contracts provide maximum incentive for the contractor to control costs and perform effectively and impose a minimum administrative burden upon the contracting parties. While this serves as a cost incentive, different incentives can be used for parameters other than cost, such as schedule or performance incentives.

It has been a common practice to use fixed-price contracts with total system responsibility clauses in production contracts for many years. Specifically included are aircraft and shipbuilding contracts along with the Marine Corps Expeditionary Fighting Vehicle (EFV) program. However, the reliability parameters need to be built into the contract through the specification and warranty.

Historically, Marine Corps contracting officers have utilized firm fixed price and fixed price incentive contracts for all but research and development (R&D) contracts. Contracting officers utilize the expertise of the program management personnel during the procurement planning phase to identify and develop risk assessment scenarios. Factors discussed in developing these scenarios include: price competition, price analysis, cost analysis, type and complexity of the requirement, urgency of the requirement, period of performance, contractor's technical capability and financial responsibility, adequacy of the contractor's accounting system, concurrent contracts, extent and nature of proposed subcontracting, and acquisition history. A return to more fixed price contracts for weapon systems can work with proper planning and risk assessment conducted by the acquisition team. Industry teaming and insight as well as use of the proper incentives will help to ensure the warfighter's needs are met at a cost that is fair and reasonable while minimizing the overall risk to the Government.

15. Senator MCCAIN. Secretary Winter, in the 2006 Defense Authorization Law, Congress instructed the Pentagon to report on every program that costs at least 50 percent more than initial projections. The provision was designed to tie programs to their original cost estimates, rather than updated cost and schedule baselines. The Pentagon has been allowed to change its baseline without invoking the penalty. How do you plan to implement this new amendment with regard to Nunn-McCurdy violations?

Secretary WINTER. The Navy has implemented the full intent of the National Defense Authorization Act for Fiscal Year 2006. On April 7, 2006, the Navy reported in the Selected Acquisition Reports information regarding these unit cost increases.

Details of the increases were provided for four programs that fall within the 30–50 percent significant cost growth category.

Notification was provided for seven programs that fall in the 50 percent and greater critical cost growth category with the intent of following up with additional details of these increases later this year.

Henceforth, the Navy will report on all Nunn-McCurdy categories. These include: 30 and 50 percent breach of initial program baselines and 15 and 25 percent breach of the current program baseline.

16. Senator MCCAIN. Secretary Winter, what will be the effect to Navy and Marine Corps programs currently in the budget?

Secretary WINTER. The amendment affects 11 Navy programs in this year's budget.

Four programs showed unit cost increases between 30 and 50 percent: EFV, F/A–18 ElF, MH–60S, and the SSN 774.

Seven programs have unit cost increases in excess of 50 percent: H–1 Upgrades, JSOW—Baseline/Blu–108, LPD 17, MH–60R, T45TS, Trident II Missile, and the V–22.

Future Selected Acquisition Reports will provide appropriate notification to Congress explaining the unit cost increases for these programs in accordance with provisions in the National Defense Authorization Act for Fiscal Year 2006. The President's fiscal year 2007 budget already accounts for these revised estimates.

313-SHIP NAVY

17. Senator MCCAIN. Admiral Mullen, in a letter to the House of Representatives dated December 16, 2005, the Congressional Budget Office (CBO) estimated the Navy will need to spend an average of $20 billion per year on new ship construction in order to achieve a 313-ship fleet in 2035. If nuclear refuelings of aircraft carriers

and submarines are included, the price per year increases to $21 billion. A Congressional Research Service (CRS) report dated January 25, 2006, states that the Navy estimates it will cost only $14 billion per year—a $6 billion difference between what the CBO says it will cost and what the Navy says it will cost.

You have provided us with a very detailed plan for the Navy as it evolves over the next 3 years. Ultimately you see a sustained 313-ship Navy with 11 aircraft carriers, 62 *Arleigh Burke* destroyers, 7 DD(X)s, 19 CG(X)s, 66 submarines, and 55 LCSs. What remains undetermined however is how much it is going to cost. There are reports from CRS and CBO that it will cost $20 billion per year while the press reports that the Navy estimates it will cost $14 billion. What do you project the Navy will need to spend to achieve a sustained 313-ship Navy?

Admiral MULLEN. The Navy has determined that the average annual investment necessary to sustain the 313-ship force structure is approximately $13.4 billion in fiscal year 2005 dollars ($14.4 billion in fiscal year 2007 dollars).

18. Senator MCCAIN. Admiral Mullen, what are you going to do to control the huge cost increases that we always see in shipbuilding programs?

Admiral MULLEN. I have instituted the NCB, in conjunction with the R3B, that are chartered specifically to review requirements and key performance parameters (KPPs) that are the cost drivers in ship, aircraft, and weapons procurements to control shipbuilding cost growth. The NCB/R3B will assess the Navy mission set that a given platform is being procured to address with a view toward the cost implications of the requirements driven by that mission set and the relative efficacy of a given option in addressing those requirements. The bottom line is that cost must be considered and "more is better" is not an option for determining need. The process of Analysis of Alternatives will be subjected to NCB/R3B review before the decisions are made that drive front-end costs to ensure that the program being pursued is not just effective against the mission for which it is designed, but also that the program is ultimately affordable within the constrains envision for the Navy's future budget. Finally, the NCB/R3B will review any changes to programs currently in production to ensure the investment required to make the change is worth the resource commitment associated with that decision. The objective is to ensure "requirements creep" does not take an affordable program into the realm of the unaffordable.

JOINT STRIKE FIGHTER

19. Senator MCCAIN. Secretary Winter, this committee heard testimony from the Air Force concerning the decision to cancel the Joint Strike Fighter (JSF) alternate engine contract leaving just one-source—Pratt & Whitney—to provide engines for the entire life cycle of the JSF. When the Chief of Staff of the Air Force, General Moseley, was asked why the decision was made to terminate the F136 JSF alternate engine program, he answered that the Navy did the analysis, could not afford it, and asked that the alternate engine program be terminated. Is this an accurate description of the chain of events leading up to the cancellation of the JSF alternate engine program?

Secretary WINTER. Air Force and Navy participated in a number of venues during the fiscal year 2007 budget formulation process where the benefits, risks, and costs of maintaining the F136 alternate engine were considered. The proposal to cancel the JSF alternate engine originated in Navy, was not objected to by Air Force, and was approved by the DOD incident to the submission of the fiscal year 2007 budget.

20. Senator MCCAIN. Secretary Winter, with regard to keeping costs down through competition, are you comfortable with having a future with only one company capable of delivering a fighter aircraft engine?

Secretary WINTER. In supporting this decision, I considered three types of risk: development, cost, and production.

The F135 engine development is on track and is meeting expectations with almost 5,000 hours completed. It is being produced using the same engineering and manufacturing processes as the F119 engine, which is performing reliably after roughly 18,000 flight hours. There is limited development risk.

Cost analysis showed that the investment for a second engine source is $2.4 billion, perhaps higher, and will not yield program cost savings. Splitting the buy between two competitors will also increase production and support costs. Office of Secretary of Defense (Program Analysis and Evaluation (OSD(PA&E)) analysis suggests that more than a 15-percent cost savings is needed to recover the investment associated with the F136 development. The Program Management Advisory Group

(PMAG) assessments concluded that savings of 16 percent to 22 percent would be required to recover the investment to develop the F136. Additional savings would be required to recover the added costs associated with two suppliers. The F–16 program suggests that at best a 5- to 10-percent cost savings may be achieved through competition. It is therefore unlikely any savings from competition will offset the investment.

Also, with two sources, neither would experience full learning curve benefits and unit costs would increase approximately $1 million per engine.

The Department also assessed that the F135 engine supplier can meet increased production demands. The F–22 and F/A–18E/F rely on a single source engine supplier. Additionally, the 2002 PMAG assessment concluded that operational risk was low to the warfighter with a sole engine supplier.

21. Senator MCCAIN. Secretary Winter, were there any studies done to determine what the cost per engine purchased would be over the complete life cycle of the aircraft, to include operation and support costs?

Secretary WINTER. Yes. The PMAG conducted engine assessments in 1998 and 2002. Operation and support costs were considered as part of that assessment.

22. Senator MCCAIN. Secretary Winter, what will the cost per engine be if the alternate engine program is kept in place?

Secretary WINTER. With two sources, neither would experience full learning curve benefits and unit costs would increase approximately $1 million. With planned procurement of approximately 3,000 engines including spares, for the 2,443 DOD aircraft quantity, projected propulsion unit costs for conventional take-off and landing (CTOL) carrier variant (CV) and short take-off, vertical landing (STOVL) would be approximately $7 million and $14 million, respectively (BY02).

23. Senator MCCAIN. Secretary Winter, would you please inform the Department that we are dissatisfied with the February 27, 2006, response and we reiterate our original request of February 16, 2006, that the information be produced as to the complete analysis supporting the decision to terminate the F136 alternate engine program?

Secretary WINTER. I have informed Secretary England of your opinion that his February 27, 2006, response on the F136 alternate engine decision is inadequate.

FA–18 HORNET—JOINT STRIKE FIGHTER TRANSITION

24. Senator MCCAIN. Admiral Mullen, there has been discussion concerning the future health of naval aviation in terms of the number of F/A–18s and the potential shortfall you will be dealing with just to get to the planned initial operational capability (IOC) of the JSF. There is also some concern that the planned IOC of 2010 for the JSF may slide to a later date thus exacerbating the Hornet shortfall problem. Do you share these concerns?

Admiral MULLEN. Ensuring JSF achieves timely IOC is of considerable concern to me. Based on a JSF IOC of 2013, the Navy anticipates a shortfall of 10 legacy Hornets by 2011 that increases to a shortfall of 48 by 2018. A delay in the IOC of the JSF could exacerbate this situation. A service life assessment program (SLAP) on the legacy Hornet is ongoing, with results to be released in December 2007.

25. Senator MCCAIN. Admiral Mullen, are we buying enough Hornets to make it to the JSF era?

Admiral MULLEN. Based upon current information available regarding the JSF's IOC and the legacy Hornets' predicted service life, I believe the 460 Super Hornets in the program of record are the correct number of aircraft needed for the Navy to transition to the JSF era without a loss of capability. A SLAP to evaluate legacy Hornets is ongoing and the results are scheduled for release in December 2007. If the SLAP indicates a shortfall through obsolescence, or the JSF IOC is significantly delayed, the Navy could consider purchasing additional Super Hornets to mitigate the shortfall.

26. Senator MCCAIN. Admiral Mullen, what is the shortfall — how many Hornets?

Admiral MULLEN. Based on current analysis the Navy anticipates a shortfall of 10 legacy Hornet aircraft in 2011 that increases to 48 aircraft by 2018. A SLAP is currently being conducted and the results are scheduled for release in December 2007. Based on more accurate data the SLAP may indicate a different shortfall in the number of legacy Hornets than currently anticipated.

27. Senator MCCAIN. Admiral Mullen, do you plan to buy more Hornets to bridge this gap or do you have some other plan to make up for this shortfall?

Admiral MULLEN. Based upon current information available regarding the JSF's IOC and the legacy Hornets' predicted service life, I believe the 460 Super Hornets in the program of record are sufficient for the Navy to transition to the JSF without a loss of combat capability. A SLAP to evaluate legacy Hornets is ongoing and the results are scheduled for release in December 2007.

AIRCRAFT CARRIERS

28. Senator MCCAIN. Admiral Mullen, how many air wings do you see as necessary now that we have retired the U.S.S. *Kennedy* and accepted 11 carriers as our required number?

Admiral MULLEN. While it is my recommendation that the U.S.S. *Kennedy* be retired this year, legislation has not yet been passed to accomplish this. With your help, I hope the U.S.S. *Kennedy* will indeed be retired by year's end. The Navy needs 10 air wings to meet the demands of the COCOM and our warfighting requirements. The aircraft carrier U.S.S. *Kennedy* will remain in commission until such time that legislation is passed removing the prohibition to retire her.

29. Senator MCCAIN. Admiral Mullen, considering the FRP and the prolonged requirement that our sailors increase their operational tempo, spend more time away from homes, and deploy more frequently than in the past—when there was not a surge requirement—is now really the appropriate time to decrease the number of carriers and subsequently the number of air wings that fly on and off our carriers?

Admiral MULLEN. I am confident that an 11 carrier force, supported by 10 air wings (the Navy does not plan a reduction in the number of air wings with the retirement of the U.S.S. *Kennedy,* CV–67), can meet COCOM requirements while maintaining a 6 + 1 surge capability—six carriers available within 30 days with an additional carrier available within 90 days. Based on extensive analysis, the QDR reached this same conclusion. The longer we delay the decommissioning of CV–67, the more money we are diverting from urgent operational and procurement requirements.

30. Senator MCCAIN. Admiral Mullen, aren't we once again going to be asking our people to do more with less?

Admiral MULLEN. I intend to sustain a 2.0 turn-around ratio (6 months deployed, 1 year at home) for our ships and sailors. This will be accomplished through the FRP which is designed to increase the time platforms are available for deployment, not the time sailors are deployed. While longer deployments may periodically be unavoidable, particularly in times of crisis, the Navy will always strive to ensure that the interests of sailors and their families are balanced with national security requirements.

EMERGENCY SUPPLEMENTAL SPENDING

31. Senator MCCAIN. Secretary Winter, a major issue in the congressional debate on funding continuing military operations and reconstruction in Iraq and Afghanistan is whether military and peacekeeping operations should be funded with supplemental requests or via the regular authorization and appropriation process. Last year, this committee urged the DOD to include the costs of current and future operations in Iraq and Afghanistan in the DOD's regular appropriations—arguing that these are now ongoing operations that should be planned for and funded in the annual defense budget. It is a responsibility of this committee to exercise oversight in the normal authorization process at the beginning of the budget debate. During the last 2 years this committee has provided for limited authorization in bridge supplemental requests in the defense authorization bill. The DOD assesses the incremental cost of Operation Iraqi Freedom at approximately $4.4 billion a month and Operation Enduring Freedom in Afghanistan at $800 million a month. As General Pace has appropriately stated in his testimony, "[w]e are in a long war." Do you think supplemental appropriations are the best vehicle for the Navy for funding this long war?

Secretary WINTER. Given the uncertain operating tempo and shifting roles and responsibilities as troop rotations and mission assignments change, a short timeframe between developing global war on terrorism estimates and appropriation enactment is very desirable, and consistent with the policies of the Department. This approach allows the most recent strength levels and operational tempo (OPTEMPO) estimates

for each Service to be utilized. Budgeting for war-related incremental costs 2 years in advance of the requirement would not be the best vehicle for financing the global war on terrorism. Of the mechanisms we have today, these incremental costs of conducting the war are better funded through supplemental appropriations.

32. Senator MCCAIN. Secretary Winter, I notice you have asked for additional F/A–18s in the supplemental appropriations request. Why didn't you fund these aircraft in the normal budget process?

Secretary WINTER. To date, no F/A–18s have been requested in the supplemental.

NAVY TANKER REQUIREMENTS

33. Senator MCCAIN. Admiral Mullen and General Hagee, I understand that any future Air Force tanker will have to have boom capability. The boom system is required to refuel all of our large transport and bomber aircraft. We also know that Navy and Marine Corps aircraft as well as our allies and coalition partners will always require probe and drogue systems. Under the failed Boeing 767 tanker lease program, e-mails among the Air Force leadership revealed a plan to build the first 100 tankers without drogue systems. I would guess that decision would not have sat well with the Navy leadership. Would you ensure that it is a naval requirement that any future tanker program should have drogue systems on all tanker aircraft?

Admiral MULLEN. As our operations become increasingly joint and integrated, I believe it is a critical requirement for any new tanker program to have both boom and probe and drogue capabilities. This dual capability is essential for flexible joint operations and has been accepted as a KPP for the next tanker aircraft. We remain confident that this requirement will be filled.

General HAGEE. As part of the Joint Capabilities Integration and Development System, the Marine Corps participates in the JROC, which reviews all joint DOD requirements for acquisition programs. The purpose of this council is to ensure that the requirements of all Services, including those of our allies, are considered in the development process.

The USAF is in the process of recapitalizing its KC–135 fleet and is continuing requirements and acquisition planning for a Replacement Tanker Aircraft (RTA). One of the KPP thresholds for the RTA is to have both a boom and a drogue system permanently installed on the aircraft. The RTA is planned to be able to refuel boom or drogue on the same mission.

34. Senator MCCAIN. Admiral Mullen and General Hagee, I understand the Navy has contracted for commercial aerial refueling with Omega Air. Several years ago, this committee heard testimony from Vice Admiral McCabe, who reported that this was a fantastically successful contract. Does commercial aerial refueling through Omega Air continue to successfully meet Navy requirements?

Admiral MULLEN. Commercial aerial refueling through Omega Air does continue to meet Navy requirements. Last year, Omega Air supported a number of Navy exercises and training evolutions on both coasts. Omega provides dependable and realistic training for our flight crews, thereby freeing Air Force tankers for use in higher priority operations.

General HAGEE. The Navy does have a contract with Omega Air which was established during December 2001 and is due to be recompeted this year. The tanker is utilized to extend aircraft "on-station" time for training sorties and during major exercises such as Joint Task Force Exercise. It has also been used to refuel Navy and Marine Corps aircraft enroute to and from these exercises when tactical or strategic tanker assets are not available.

I cannot speak for Navy requirements, but the limited amount of time that the USMC has utilized this asset it has provided important air refueling training, exercise support, and transcontinental aerial refueling capability.

35. Senator MCCAIN. Admiral Mullen and General Hagee, would you recommend expanding the contract to provide a greater commercial air refueling capability?

Admiral MULLEN. Omega Air provides a valuable service by offering commercial air refueling of Navy aircraft during training. I am satisfied with the current level of support the Navy receives from Omega Air and do not recommend expanding the Navy-Omega Air contract at this time. If, in the future, the fleet's requirements call for increased air refueling capability, I would support examining a commercial option to provide it.

General HAGEE. The Omega Air contract is currently funded by Navy flight hour funds. The Marine Corps utilizes approximately 8–9 percent of the annual Navy

flight hours contracted with Omega Air tanker services for nontactical aerial refueling. If funding was made available to expand this contract, the Marines would certainly take advantage of this increased capability. However, the current President's budget reflects the best balance of resources and requirements.

SPECIAL FORCES

36. Senator MCCAIN. Admiral Mullen, the QDR calls for a significant increase in Special Operations Forces (SOF) capability and capacity: "U.S. Special Operations Command (USSOCOM) will establish the Marine Special Operations Command (MARSOC). The Navy will support a USSOCOM increase in sea/air/land team manning and will develop a riverine warfare capability." The QDR recognizes an important need for the increase of SOF personnel and their capability. It is unclear if the Navy will get the resources required for this very important area. Will funding for a new MARSOC and riverine warfare squadron come out of the Navy's budget thus reducing the ability to fund naval aviation and ship procurement?

Admiral MULLEN. Funding for the MARSOC will not come out of the Navy's budget. Although the Navy's budget will fund the establishment of a riverine warfare capability, this cost is not expected to reduce the Navy's ability to fund naval aviation or ship procurement.

37. Senator MCCAIN. Admiral Mullen, are resources being diverted from some other area of DOD to fund this aggressive, yet needed increase in our SOF capabilities?

Admiral MULLEN. While aggregate Navy strength may be decreasing, the Navy's force shaping plan provides for growth in certain manpower specialties, including SOF, without requiring that resources be diverted from other areas of DOD. Specifically, the Navy has established a plan that will add over 650 personnel (above a fiscal year 2004 baseline) to the Navy's SOF communities through fiscal year 2008, and is developing plans to rapidly, yet prudently, implement QDR-directed growth in SOF and SOF supporting communities.

RESERVE COMPONENTS

38. Senator MCCAIN. Secretary Winter and Admiral Mullen, several recommendations in the QDR with regard to Reserve and Guard personnel policies cause me some concern. For example, the QDR recommends:

1. Increasing Presidential Reserve call-up from 270 to 365 days.
2. Seeking legislation to improve access to Guard and Reserve in support of civil authorities.
3. Seeking legislative relief of Presidential Reserve call-up statute to activate reservists for natural disasters.
4. Developing Reserve units that train more intensively and require shorter notice for deployment.

We are already hearing from many reservists and their employers about deployments which are neither periodic nor predictable. Are these policies in the best interests of our total force?

Secretary WINTER. These QDR initiatives are in the best interests of our national defense as they enhance the warfighting capability of our total force. Responding to the threats posed by terrorism requires a Reserve component (RC) that is adaptive, flexible, and ready to fight our Nation's wars. Balancing the need for an agile and accessible force with a predictable and periodic OPTEMPO is the challenge for Navy/Marine Corps leadership.

Justification for these policy initiatives follows:

A. Increasing Presidential Reserve Call-Up Authority from 270 to 365 days

The operational rotation cycles currently used by the United States Navy and Marine Corps relative to deployments for their Active and Reserve components vary from 6 (Navy)/7 (Marine) to 12 months "boots on the ground." These are the most efficient and effective length for tours of duty. Expanding the maximum duration to 365 days will facilitate greater "boots on the ground" time for RC. It will allow for effective and efficient pre-deployment training and post-deployment deactivation.

As our Reserve component changes from a strategic to an operational Reserve, we must increase accessibility of our reservists. Increasing Presidential Reserve Call-Up Authority in title 10, section 12304 to 365 days will provide more critical skill sets for the supported command during a national emergency. This increased au-

thority would allow the Services to meet emerging requirements with fewer rotations of recalled service members.

B. Improving access to, and competencies of, Guard and Reserve in support of civil authorities and natural disasters (Initiatives (2) and (3), above)

Hurricane Katrina revealed once again that the heart and soul of our national response to such crises is our Guard and Reserve. They are especially suited for these nontraditional missions because of their unique and diverse skill sets. More importantly, they live in the communities impacted by such events. These important roles, supporting homeland defense/homeland security and providing humanitarian assistance/disaster relief, require legislation to improve access to the Reserves. Improved access by civil authorities will enable a stronger response by the DOD and our Nation.

C. Develop Reserve units that train more intensely and require shorter notice for deployment

Today's RC is a critical component of the Total Force. As such, the RC must be responsive to the changing demand signals sent by COCOMs who require rapidly deployable, flexible warfighting capabilities.

Navy initiatives such as Active Reserve Integration (ARI) allow Active component (AC) and RC to work side-by-side in support of 21 JCAs and to do so seamlessly. This enables an RC that is trained and ready in fleet compatible equipment, systems, and functions. Navy reservists are ready, relevant, and fully integrated. Recent examples include forward-deployed helicopter combat support detachments comprised of integrated AC and RC warfighters.

The Marine Corps Reserve units are able to promptly and efficiently activate. They can deploy from their Reserve training centers and report to their gaining force commander within 5 to 7 days from activation. Individual mobilization augmentees are prepared to report to their respective commands/staffs within 72 hours of notification. Under the continuum of service umbrella, the Marine Corps has been working with OSD on one of its innovative force management initiatives known as "Variable Participation of Reservists at Unit Level (VPR–U)." VPR–U anticipates capitalizing on volunteerism to provide trained units that offer a predictable, rapid response capability, without requiring an initial involuntary mobilization authority. The Marine Corps expects possible testing and evaluation with one or more units in the future. Further development of the VPR–U concept may increase predictability to the warfighter, the individual marine, and his/her family and employer.

We recognize the impact of supporting the global war on terror and day-to-day operational requirements upon our reservists, their families, and their employers. We are committed to supporting our citizen sailors/marines as they answer our Nation's call to arms in this long war of our generation.

Admiral MULLEN. These QDR initiatives are in the best interests of our national defense as they enhance the warfighting capability of our total force. The transnational, asymmetric threats posed by terrorism require an RC that is adaptive, flexible, and ready to fight our Nation's wars. Balancing the need for an agile and accessible force with a predictable and periodic OPTEMPO is the challenge for Navy leadership. We recognize the impact of supporting the global war on terror and day-to-day operational requirements upon our reservists, their families, and their employers. We are committed to supporting our citizen sailors as they answer our Nation's call to arms in this long war of our generation.

Increasing Presidential Reserve Call-Up Authority from 270 to 365 days

As our Reserve component changes from a strategic to an operational Reserve, we must increase the accessibility of our reservists. Increasing Presidential Reserve Call-Up Authority in title 10, section 12304 to 365 days will provide more critical skill sets for the supported command during a national emergency while allowing for more effective pre-deployment training and post-deployment deactivation. Further, this increased authority would allow the Navy to meet emerging requirements with fewer rotations of recalled sailors.

Seeks legislation to improve access to Guard and Reserve in support of civil authorities and natural disasters (Initiatives (2) and (3))

Hurricane Katrina revealed once again the value of our Guard and Reserve in responding to natural disasters. Supporting homeland defense/homeland security and providing humanitarian assistance/disaster relief are important roles for the RC that must be enabled by legislation. These nontraditional missions are especially suited for the Guard and Reserve because of the diverse skill sets resident within these organizations. More importantly, our guardsmen and reservists live in the

communities impacted by such events. The Navy Reserve will remain a "ready and relevant" contributor to civil authorities and disaster relief efforts.

Develop Reserve units that train more intensely and require shorter notice for deployment

As previously stated, today's RC is a critical component of the total force. As such, the RC must be responsive to the changing demand signals sent by COCOMs who require rapidly deployable, flexible warfighting capabilities. Initiatives such as ARI allow AC and RC to work side-by-side in support of 21 JCAs and to do so seamlessly. They enable an RC that is trained and ready in fleet compatible equipment, systems, and functions. This ARI training is more effective and efficient, and has resulted in a Navy Reserve that is ready, relevant, and fully integrated. Recent examples include forward-deployed helicopter combat support detachments comprised of integrated AC and RC warfighters.

QUESTIONS SUBMITTED BY SENATOR SUSAN M. COLLINS

DD(X) REQUIREMENTS

39. Senator COLLINS. Admiral Mullen, due to Office of Management and Budget-imposed budget cuts and not military analysis, last year's Navy budget request slashed production of the DD(X) over the next 6 years from 12 to 5. This year's budget also requests only 5 DD(X)s—even though the former Chief of Naval Operations, Admiral Clark, stated to me before this committee that the requirement for DD(X) destroyers is unchanged at 12. During a hearing on February 10 last year, I asked Admiral Clark how the fiscal year 2006 budget called for five DD(X) destroyers to be constructed instead of the 12 because I was mystified at how the requirement could suddenly have dropped to less than half. Admiral Clark clarified the requirement for the DD(X) by stating: "My view (for) DD(X) is somewhere around a dozen ships. So the requirement has not stopped at five. The real key, I think, to your question is this: is it an affordability issue or did I change the requirement? I did not change the requirement. It is an affordability issue." Your proposed 313-ship fleet includes a requirement for a total of 88 cruisers and destroyers—7 DD(X)s, 19 CG(X)s), and 62 older *Arleigh Burke* class Aegis destroyers. Assuming a 35-year average life for cruisers and destroyers, maintaining a force of 88 cruisers and destroyers over the long run would require steady-state procurement rate of about 2.5 ships per year. This dramatic cut in DD(X) procurement rates, however, will impact the size of our major surface combatant fleet far into the future. A prospective DD(X) build rate of one ship per year also impacts economies of scale and contributes to increased program costs. I remain concerned that we're not building as many DD(X)s as previously planned and as many as are necessary in order to achieve the stated military requirement. Do you agree that increased ship procurement rates and predictability lead to efficiencies, reduced costs, and help to maintain a steady workload for a stable and highly-skilled industrial base?

Admiral MULLEN. I agree that maintaining a stable, predictable shipbuilding plan is a key ingredient in achieving maximum shipbuilding efficiencies, cost savings, and a skilled workforce. The fiscal year 2007 President's budget request demonstrates a renewed commitment to maintaining stability in the shipbuilding accounts and Navy expects to continue this trend as we execute our 2007 Comprehensive Plan for the Construction of Naval Vessels.

40. Senator COLLINS. Admiral Mullen, how can Congress and industry work with you to increase procurement rates of major surface combatants?

Admiral MULLEN. I am grateful for all the support you and your colleagues in Congress continue to provide to the Navy's shipbuilding program, and I am encouraged by the progress being made by American shipyards in controlling costs. The Navy is committed to taking steps to help continue this trend. There are a few key areas in which the Navy, Congress, and industry can work together to help industry achieve the greatest possible efficiency.

First, the Navy must continue its commitment to providing stability in future shipbuilding plans, programs, and budgets. Industry should have a reasonable expectation of what work will be available for competition and position themselves accordingly.

Second, the Navy needs to continue to enter into contracts that encourage and incentivize industry to make the capital improvements required to sustain their world-class status.

Third, we are encouraging our Nation's two military shipbuilding corporations to work more closely together. In addition, we are considering options to economize the

purchase of components across ship classes. To achieve these potential savings, the Navy and Congress would need to address control over the line item appropriations process and the visibility into costs.

Lastly, the Navy will continue to transition programs away from cost-reimbursement type contracts to fixed-price contracts as early in a program as practical. A fixed-price environment provides industry the best incentive for cost-reducing improvements.

41. Senator COLLINS. Admiral Mullen, are you optimistic that your shipbuilding plan, combined with the commitment of our shipbuilders, will help lower the costs for ships?

Admiral MULLEN. I am confident that if we stay the course on the long range shipbuilding plan and control our appetite for requirements growth we can provide the stability and predictability our partners in industry need to reduce the costs for ships over time.

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

CONVENTIONAL SEA-LAUNCHED BALLISTIC MISSILES

42. Senator LEVIN. Secretary Winter, the Navy has proposed to replace nuclear warheads with conventional warheads on two D–5 Trident sea-launched ballistic missiles on some, and possibly all, of the 14 Trident submarines. Each Trident submarine carries 24 D–5 missiles. The production schedule for D–5 missiles provided just enough missiles to meet the nuclear mission. Would additional missiles have to be manufactured? If the answer is yes, how many additional missiles would have to be manufactured and how much would that cost?

Secretary WINTER. No, additional missiles do not have to be manufactured. The Navy is not requesting any increase in the Trident II (DS) missile inventory. The proposed plan will provide two missiles for each of the SSBNs with the capability for conventional warheads.

Other than the change to the warhead, very little modification to the missile or onboard system is required for this program. Only minor changes to the missile guidance system and shipboard fire control system will be necessary. Testing will be accomplished in conjunction with ongoing commanders follow-on operational test flights. The current and projected DS missile inventory is sufficient to field this new capability.

TRICARE

43. Senator LEVIN. Admiral Mullen and General Hagee, do you support the proposals in the budget to increase TRICARE premiums and deductibles for working-age military retirees?

Admiral MULLEN. Yes, I fully support these modest increases to copays designed to maintain TRICARE as a gold standard healthcare system while reestablishing a more appropriate cost-sharing balance between beneficiaries and the Government. I align myself with General Pace and the other Joint Chiefs in recommending the renorming of premium costs for the first time since 1995.

General HAGEE. Unfortunately, health care costs continue to outpace funding support. In order to maintain the benefit at its current level for our military, family members, and retirees, we need to look at additional funding sources to include reasonable premium and deductible costs for our retirees.

44. Senator LEVIN. Admiral Mullen and General Hagee, why do you feel these steps are necessary?

Admiral MULLEN. I align myself with General Pace and the rest of the Joint Chiefs in my desire to ensure our Active-Duty servicemembers and retirees remain the beneficiaries of this "gold standard" of health care.

As I indicated in my written statement, DOD health care costs have doubled from $19 billion in 2001 to just over $37 billion in the 2006 budget. Yet, since 1995 when Congress enacted the TRICARE program, the premiums have not changed. The net effect is increased pressure on other Navy accounts to meet DOD Health Care obligations.

The Joint Chiefs have met many times on this subject and our unanimous recommendation to Congress is that you renorm the cost of the premiums to the 1995 levels.

This revised plan provides excellent health care coverage at very reasonable cost to the individual member. More importantly, renorming premium costs sustains this excellent program for the foreseeable future for Active-Duty and retired.

General HAGEE. DOD provides the finest health care in the world to our military, family members, and retirees. It is a commitment that is highly important to them and one we will sustain. It has become an urgent issue as we are now seeing that, without adjustment of fees, this superb benefit will continue to require financing that is growing at a rate that has far outstripped the growth in the budgets that also support our current and future defense readiness: our manpower, our warfighting, and infrastructure investments, and the operation and maintenance funds to repair and maintain those investments. We look forward to working with Congress to finding a responsible solution to this issue.

NUMBER OF LPD–17 AMPHIBIOUS TRANSPORT DOCKS

45. Senator LEVIN. General Hagee, the Navy budget and the FYDP will stop LPD–17 procurement at 9 ships, before they buy the 12 ships that the Marine Corps has repeatedly said it needs. Do you believe that this is the correct decision on force structure?

General HAGEE. Limiting the LPD–17 production line to nine ships places the Marine Corps' ability to support national security requirements at risk by further decrementing the MEB equipment for the assault echelon. The U.S.S. *San Antonio*, LPD–17 class of ships, is optimized for operational flexibility to meet Marine Air Ground Task Force requirements to project strike (fire and maneuver) forces from the sea deep into littoral land objectives. With its significantly enhanced survivability, habitability, and functionality, it represents a critical element of seabasing with a spacious well deck for deployment of Landing Craft, Air Cushions (LCAC) and EFV and an enhanced flight deck and maintenance facility for employment of MV–22, medium assault tiltrotors and CH–53E/K heavy lift helicopters. Survivability upgrades protect against mines, missiles, and surface attack and make it a highly capable platform for the forward deployed ESG/Marine Expeditionary Unit and larger forcible entry operations. With the LHA(R) ship design emphasis on aviation transport and strike fires, the well decks of the LPD–17 and existing LSD–41/49 class have even more importance to the rapid surface movement of EFVs deep inland and LCAC transport of heavy or bulky ground equipment and sustainment. The utility of the well deck space of this ship cannot be over emphasized. The well deck space of the LPD–17 provides the Marine Corps with the capability to employ heavy equipment across the beach through of the joint campaign construct.

MEDICAL SPECIALTY SHORTFALLS

46. Senator LEVIN. Admiral Mullen, in your prepared statement, you describe the Navy's successes in achieving its accession goals in fiscal year 2005, but identify shortfalls in accessions for Navy medical programs. What is the Navy doing to address the shortfalls in recruiting for medical programs?

Admiral MULLEN. The Navy is pursuing a number of initiatives to improve recruiting and retention of health professionals. One such recently implemented initiative is the Health Profession Loan Repayment Program. We are also evaluating policy actions within existing authority to establish critical skills accession bonuses for Medical Corps and Dental Corps Health Professions Scholarship Students and Direct Accession Dentists.

To address shortfalls within the Nurse Corps, we have increased accession goals in our traditionally successful student pipeline programs and are considering further increases. We have found these programs to be a more productive source than direct accessions. We are also evaluating a Critical Skills Retention Bonus for this community to address retention shortfalls among Navy nurses at 7–9 years of commissioned service.

In concert with the recommendations of the Defense Advisory Committee on Military Compensation and the impending Quadrennial Review of Military Compensation, the Navy will continue to evaluate the need for enhanced incentives to attract and retain personnel with critical health professions skills.

47. Senator LEVIN. Admiral Mullen, do you need new legislative authority to improve recruiting of medical personnel?

Admiral MULLEN. We are not convinced that additional legislative authorities are required. The Navy is working first to maximize the use of existing authorities and to implement recruiting and retention incentives currently available without new

legislation. If needed, we will offer appropriate recommendations on both policy and legislative initiatives to DON and Defense leadership in the coming weeks.

48. Senator LEVIN. Admiral Mullen, what can we do to help you address this shortfall?

Admiral MULLEN. We are not convinced that additional legislative authorities are required. The Navy is working first to maximize the use of existing authorities and to implement recruiting and retention incentives currently available without new legislation. If needed, we will offer appropriate recommendations on both policy and legislative initiatives to DON and Defense leadership in the coming weeks.

FOREIGN TRAINING

49. Senator LEVIN. General Hagee, under what authority did the Marine Corps establish a foreign training component last year?

General HAGEE. In anticipation that the Marine Corps will be tasked to provide a Marine Corps function—tailored basic military and combat skills training, and advisor support for identified foreign military forces—the Marine Corps stood up a Foreign Military Training Unit (FMTU) organization in August 2005. However, the FMTU has not engaged in the training of any foreign military forces to date. When the Marine Corps is tasked to conduct such training of foreign military forces, it will be conducted under the authorities found in title 22 of the U.S. Code and funded accordingly.

NAVY-MARINE CORPS INTRANET

50. Senator LEVIN. Secretary Winter, Congress was recently informed of transfers of nearly $75 million for the purpose of settling numerous claims filed by Electronic Data Systems (EDS) in connection with the Navy's contract for the Navy-Marine Corps Intranet (NMCI). Can you provide specifics on which claims were paid off using these funds?

Secretary WINTER. As part of a recent modification of the NMCI contract and after negotiation between EDS and the Navy, significant claims valued at approximately $800 million by EDS against the Navy were settled for $100 million. This settlement utilized $100 million of expired funds (fiscal year 2005 and prior), $75 million of which were subject of the congressional notification of reprogramming action.

The recent modification settled all outstanding claims, all of which were certified, that the contractor had brought against the Department. These included claims by the contractor related to:

1. Reconstitution of the Pentagon after September 11;
2. The Department's Legacy Environment
    a. Legacy Applications;
    b. Dual Desktop Support;
    c. Legacy Network Connectivity; and,
    d. Manual Deployment of Applications;
3. Failure to Meet Contract Minimums;
4. Uncompensated Services (excess e-mail storage and file remediation);
5. San Diego Helpdesk;
6. Certain Lease Credits;
7. Asbestos Remediation;
8. Installation of Certain Fire Risers; and,
9. Lost, Stolen, or Damaged Equipment at Millington.

51. Senator LEVIN. Secretary Winter, what was the Navy's position on the merit of those claims?

Secretary WINTER. The Department undertook an extensive evaluation of the claims submitted by EDS beginning in March 2005. An interdisciplinary team, consisting of technical, contracting, and legal personnel evaluated the claims. The results of these evaluations were used to form the basis for the negotiation of the settlement of these claims. Included in the modification was a full and final release for all claims and potential claims arising prior to March 24, 2004. Settlement of these claims was in the best interests of the Department, avoids major potential litigation, and allows the DON and EDS to focus on the future performance of the contract.

52. Senator LEVIN. Secretary Winter, after paying these claims, what is the status of any pending or future claims that could be filed by EDS against the Navy?

Secretary WINTER. The settlement provided the DON with a release for all pending claims and, with a few exceptions, for all events arising prior to March 24, 2006. The few reserved items were agreed to as reasonable items to exclude from the settlement and we anticipate addressing and resolving them without any further claims. Should there be future claims, they will be handled in accordance with the terms of the contract (under the newly added alternate dispute resolution provision) and the Contract Disputes Act.

53. Senator LEVIN. Secretary Winter, what lessons has the Navy learned with respect to contracting for information technology services as a result of its dealings with NMCI and EDS?

Secretary WINTER. We have learned that we need to have a robust, stable requirement developed in a timely manner. While the Navy wanted to consolidate and standardize its desktop computing platform and strengthen its infrastructure, neither Navy nor EDS fully understood the complexity of the existing legacy network infrastructure, nor did they appreciate the magnitude of the legacy applications that ran on those networks.

Additionally, the contract, as awarded was a commercial contract (FAR Part 12), and did not have a disputes resolution process. Therefore, unresolved issues resulted in formal claims against the Government.

In order to improve future information technology procurements, the following have been instituted on the current contract and will be carried forward to the follow-on effort:

a. Dr. Dolores Etter, Assistant Secretary of the Navy (Research, Development, and Acquisition), has directed that a course of action be developed to define future NMCI requirements. To this end, the DON Chief Information Officer (CIO) and the Deputy Chief of Naval Operations for Communication Networks (OPNAV N6) has initiated an effort with stakeholders from the Naval (USN/USMC) and joint communities to begin the definition of the requirements for the follow-on NMCI contract to commence performance in October 2010.

b. The Assistant Secretary of the Navy with DON CIO is developing governance processes for applications standardization reduction and configuration management.

c. Alternative disputes resolution process to resolve issues between Government and contractor prior to formal claims being initiated by the contractor.

54. Senator LEVIN. Secretary Winter, I understand that the Navy and EDS are finalizing a modification of the NMCI contract. What are the purposes of this contract modification?

Secretary WINTER. On March 24, 2006, the Department executed a modification to the NMCI contract with EDS Corporation. This modification accomplished several important purposes. First, the Department was able to fairly and equitably settle claims brought by the contractor. Furthermore, the modification better aligns the contractor and the Department to focus both on execution of the contract and completion of the rollout of the network.

The additional terms of the modification, particularly the enhanced end-of-contract transition planning and services provisions, will improve the Department's ability to conduct a full and open competition for the follow-on effort scheduled to commence in 2010.

55. Senator LEVIN. Secretary Winter, why was the contract not opened up for a full recompetition with other interested potential contractors at this time?

Secretary WINTER. The option which the Department exercised was competed as part of the original competition for the NMCI contract. For the initial award, the DON evaluated each of the offerors' proposals, which included the option as part of the original source selection process.

Based on an analysis conducted by two independent firms, Booz Allen Hamilton and the Gartner Group, it was determined that the exercise of the option was the most advantageous method of fulfilling the Government's requirements through 2010, price and other factors considered.

In the longer term, Dr. Dolores Etter, Assistant Secretary of the Navy (Research, Development, and Acquisition), has directed that a course of action be developed to define future NMCI requirements. To this end, the DON CIO and the Deputy Chief of Naval Operations for Communication Networks (OPNAV N6) will initiate with

stakeholders from the Naval (USN/USMC) and Joint communities to begin the definition of the requirements for the follow-on NMCI contract in 2010. This is the first step in the Department's preparation for the recompete in order to have a new contract awarded to commence performance not later than October 1, 2010.

QUESTIONS SUBMITTED BY SENATOR EDWARD M. KENNEDY

JOINT STRIKE FIGHTER ALTERNATE ENGINE PROGRAM

56. Senator KENNEDY. Secretary Winter, Secretary Wynne is on record that the Navy initiated the recommendation to cancel the second engine development for the JSF. What analysis has the DON conducted to support the recommendation to cancel competition for the JSF engine program?

Secretary WINTER. During the fiscal year 2007 budget deliberations, engine assessments completed by the PMAG in 1998 and 2002, initial test results from the F135 engine, and a 2005 OSD(PA&E) analysis were considered to support the recommendation to cancel the JSF Alternate Engine Program.

In supporting this decision, the Department of the Navy also considered three types of risk: development, cost, and production.

The F135 engine development is on track and meeting expectations with almost 5,000 hours completed. It is being produced using the same engineering and manufacturing processes as the Fl19 engine, which is performing reliably after roughly 18,000 flight hours. There is limited development risk.

A 2005 OSD(PA&E) analysis showed that the investment cost of a second engine source is $2.4 billion, perhaps higher, and will not yield program cost savings. Additionally, splitting the buy between two competitors will increase production and support costs.

The Department also assessed that the F135 engine supplier can meet production demands. Additionally, the 2002 PMAG assessment concluded that operational risk was low to the warfighter with a sole engine supplier. The F–22 and F/A–18E/F rely on a single source engine supplier.

57. Senator KENNEDY. Secretary Winter, in view of the higher power levels required by the STOVL variant required by the Marine Corps, what is the technical risk associated with a single engine development program?

Secretary WINTER. Performance of the F135 and F136 are similar since they are designed and controlled to specification levels of thrust. We have confidence in the reliability and performance of the F135 engine based on its initial test results. The F135 engine now has almost 5,000 test hours completed. The F135 engine is also being produced using the same engineering and manufacturing processes as the F119 engine currently installed in the F–22, which is performing reliably after roughly 18,000 flight hours.

58. Senator KENNEDY. Secretary Winter, what analysis was conducted on the impact of non-competitive sourcing on quality, service, acquisition, and life cycle support cost for the JSF engine program?

Secretary WINTER. During the fiscal year 2007 budget deliberations, the Department of the Navy considered engine assessments completed by the PMAG in 1998 and 2002, initial test results from the F135 engine, and a 2005 OSD(PA&E) analysis to support the recommendation to cancel the JSF Alternate Engine Program.

These assessments suggest that a more than 15 percent cost savings is needed to recover the investment associated with the F136 development. Additional savings would be required to recover the additional costs associated with two suppliers.

Previous engine competitions indicate at best a 5–10-percent cost savings achieved. It is therefore unlikely any savings competition will offset the investment.

In supporting this decision, the Department also considered development risk and production risk to the warfighter.

The F135 engine development is on track and meeting expectations with almost 5,000 hours completed. It is being produced using the same engineering and manufacturing processes as the F119 engine, which is performing reliably after roughly 18,000 flight hours. The F–22 and F/A–18E/F rely on a single-source engine supplier. There is limited development risk.

The Department also assessed that the F135 engine supplier can meet production demands. Additionally, the 2002 PMAG assessment concluded that operational risk was low to the warfighter with a sole engine supplier. The F–22 and F/A–18E/F rely on a single-source engine supplier.

59. Senator KENNEDY. General Hagee, as the end user for the most complex variant of the JSF, is the Marine Corps comfortable with the decision to shift to a single engine development program?

General HAGEE. The STOVL variant propulsion system as currently designed will meet all of its requirements per the Operational Requirements Document regardless of dual or single source engine development.

60. Senator KENNEDY. General Hagee, what analysis has satisfied the Marine Corps that a single engine development program for the JSF will deliver the capabilities you need at acceptable risk?

General HAGEE. During fiscal year 2007 budget deliberations, the findings of past engine assessments, along with initial test results from the F135 primary engine, were considered. As you are perhaps aware, the F135 engine is a derivative from the F119 engine that is currently being manufactured for the F–22.

The F135 engine now has almost 5,000 test hours. The F135 engine is also being produced using the same engineering and manufacturing processes as the F119 engine which is performing reliably after roughly 18,000 flight hours. Accordingly, the Department has reasonable confidence in the reliability of the F135 engine.

In addition to confidence in the reliability of the F135 engine, DOD's analysis concluded that a second source would not yield program cost savings. The investment cost of developing a second source would not yield program cost savings. The investment cost of developing a second source is high, on the order of at least $2.1 billion and perhaps higher. Second, with two sources, neither source would experience full learning curve benefits. In addition to initial acquisition cost and reduced production rates, a second supplier also potentially introduces a second supply chain which could also increase support costs.

In summary, while there are indeed some benefits to having a second engine source, those benefits are not commensurate with the increased costs. Accordingly, the DOD decided to terminate the F136 alternate engine, starting in fiscal year 2007. In an earlier correspondence to Senators John Warner and Carl Levin, DOD agreed to continue with the planned alternate engine program until this termination decision was fully vetted by Congress.

SENSOR TECHNOLOGY

61. Senator KENNEDY. General Hagee, it has come to my attention that the Marine Corps has identified a "gap" in its unmanned aircraft systems sensor capabilities, and that the Marine Corps Warfighting Lab and Marine Corps Combat Development Command are actively evaluating advanced sensor technologies to address requirements for persistent intelligence, surveillance, and reconnaissance (ISR), laser designation, and multi-sensor payloads for counter-mine, counter-improvised-explosive-device (IED), and convoy protection. Could you provide the committee with an overview of your evolving requirements in this area, along with an assessment of the most urgently needed systems capabilities to address these requirements?

General HAGEE. Marine Corps Combat Development Command is developing JCIDS documentation for tier II and III unmanned aircraft systems (UAS) which identify the mission and related sensor capability gaps that were mentioned. The tier III ICD as approved by the JROC in December 2005. The tier II ICD is in draft form and currently implementing USAF Special Operations Command and Special Operations Command input to make it a joint document. We continue to integrate and coordinate with our Warfighting Lab, other Services, the research community, and industry to identify the best possible solutions in sensor technologies and to address our highest priority gaps including: infrared; communications relay; counter-IED signal intelligence; and laser pointer/designator. As our Warfighting Lab completes testing in new payload technologies, results will be incorporated into future capabilities documents leading to fielding materiel solutions.

Background information:

In February 2005 a consolidated Marine Corps UAS approach was developed (approved by the Marine Requirements Oversight Counsel (MROC)) for a three-tier concept.

Tier I	Supports the battalion and below
	Current Dragon Eye UAS (manpackable system) and a Defense Advanced Research Projects Agency (DARPA) test (ongoing)
	Follow-on Tier I UAS Joint Army/USSOCOM/USMC system
Tier II	Supports division/regiment/battalion/marine expeditionary units

	Current Operation Iraqi Freedom (OIF) Information, Surveillance, and Reconnaissance (ISR) services (Boeing Scan Eagle)
	Follow-on compete OIF ISR services
	Building joint tier II program of record (POR) (USMC/USAF/USN/USSOCOM)
Tier III	Supports JTF/MAGTF commanders
	Current POR Pioneer UAS
	Follow on Vertical Unmanned Aircraft Systems (VUAS) IOC 2015
	JROC approved VUAS ICD December 2005

COST OF WAR

62. Senator KENNEDY. Admiral Mullen, I noted your and General Hagee's comments about how the war in Iraq is wearing out equipment. In view of the fact that many Marine capabilities, particularly Marine aviation capabilities, are paid for through Navy procurement accounts, is the Navy receiving sufficient support in the supplemental to pay for the cost of the war?

Admiral MULLEN. I believe our fiscal year 2006 supplemental request adequately addresses cost of war shortfalls. The Navy Department's fiscal year 2006 Emergency Wartime Supplemental request for $10.3 billion included $271.1 million for Navy/Marine Corps aircraft procurement (APN). This APN funding included new and restored aircraft procurement (UH–1Y and H–53 AMARC) as well as major overhaul, equipment replacement, and force protection expenditures.

H–46 REPLACEMENT

63. Senator KENNEDY. Admiral Mullen, considering the cost of the MV–22 Osprey aircraft, will the Navy be able to buy them fast enough to replace the H–46 Sea Knight helos, a 40-year-old aircraft whose limited remaining service life is being rapidly consumed in Iraq?

Admiral MULLEN. Yes. Production of the MV–22 is being ramped up, and the Marine Corps intends to field two squadrons each year with Ospreys. The Program of Record procures 360 MV–22 aircraft through fiscal year 2016, with the last delivery in fiscal year 2018. It is a fact the H–46 is being flown at utilization rates three to four times their planned peacetime rate during operations in Iraq. However, we have and will continue to invest in H–46 sustainment to preserve this vital medium-lift assault support capability until we have achieved full operational capability with the MV–22 Osprey.

64. Senator KENNEDY. Admiral Mullen, should we be looking for an alternative that can be procured more rapidly to perform the missions currently being performed by the H–46 in Iraq?

Admiral MULLEN. No, I do not believe this is necessary or desirable. We have performed well over a dozen cost and operational effectiveness analyses of the medium-lift assault support requirement. In every case the MV–22 Osprey is more operationally effective and cost effective than any other alternative. The MV–22's combination of speed, payload, and range delivers unsurpassed warfighting capabilities.

The MV–22 recently surpassed Milestone III and was approved by the OSD for full-rate production. The Navy is commencing the buildup to full rate production starting with the President's budget in 2007. The Navy intends to seek economies across the board with a proposed multi-year procurement commencing in fiscal year 2008. The first operational squadron is currently in training and we will field an operational capability in 2007.

QUESTIONS SUBMITTED BY SENATOR JOSEPH I. LIEBERMAN

JOINT STRIKE FIGHTER ALTERNATE ENGINE PROGRAM

65. Senator LIEBERMAN. Admiral Mullen, General Electric (GE) has delivered almost 4,000 F–18 engines, sole source. Have you ever had to ground the F–18 fleet due to an engine problem that would have been alleviated by an alternate engine?

Admiral MULLEN. There have been six events in the history of the F/A–18 (A through F) program that required immediate grounding of aircraft until corrective action was accomplished on the engine. We do not believe that if an alternate engine had been available, it would have alleviated any of these six groundings.

66. Senator LIEBERMAN. Admiral Mullen, given that the Pratt & Whitney (F135) and GE/Rolls-Royce (F136) engines are to be interchangeable; and that the STOVL hardware common to both engines limits STOVL thrust, do you see any way that the alternate engine could provide a thrust advantage over the primary (F135) engine?

Admiral MULLEN. The STOVL JSF would not benefit from more thrust even if an alternate engine could provide the additional thrust. STOVL flight operation is limited by two lift components: (1) lift fan torque and speed limits; and, (2) exhaust system loads. Because the lift fan thrust must equal the engine thrust to maintain aircraft balance during vertical lift, it is the lift fans' thrust that is the limiting factor. Additionally, the exhaust system's load capability is limited to the specification performance parameters designed to reduce the aircraft's overall weight.

67. Senator LIEBERMAN. Admiral Mullen, given the $3.5 billion development cost for the alternate engine and the billions of dollars in extra cost to manufacture and support a second engine through the JSF life cycle, do you have an analysis that shows that the alternate engine investment could be recovered or even an analysis that reflects a break even point? If yes, please explain.

Admiral MULLEN. Analysis indicates that the Department will be unable to recover its investment in an alternate engine for the JSF. Additionally, by using two sources we would pay a large premium on each engine purchased.

During the fiscal year 2007 budget deliberations, the Department of the Navy considered engine assessments completed by the PMAG in 1998 and 2002, as well as a 2005 OSD(PA&E) study. These assessments showed that the investment for a second engine source is approximately $2.4 billion. To recover this investment, an alternate engine and production competition would need to yield an overall savings of between 15 and 22 percent. Current estimates do not indicate any potential savings through an alternate engine and competitive production. Splitting the buy between two competitors would increase both production and support costs. With two sources, neither maker would experience full learning curve benefits and unit costs would increase by approximately $1 million. Support costs would increase as a result of establishing two supply lines for spare parts and components.

68. Senator LIEBERMAN. Admiral Mullen, since engine reliability is at an all time high, wouldn't it make more sense to consider a second source for higher risk subsystems—such as avionics or software? If not, why not, and if so, why?

Admiral MULLEN. The decision to cancel the alternate engine program was based on affordability and risk assessment. Given the approximately $2.4 billion investment cost for developing the F136, analysis concluded that production competition would not yield a significantly more reliable product or cost savings. It was determined that a single engine supplier provides the best balance of risk and cost. Before considering establishing a second source for other subsystems a business case analysis would need to be completed to determine if the potential benefits of a second source are commensurate with the projected cost and whether or not the effort would yield program cost savings.

69. Senator LIEBERMAN. Secretary Winter, it seems to me that there is enough military engine business to keep GE in the military engine market, regardless of whether the Department continues with the alternate engine. If the industrial base is really an issue on this program, why is it that GE would voluntarily give away 40 percent of the work on the alternate engine to Rolls-Royce?

Secretary WINTER. I would prefer not to comment on the motivation for GE and Rolls-Royce to form the GE Rolls-Royce Fighter Engine Team, LLC, (FET). Any responses that I would offer would be speculative on my part and inappropriate.

70. Senator LIEBERMAN. Secretary Winter, it is my understanding that the United Kingdom associated companies supporting the JSF program would see close to $6 billion return on their $2 billion investment, regardless of whether an alternate engine would be developed. Is that true?

Secretary WINTER. [Deleted.]

SHIPBUILDING

71. Senator LIEBERMAN. Admiral Mullen, according to the CBO, if the Navy wants to grow to 313 ships in 5 years, it will need an average of $18.3 billion per year for shipbuilding, or $19.5 billion if nuclear refueling is included. The CBO's estimate

is approximately 25 percent higher than the Navy's long-range fiscal plan for shipbuilding. Can you respond to this disparity?

Admiral MULLEN. We have reviewed the CBO analysis and have met with the authors of both the CBO and CRS studies. CBO and CRS used different assumptions and, in some cases, different methods of analysis that led to different computational conclusions. First, the CBO computed cost per ship in each class by dividing the total dollars spent on a program by the number of ships of that type in the build. Navy's position is that this incorrectly limits amortization of non-recurring engineering costs to production years, vice over the life of the program. This raises the unit cost per ship in the CBO model.

Second, Navy's plan accounts for aggressive cost controls derived from stability in the shipbuilding plan, strict control of requirements and design configuration by Navy, and our ongoing partnership with industry to do their part to help control costs.

Finally, the CBO calculations differ in the manner in which recapitalization is computed. Specifically, CBO estimates did not account for Navy's planned use of SSN–774 technologies (and hull form) in SSBN(X) design efforts nor the smaller payloads projected for the *Ohio*-class follow-on.

72. Senator LIEBERMAN. Admiral Mullen, do you dispute the CBO estimates?

Admiral MULLEN. The CBO estimates used a weight based costing mechanism which does not take into account more efficient production facilities, use of proven design tools, predicted market conditions, or disciplined acquisition strategies. In addition, I believe that our composite shipbuilding inflator, which relied on proprietary agreements between the individual yards and their supplier and union bases, most accurately reflects the real inflation we will see in our shipbuilding environment.

73. Senator LIEBERMAN. Admiral Mullen, is the Navy's shipbuilding plan too ambitious, given the budgetary demands on military pay and health benefits for service members and retirees?

Admiral MULLEN. No, Navy will continue to meet our security commitments to the American people while fully supporting the health care needs of our Active and Reserve members and their families, keeping the faith with those who stood the watch before us. We have already programmed SCN/NDSF funds within the FYDP to support the 30-year shipbuilding plan. We will accept some risk in lower priority procurement programs, readiness accounts, and R&D projects to meet the target of $13.4 billion (in fiscal year 2005 dollars).

74. Senator LIEBERMAN. Admiral Mullen, do the Navy's estimates for future shipbuilding include the cost of refueling each of the Navy's nuclear-powered aircraft carriers? If not, how will that affect your planning?

Admiral MULLEN. The Navy's estimates for future new-ship construction did not include the cost of refueling each of the Navy's nuclear-powered aircraft carriers since refueling is not considered new-ship construction. However, we did balance new-ship construction funding requirements against the entire spectrum of competing resources. In that context, then, we did account for the impact of the carrier and submarine refueling requirements. I have consistently stated that we need $13.4 billion in new-ship construction funding exclusive of the other funding requirements in the Navy. Absent a significant reduction in the overall resources available to the Navy, I believe we will be able to afford $13.4 billion in new-ship construction plus approximately $2 billion in annual requirements for refueling, non-battle force ship procurements, and outfitting/post delivery requirements.

75. Senator LIEBERMAN. Admiral Mullen, does the Navy's shipbuilding plan adequately support the Nation's shipbuilding industrial base?

Admiral MULLEN. Yes, the Navy's long-range shipbuilding plan provides a solid foundation for achieving stability in the shipbuilding industry. The Navy must now ensure that, to the largest extent possible, we stay the course as outlined in the report to Congress on the annual long-range plan for construction of vessels for fiscal year 2007. Our partners in industry have frequently decried the lack of stability that results from yearly changes to the build plan. We must do our best to control these perturbations and provide a solid base upon which the shipyards can plan. This will, in turn, ultimately be more profitable for the yards while at the same time more cost-effective for the Navy. Finally, the Navy will seek to incentivize cost savings and fiscal responsibility throughout the lives of our programs, from design to logistics support, that should encourage the retention of a skilled shipbuilding workforce.

76. Senator LIEBERMAN. Admiral Mullen, in particular, do you think the plan can support enough submarine design and engineering work to maintain its industrial base?

Admiral MULLEN. The Navy has recognized the potential impact of losing a national submarine design capability, and is taking steps to mitigate this risk. We have commissioned RAND to study this unique portion of the industrial base. The RAND study is expected to conclude this fall. We are working closely with General Dynamic's Electric Boat Division and Northrop Grumman Newport News to address the 24 design skills that we must maintain to ensure we remain capable of designing nuclear-powered submarines in the future. The combined results of the RAND study and interaction with industry will inform us and allow us to make appropriate decisions for the future.

QUESTIONS SUBMITTED BY SENATOR JACK REED

IMPROVISED EXPLOSIVE DEVICE MANHATTAN PROJECT

77. Senator REED. Secretary Winter, how much funding are you requesting for the basic research IED "Manhattan Project"?

Secretary WINTER. The Navy IED research effort requests $30 million in the fiscal year 2007 budget request. The counter IED request allocates $15 million to the Office of Naval Research and $15 million to the Naval Research Laboratory. The effort also includes $30 million per year across the FYDP for the Navy effort. This program is separate from the activities of the joint IED organization, and is focused on basic research (6.1 and 6.2). The goals of the program have been communicated to and coordinated with the Joint Counter IED Task Force through the Joint Lab Board (JLB).

78. Senator REED. Secretary Winter, what are the specific technological goals of this activity?

Secretary WINTER. The Navy's Counter IED Project under the Office of Naval Research is focused on basic research, with associated timelines of 5 years or more. This basic research will focus on fundamental phenomenology and technologies related to prediction, detection, neutralization, and mitigation of IEDs.

79. Senator REED. Secretary Winter, were those goals coordinated with the Joint IED Defeat Office?

Secretary WINTER. The goals for the Navy Counter IED Project have been communicated to and coordinated with the Joint Counter IED organization through the JLB. This board oversees joint counter-IED research programs to ensure unity of the science and technology (S&T) effort. Dr. Starnes Walker (Office of Naval Research Technical Director) is chairman of the JLB.

80. Senator REED. Secretary Winter, was the funding for these activities additional to the continuing core basic research work of the Navy or were ongoing basic research efforts curtailed to fund this project?

Secretary WINTER. The budget request for the Navy effort is $30 million in fiscal year 2007 and each year over the FYDP. The dollars for the Navy's basic research counter-IED project were redistributed from across the entire S&T program without curtailing any ongoing basic research efforts.

RADIO FREQUENCY SYSTEMS TECHNOLOGIES RESEARCH

81. Senator REED. Secretary Winter, the Navy's fiscal year 2007 budget request significantly reduces Navy funding for advanced technology development on radio frequency (RF) systems. What was the reason for this reduction?

Secretary WINTER. The fiscal year 2007 budget request for RF systems advanced technology (PE0603271N) is reduced from fiscal year 2006 because programs showed sufficient development to transition from S&T to R&D funding in preparation for acquisition. For example:

(1) The advanced technology development efforts for Real Time Precision Targeting Radar, Airborne Communications Package, Integrated VHF/UHF/L-Band Antenna System, and Next Generation Submarine Buoyant Cable Antenna will complete in fiscal year 2006.

(2) The advanced technology development effort for Advanced Multifunction RF Concept (AMRFC) V1 will complete in fiscal year 2007.

In addition, the funding for the advanced technology development efforts for High Altitude Airborne Relay and Router Package and UHF/L-Band Phased Array Antennas has moved from PE0603271N to PE0603235N (Common Picture Advanced Technology). These two technology products support the Future Naval Capability for Global Information Grid Compliant Networking, which has scope more appropriate to PE0603235N.

82. Senator REED. Secretary Winter, what specific programs and efforts are curtailed as a result of this reduction?

Secretary WINTER. No specific programs are curtailed. The reduction in the budget request reflects the maturing of the S&T efforts of several programs and their transition to acquisition programs under R&D funding, as well as a realignment of programs under more appropriate funding line numbers.

For example, the advanced technology development efforts for Real Time Precision Targeting Radar, Airborne Communications Package, Integrated VHF/UHF/L-Band Antenna System, and Next Generation Submarine Buoyant Cable Antenna will complete in fiscal year 2006. The advanced technology development effort for AMRFC VI will complete in fiscal year 2007.

The funding for the advanced technology development efforts for High Altitude Airborne Relay and Router Package and UHF/L-Band Phased Array Antennas have moved from funding line PE060327IN to PE0603235N (Common Picture Advanced Technology). These two technology products support the future naval capability for global information grid compliant networking, which has scope more appropriate to PE0603235N.

83. Senator REED. Secretary Winter, what future naval capabilities are supported by investments in this area?

Secretary WINTER. Fiscal year 2007 investments in PE0603271N support the Sea Shield Future Naval Capability by developing enabling capabilities for multi-source ISR to the warfighter and Advanced Electronic Sensor Systems for missile defense through the advanced technology development of the following technology products: AMRFC VI, Electronic Attack Techniques to Counter Advanced Threats, S-Band Digital Array Radar I, and Shipboard Electro-Optic/Infrared Closed Loop Self Protection.

NAVY SCIENCE AND TECHNOLOGY INVESTMENT STRATEGY

84. Senator REED. Secretary Winter, the Naval Research Advisory Committee (NRAC) recently released a report titled "S&T for Naval Warfare 2105–2020" that states "failure to change the investment strategy for Navy-Marine Corps S&T will make technological surprise on the battlefield likely—and success in executing naval missions will be problematic." The report made a series of recommendations on potential changes to the Navy S&T program. Have you been briefed on this report and its findings?

Secretary WINTER. I have reviewed the report. I have been engaged with Dr. Etter, the Assistant Secretary of the Navy for Research, Development, and Acquisition, and Dr. Tether of DARPA to evaluate ways in which the Navy can focus and leverage our S&T investments.

85. Senator REED. Secretary Winter, what steps are you taking to act upon the NRAC recommendations?

Secretary WINTER. The Navy S&T Corporate Board has tasked the Chief of Naval Research with developing an S&T strategic plan. The objective of the strategic plan is to ensure that S&T is focused on Navy and Marine Corps priorities and to determine how to invest in S&T research areas. The strategy is driven by the QDR, Naval Power 21, Sea Power 21, and Secretary of the Navy, CNO, Commandant of the Marine Corps visions. This guidance leads to key naval capability areas which are supported by our Office of Naval Research (ONR) research areas across many disciplines.

ONR's S&T departments are tasked with sponsoring 6.1 through 6.3 programs. These programs are managed to advance and transition technology options to the fleet and force. Research programs categorized as "future naval capabilities" and "innovative naval prototypes" have well-defined review and oversight processes. In the case of the Discovery and Invention (6.1 and early 6.2) programs, ONR developed, in fiscal year 2005, a process for evaluating programs based on naval impact, innovation, quality, and risk.

The S&T strategy will map the overall S&T portfolio to the key naval capabilities in collaboration with DARPA and the other Services. Investment priorities will be set by the S&T Corporate Board to ensure that capabilities are supported within the S&T budget. This strategy will be reviewed biennially by the Naval Research Advisory Committee (NRAC) to maintain alignment with naval priorities. The next review (The NRAC Summer Studies) will take place on June 22 and 23, 2006.

UNIVERSITY RESEARCH

86. Senator REED. Secretary Winter, for over 50 years the academic community has played a critical role in providing the Navy with advice and innovative research in areas of fundamental importance to its core missions such as facing the challenge of the Soviet submarine fleet, mine warfare, subsurface communications, the new technologies of autonomous vehicles, and underwater acoustics. What role does the Navy envision for the academic community with respect to sustaining and enhancing its ability to perform its core mission?

Secretary WINTER. Historically, academia has been the primary supplier of Navy basic research. In fiscal year 2005, 54 percent of our basic research and 20 percent of our applied research were performed by universities. The intent of basic research is to further knowledge of the fundamental aspects of phenomena without specific applications towards process or products. It is research that is publishable, predominantly unclassified and best suited to universities. While we strive to maintain a broad discovery and invention (D&I) portfolio, one of our key criteria for selecting basic research programs is "Navy relevance," i.e. could the knowledge contribute to the achievement of long-term DON strategies/goals? ONR program officers have significant technical expertise and are familiar with the technical communities that provide basic research. Their roles include seeking the best research available and translating Navy needs into basic research programs.

ONR D&I funding supports approximately 3,000 graduate students per year. These are the future S&T workers who may join the naval research enterprise or perform Navy relevant S&T work in industry or academia. Universities are critical in filling the S&T pipeline with excellent research and with scientists and engineers. We foresee no change in the importance of academia's contribution to maintaining the technological superiority of the Navy.

UNDERSEA WARFARE TECHNOLOGIES

87. Senator REED. Admiral Mullen, looking ahead 10–15 years, are there any types of undersea warfare technologies in which you think the United States will not have a clear technological lead over global competitors?

Admiral MULLEN. There are none. The Navy's investment in the full spectrum of undersea warfare technologies has resulted in an undersea warfare "system of systems" that will ensure the United States maintains its technological lead over any potential global competitor envisioned during the proposed time frame. These systems include submarines, surface ships, aircraft, distributed systems, unmanned undersea vehicles, advanced torpedoes, and acoustic and non-acoustic undersea detection systems.

88. Senator REED. Admiral Mullen, what areas are those?

Admiral MULLEN. None.

89. Senator REED. Admiral Mullen, what are the military threat implications of this?

Admiral MULLEN. None.

90. Senator REED. Admiral Mullen, what steps can we take now to avoid losing our international lead in undersea warfare technologies?

Admiral MULLEN. To maintain our technological advantage in undersea warfare, we must continue our investment in R&D, as well as in ISR, enhancing the capabilities of all the systems that contribute to undersea warfare, and exploring new technologies that may have undersea warfare potential. The Navy's balanced program of funding for advanced R&D, executing a stable procurement plan to help lower system costs, and procuring the required numbers of systems will, when coupled with robust training and aggressive maritime domain awareness, help to ensure the United States maintains its total dominance of undersea warfare.

QUESTIONS SUBMITTED BY SENATOR EVAN BAYH

MAN-OVERBOARD INDICATOR PROGRAM

91. Senator BAYH. Admiral Mullen, how many sailors or marines fall from ships each year who are not wearing a float coat?

Admiral MULLEN. An average of 40 sailors or marines fall overboard each year. All sailors or marines conducting flight deck operations are required to wear a life jacket or float coat as these personnel are considered to be at greatest risk for going over the side. The Navy estimates that approximately 35 percent of the 40 man-overboard incidents involve sailors or marines not wearing a float coat or life jacket. The baseline Man-Overboard Indicator (MOBI) program, which provides a transmitter to be worn on individual float coats and life jackets, will be completed on all Navy ships during fiscal year 2008. The Navy is currently evaluating the next generation "one-per-person" MOBI concept, which does not require the transmitter to be worn on the float coat or life jacket. Rather, the transmitter is attached directly to a sailor's uniform. This will ensure that all personnel will be guaranteed MOBI protection regardless of whether they are wearing a float coat or life jacket. The "one-per-person" concept is currently being evaluated aboard U.S.S. *Germantown* (LSD 42).

92. Senator BAYH. Admiral Mullen, to date, Congress has funded the lifesaving MOBI program. When do you plan to include this program in your budget?

Admiral MULLEN. All previous MOBI installations on Navy ships were funded through congressional support. Funding included procurement and installation costs of the MOBI system components, consisting of receivers, direction finders, antennas, connectors, and life jacket transmitters. Due to competing requirements, there were no MOBI funds included in the fiscal year 2006 or fiscal year 2007 budget. As the Navy develops its POM for fiscal years 2008–2013, the MOBI system will be considered along with all other requirements, though the aforementioned competing budget pressures remain.

[Whereupon, at 12:11 p.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2007

TUESDAY, MARCH 14, 2006

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

COMBATANT COMMANDERS ON THEIR MILITARY STRATEGY AND OPERATIONAL REQUIREMENTS

The committee met, pursuant to notice, at 9:41 a.m. in room SH–216, Hart Senate Office Building, Senator John Warner (chairman) presiding.

Committee members present: Senators Warner, McCain, Inhofe, Collins, Talent, Cornyn, Levin, Akaka, Bayh, and Clinton.

Committee staff members present: Charles S. Abell, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff members present: William M. Caniano, professional staff member; Sandra E. Luff, professional staff member; Scott W. Stucky, general counsel; and Richard F. Walsh, counsel.

Minority staff members present: Richard D. DeBobes, Democratic staff director; Gabriella Eisen, research assistant; Evelyn N. Farkas, professional staff member; Richard W. Fieldhouse, professional staff member; William G.P. Monahan, minority counsel; and Mary Louise Wagner, professional staff member.

Staff assistants present: Micah H. Harris, Benjamin L. Rubin, and Jill L. Simodejka.

Committee members' assistants present: Christopher J. Paul, assistant to Senator McCain; John A. Bonsell, assistant to Senator Inhofe; Mackenzie M. Eaglen, assistant to Senator Collins; Russell J. Thomasson, assistant to Senator Cornyn; Stuart C. Mallory, assistant to Senator Thune; Darcie Tokioka, assistant to Senator Akaka; William K. Sutey, assistant to Senator Bill Nelson; Todd Rosenblum, assistant to Senator Bayh; and Andrew Shapiro, assistant to Senator Clinton.

OPENING STATEMENT OF SENATOR JOHN WARNER, CHAIRMAN

Chairman WARNER. Good morning, everyone. The committee meets today to receive the testimony from two of our most distinguished combatant commanders on their military strategy and operational requirements in review of the National Defense Authorization Request for Fiscal Year 2007. We welcome our guests.

Admiral Keating is Commander, U.S. Northern Command (NORTHCOM); and General Craddock is Commander, U.S. Southern Command (SOUTHCOM). I commend each of you and those within your respective commands for the leadership that you provide and that you convey to protect our Nation and the interests of our allies and friends. I particularly wish to convey to the fine men and women in your command, as well as their families, the Nation's gratitude for their selfless service to maintain our freedom.

Admiral Keating, it is my understanding that your wife has joined us today. We would be privileged to have you introduce her.

Admiral KEATING. It would be a pleasure, Senator, to introduce my wife, Wanda Lee Keating. We have stopped counting anniversaries. We are up in the decades. She is the proud mother of a Navy F–18 pilot who is in Oceana and the proud mother of a daughter who is married to an F–18 pilot in Oceana, Virginia.

Additionally, we have Command Sergeant Major Scott Frye with us, Mr. Chairman. He is our senior advisor for both North American Aerospace Defense Command (NORAD) and NORTHCOM and he is a native of New Haven, Connecticut, and a rabid Huskies fan.

Thank you for the opportunity.

Chairman WARNER. Yes, I know a few things about him.

Mrs. Keating, we thank you for joining us. I think it is important that you have the opportunity to see all aspects of your distinguished husband's career and to give your input. My congratulations on that family. We will not have you here as a witness on the F/A–18. You are prejudiced on that one for sure.

We recognize that the U.S. forces must be capable of defeating threats on distant shores and must simultaneously possess the capability to swiftly mitigate the consequences of any attack or catastrophic natural disaster on the homeland.

Admiral Keating, with regard to the Northern Command, the committee is very much interested in the following: One, the evolution of your command as a combatant command, including any recommendations to improve and enhance your operational and situational awareness; the sufficiency of forces at your disposal to defend the United States from external attack and respond to a domestic emergency; your assessment of how best to employ National Guard and Reserve component forces to ensure unity of command as well as unity of effort; your vision of NORTHCOM's role in homeland defense and support of civil authorities, particularly in light of NORTHCOM's role in response to Hurricane Katrina; your efforts to protect the air, sea, and land approaches to the United States; and your assessment of the interagency synchronization as well as the theater security cooperation with Mexico and Canada regarding the critical protection of our borders.

General Craddock, the activities of your command continue to make important contributions to the positive progress throughout Latin America and the Caribbean region. In SOUTHCOM's area of operations, an overwhelming majority of nations have made significant strides in political and economic development over the past 2 decades.

Despite these developments, there remain some important challenges to U.S. and hemispheric stability and security. Yesterday

during our visit you reviewed with me the number of elections coming up and the influence of certain nations on those elections. I hope you will cover that with my colleagues. These challenges include persistent poverty, guerrilla movements, drug trafficking, rising crime, gang activities, and the rise of radical populism in several Latin American countries. These matters add to the strategic importance of the region.

The committee is particularly interested in your insights into: the political developments in Haiti and international support to peacekeeping operations; the activities of President Chavez in Venezuela and his relations with his neighbors; the government of President Morales in Bolivia; Colombia's struggle against drug trafficking and illegally armed groups and the courage of that nation—it has been steadfast and I hope that you will comment on the political stability in that area today; and the threat imposed by international terrorist groups, including al Qaeda, who have used areas of Latin America to advance their causes.

Detention operations at Guantanamo Bay also remain a matter of great concern to this committee. In addition to the legal debate, the treatment of the detainees has been the focus of detailed international and media attention. Your assessment then, General, of recent reporting and an update on detention operations at the facility.

Our witnesses today symbolize the global scope of the threats that this Nation of ours faces in the 21st century, both at home and abroad. We welcome you.

[The prepared statement of Senator Warner follows:]

PREPARED STATEMENT BY SENATOR JOHN WARNER

Good morning, the committee meets today to receive testimony from two of our distinguished combatant commanders on their military strategy and operational requirements in review of the National Defense Authorization Request for Fiscal Year 2007.

We welcome our distinguished witnesses: Admiral Timothy J. Keating, Commander, U.S. Northern Command (NORTHCOM); and General Bantz Craddock, Commander, U.S. Southern Command.

I commend each of you for the leadership you provide, and ask that you convey to the fine men and women in your commands, as well as their families, the Nation's gratitude for their selfless service and commitment to our Nation's defense.

I would also like to welcome a special guest to our hearing today—Wanda Lee Keating.

Thank you for joining us—and thank you for all you do to support the family members of NORTHCOM.

Gentlemen—we welcome your insights on developments in your respective commands, as well as your own assessments of the fiscal year 2007 defense budget request.

We recognize that U.S. forces must be capable of defeating threats on distant shores, and must simultaneously possess the capability to swiftly mitigate the consequences of an attack, or a catastrophic natural disaster, on the homeland.

Admiral Keating, with regard to NORTHCOM, the committee is very interested in your views on:

- the evolution of NORTHCOM as a combatant command;
- the sufficiency of forces at your disposal to defend the United States from external attack or to respond to a domestic emergency;
- your assessment of how best to employ National Guard and Reserve component forces to ensure for—unity of command—as well as unity of effort;
- your vision of NORTHCOM's role in homeland defense and support to civil authorities particularly in light of NORTHCOM's role in response to Hurricane Katrina;

• your efforts to protect the air, sea, and land approaches to the United States; and
• your assessment of the interagency synchronization, as well as the theater security cooperation with Mexico and Canada regarding the critical protection of our borders.

General Craddock, the activities of United States Southern Command continue to make important contributions to positive progress throughout Latin America and the Caribbean region.

In the Southern Command's area of operations, an overwhelming majority of nations have made significant strides in political and economic development over the past few decades.

Despite positive developments, there remain some important challenges to U.S. and hemispheric stability and security.

These challenges include persistent poverty, guerrilla movements, drug trafficking, rising crime, gang activities, and the rise of radical populism in several Latin American countries. These matters surely add to the strategic importance of the region.

The committee is particularly interested in your insights into:

• the political developments in Haiti and international support to peacekeeping operations;
• the activities of President Chavez in Venezuela and his relations with his neighbors;
• the government of President Morales in Bolivia;
• Colombia's struggle against drug trafficking and illegally armed groups; and
• the threat posed by international terrorist groups who have used areas of Latin America to advance their causes.

Detention operations at Guantanamo Bay also remain a matter of considerable concern. In addition to the legal debate, the treatment of detainees has been the focus of detailed international and media attention.

Your assessment of recent reporting and an update on detention operations at the facility will be very useful.

Our witnesses today symbolize the global scope of the threats we face in the 21st century—both at home and abroad.

Again, we welcome you here today and look forward to your testimony.

Chairman WARNER. Senator Levin.

STATEMENT OF SENATOR CARL LEVIN

Senator LEVIN. Thank you, Mr. Chairman. First let me join you in welcoming Admiral Keating and General Craddock. We extend our thanks to you and to all the personnel under your commands for their and your service to the country. I also join our chairman and I know every member of this committee, in thanking the family members, including the special member who is with us here today, for their service in making your service possible.

Among the important issues that I hope we can explore during this hearing today are: one, the lessons learned from the military response to Hurricane Katrina; two, intelligence sharing among agencies in the NORTHCOM in order to prevent another terrorist attack; three, North American Aerospace Defense Command (NORAD) and its maritime security efforts; four, U.S. military assistance to the government of Colombia; and five, the potential impact on security in the Western Hemisphere of political developments in Haiti, Venezuela, and Bolivia.

Admiral Keating, on Friday the Subcommittee on Emerging Threats and Capabilities held the first hearing on homeland defense since Hurricane Katrina. Today's hearing is the first full Armed Services Committee hearing with NORTHCOM represented since the hurricane hit. The White House review, called "The Federal Response to Hurricane Katrina Lessons Learned," concluded

that, "Active-Duty military and National Guard operations were not coordinated." I hope Admiral Keating will tell us how NORTHCOM plans to work with the National Guard to integrate civil support efforts and about the contingency planning and exercises that the command will conduct to strengthen the military's ability to coordinate its assistance to Federal agencies.

I also hope that we will hear, Admiral Keating, about changes that you intend to make to the NORAD structure and organization and how they might affect binational homeland defense cooperation with Canada.

On intelligence, I continue to be concerned about the nature of the interaction between NORTHCOM and the National Counterterrorism Center (NCTC) and whether the command is receiving appropriate intelligence in a timely fashion in order to conduct its mission.

General Craddock, this year is the seventh year of our political-military effort to help the Colombian government defeat indigenous narcoterrorists and to strengthen democratic Colombia. The Colombian government and military have made progress, but obstacles remain. Among them is the fact that, although coca eradication has increased, cultivation overall has increased, and the price of cocaine in the United States does not appear to have changed significantly. That is an indication that the supply has not changed significantly.

Two years ago, SOUTHCOM asked this committee for authority to raise the cap or the restriction placed on the number of personnel supporting the Colombian military effort from 400 military and civilian personnel respectively to 800 military and 600 civilian personnel. We granted the Defense Department authority for 2 years and this year the Department has asked us to renew it. Given that the greatest challenges in Colombia are associated with the demobilization of all narcoterrorists, governance, and economic development, I hope to hear from General Craddock about whether there is a U.S. and Colombian interagency strategy to govern the wise use of U.S. military assistance.

Finally, like our chairman, I hope to hear from General Craddock regarding our operations in Guantanamo, the status of the various legal proceedings, including the military tribunals, and the assumptions that he and the Department are using regarding the future detainee population.

Again, my thanks to our witnesses and thank you, Mr. Chairman.

[The prepared statement of Senator Levin follows:]

PREPARED STATEMENT BY SENATOR CARL LEVIN

Let me join the chairman in welcoming Admiral Keating, and General Craddock. We extend our thanks to you, and all the personnel under your commands, for your service to the country. I also thank the family members who make your service possible.

Among the important issues I hope we can explore during this hearing are: 1) the lessons learned from the military response to Hurricane Katrina; 2) intelligence-sharing among agencies and the Northern Command in order to prevent another terrorist attack; 3) North American Aerospace Defense Command (NORAD) and its air and maritime security efforts; 4) U.S. military assistance to the government of Colombia, and; 5) the potential impact on security in the Western hemisphere of political developments in Haiti, Venezuela, and Bolivia.

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The White House review, The Federal Response to Hurricane Katrina: Lessons Learned concluded that, "Active-Duty military and National Guard operations were not coordinated and served two different bosses, one the President and the other the Governor."

I hope Admiral Keating will tell us how Northern Command plans to work with the National Guard to integrate civil support efforts, and about the contingency planning and exercises that the Command will conduct to strengthen the military's ability to coordinate its assistance to Federal agencies.

I also hope to hear, Admiral Keating, about changes that you intend to make to the NORAD structure and organization and how they might affect binational homeland defense cooperation with Canada. On intelligence, I continue to be concerned about the nature of the interaction between Northern Command and the National Counterterrorism Center, and whether the command is receiving appropriate intelligence in a timely fashion in order to conduct its mission.

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Two years ago, the Southern Command asked this committee for authority to raise the "cap," or restriction, placed on the number of personnel supporting the Colombian military effort from 400 military and civilian personnel respectively to 800 military, and 600 civilian, personnel. We granted the Defense Department this authority for 2 years, and this year the Department has asked us to renew it. Given that the greatest challenges in Colombia are associated with the demobilization of all narcoterrorists, governance, and economic development, I hope to hear from General Craddock about whether there is a U.S. and Colombian interagency strategy to govern the wise use of U.S. military assistance.

I also hope to hear from General Craddock regarding our operations in Guantanamo, the status of the various legal proceedings including the military tribunals, and the assumptions he and the Department are using regarding the future detainee population.

Thank you.

Chairman WARNER. Thank you very much, Senator Levin.

Colleagues, we are few in number here this morning, so does anyone else desire to make a few opening comments? Senator McCain, Senator Akaka, any others? [No response.]

Thank you very much.

General Craddock.

STATEMENT OF GEN BANTZ J. CRADDOCK, USA, COMMANDER, U.S. SOUTHERN COMMAND

General CRADDOCK. Mr. Chairman, Senator Levin, distinguished members of the committee: Thank you for the opportunity to report here today on the posture of SOUTHCOM. I have prepared a complete written statement that I request to submit for the record.

Chairman WARNER. Without objection, the full text of statements by both witnesses will be included in the record.

General CRADDOCK. Thank you, sir.

Before I begin with a short oral statement, I would just like to say I am pleased to be here today with my esteemed colleague and good friend, Admiral Tim Keating. It is indeed a pleasure to work with Tim on a routine, almost daily basis.

The men and women of SOUTHCOM are doing a superb job. In keeping with the highest priorities of this Nation, the members of the command continue to ensure the forward defense of the United

States, encourage regional partnerships, and enhance stability and security throughout the region. In addition, Joint Task Force Guantanamo operations continue in support of our Nation's long war against terrorism.

Across the region, poverty, corruption, and inequality contribute to an increased dissatisfaction with democracy and free market reforms. This has been accompanied by the growing popularity of leaders who profess to offer an alternative through anti-U.S. and anti-free market rhetoric.

We at SOUTHCOM believe the Andean region remains the linchpin to security and stability in Latin America and the Caribbean Basin. Columbia, engaged in its own long war now over 4 decades, has shown tremendous successes in its efforts to increase governance and security throughout its territory. Additionally, Colombia has also experienced record drug eradications and interdictions, as well as extending government presence to every municipality and every department of the country. Continued U.S. support is essential to sustain and build on these gains, not only to achieve Colombia's ultimate victory, but also to ensure the stability of its neighboring countries.

The threats facing this region did not develop overnight nor can they be solved overnight. Shared security problems in this hemisphere require shared solutions. Ungoverned spaces, porous borders, organized crime, and narcoterrorism pose enormous challenges to the freely elected leaders and often undermine legitimate governments.

We at SOUTHCOM recognize that not all problems and solutions are military in nature. The military can often help to set the conditions to create a safe and secure environment, thus allowing agents of reform and development—the political, the economic, and the social programs—to improve the quality of life for all citizens in the region. Such an approach requires an integrated long-term effort.

We at SOUTHCOM fully support the American Servicemembers Protection Act (ASPA). Although well-intentioned, ASPA continues to have unintended consequences. Eleven partner nations in our area of responsibility are unable to attend U.S. International Military Education and Training (IMET) programs. This loss of engagement prevents the development of long-term relationships with future military and civilian leaders.

We thank the committee for your steadfast support. Continued congressional support for our efforts will ensure that this command is capable of more effective engagement with our regional partners.

I thank you again for the opportunity today and I look forward to your questions. Thank you, Mr. Chairman.

[The prepared statement of General Craddock follows:]

PREPARED STATEMENT BY GEN BANTZ J. CRADDOCK, USA

Mr. Chairman, Ranking Member Levin, and distinguished members of the committee, thank you for the opportunity to provide an overview of Southern Command's area of responsibility (AOR) to include the challenges we face and how we are addressing them. Today, I will describe the regional conditions and threats affecting our partner nations and, thus, our own national security; how we are working with our partner nations to face these threats; and what we foresee for the region. It is primarily through nation-to-nation engagements that we establish regional partnerships to enhance hemispheric stability and security, thereby ensuring the forward defense of the United States.

On an average day, about 4,500 men and women of the United States Southern Command are serving in the headquarters and throughout the AOR. Our men and women play a vital role in carrying out the objectives of U.S. Southern Command.

COMMAND OBJECTIVES

In keeping with the highest priority of the Nation, the U.S. Southern Command ensures the forward defense of the United States. We must protect the southern approaches to our Nation with an active defense against those who seek to harm this country.

The forward defense of the U.S. can best be accomplished through broad cooperation with partner nations. This command must strengthen existing relationships and establish regional partnerships necessary to provide collective security across the broad spectrum of threats facing both the United States and peaceful nations in the region.

Strong regional partnerships will enable Southern Command and our partner nations to enhance hemispheric stability and security. The stability and security of the U.S. and our partner nations depend upon our ability to work together in a mutual effort to confront and defeat common security challenges, such as illicit trafficking and narco-terrorism.

During the past year, I have traveled extensively throughout the region. I am impressed by the progress being made in some areas, and concerned about the progress still to be made in others. I am concerned about what appears to be a growing instability in the region that is degrading the ability of governments to sustain their democratic processes.

Since March 2005, there have been six presidential elections in this region—Honduras, Chile, Bolivia, Haiti, Costa Rica, and Suriname—and there will be seven more taking place by the end of 2006. That equates to 13 opportunities for the people of those countries to take one more step toward strengthening, or on the other hand, weakening their democratic processes. In the six elections that have taken place since my last testimony, all of the newly-elected leaders have said they will continue their cooperative relationships with the U.S.

A recent article in the Economist stated that democracy's defining feature is "the freedom to hire and fire your government." Elections alone are only a first step in guaranteeing secure, stable, and peaceful democracies. Democracies also rest upon a foundation of strong institutions, with checks and balances among legislative, executive, and judicial branches of government, which ensure basic civil liberties and human rights. Leaders can rise to power through democratic elections and then seek to undermine these same democratic processes, which are fragile in much of the region. An election can present an opportunity for those with extremist views to exploit themes of nationalism, patriotism, and anti-elite or anti-establishment rhetoric to win popular support—especially in young and vulnerable democracies.

U.S. Southern Command's linkage to, and support for, good governance is manifested through our engagement opportunities. It is through theater security cooperation activities that Southern Command has been able to maintain positive military-to-military relations with most of the region. These sustainable relations enable us to reinforce professional militaries that support democratic institutions. Southern Command will continue to support U.S. policy and objectives in the region by striving to maintain good relations with our military counterparts as these new administrations take shape.

CONDITIONS AND THREATS

Today, Latin America is one of the least armed areas of the world, having no nuclear weapons, or large standing conventional forces. However, this region can hardly be considered benign. To the contrary, the insidious nature of the threats to the U.S. and our partner nations can be somewhat deceiving at first glance. The conditions of poverty, disease, corruption, social inequality, and widespread income disparity contribute to the growing dissatisfaction of a population that has been exposed to the political benefits of a democracy, but has not yet profited economically.

The lack of security, stability, and in some cases, effective rule of law, further exacerbates the situation. Under-governed sovereign territory and porous borders add another dimension. All of these conditions create an environment that is conducive to the development of threats such as illicit trafficking, urban gangs, kidnapping, criminals, and narco-terrorists whose activities discourage licit commerce and undercut economic development. This, in turn, seriously affects the ability of legitimate governments to provide for their citizens.

This permissive environment existing throughout the AOR enables extremist groups to maintain a presence and operate with relative impunity. We have seen

indications of Islamic Radical Group presence (such as Hizballah, HAMAS, and Egyptian Islamic Gama'at) in various locations throughout the AOR. These members and facilitators primarily provide financial and logistical support to Islamic terrorist groups from numerous cities in the region, including the tri-border area of Paraguay, Brazil, and Argentina. Despite increased partner nation cooperation and some law enforcement action, enclaves in the region generally remain a refuge for terrorist support and fund-raising activities. History has taught us that terrorist organizations such as al Qaeda seek safe havens in the many ungoverned areas in this region. We remain concerned that members and associates in the region could move beyond logistical support and actually facilitate terrorist training camps or operations.

Historically, the AOR has been prone to trafficking. Established and elusive transit routes have brought tons of cocaine to our shores as well as facilitated movement of special interest aliens. Document forgery is now an emerging problem wherein well-established networks are capable of producing quality forgeries and, through corrupt government officials, they can acquire legitimate documents. These document forgers or smugglers could facilitate the travel of extremist operatives throughout the region and into the United States.

It is in the context of these conditions and threats that the U.S Southern Command works to ensure the forward defense of the United States in the hemisphere's four sub-regions: the Andean Ridge, Central America, the Caribbean, and the Southern Cone. A quick review of the four will reveal they all have both common and unique characteristics.

ANDEAN RIDGE

The Andean Ridge is the linchpin to regional stability. Nations within this subregion are politically fragile, economically challenged, and in some instances, lack sufficient security forces to control their sovereign territories. Despite their vulnerabilities, these nations are dedicated to combating myriad social, political, and economic threats that transcend purely military issues.

Colombia

Our top priority in Colombia is the safe return of the three American hostages, who have now been held captive by the Revolutionary Armed Forces of Colombia (FARC) for over 3 years. Our efforts remain focused on assuring the safe return of these courageous and honorable men.

The Colombian Government continues to make progress in restoring security and strengthening its democratic institutions. In 2003, the Government of Colombia implemented the Democratic Security Strategy intended to bring peace to its war-torn nation. In just under 3 years, that strategy has proven effective as measured by a precipitous drop in homicides to the lowest level in 18 years. Additionally, kidnappings are down 73 percent with an overall reduction in violent crime of 37 percent. The number of attacks on towns by insurgents has also seen a major reduction of 84 percent.

Plan Patriota is an integral part of the Government of Colombia's Democratic Security Strategy designed to provide safety and security for Colombia's citizens. Plan Patriota is a complex, multi-year military campaign designed to force the FARC to capitulate or enter negotiations on terms favorable to the Colombian government. As part of this campaign, the Colombian military has destroyed more than 800 FARC encampments, successfully forced the FARC into a defensive posture, denied them necessary lines of communication and logistic/resupply points, and reduced their strength by approximately 30 percent. Since 2003, Plan Patriota operations have removed approximately 20 mid-level commanders from the battlefield. In 2005, 400 FARC combatants were killed in action and 445 were captured. However, FARC senior leadership continues to elude the Colombian military's efforts.

Demobilization and reintegration of paramilitaries is progressing under Colombia's peace process with more than 16,000 Autodefensas Unidas de Colombia (AUC) personnel demobilized by the end of 2005. In addition, over 8,000 members of Colombia's three most important illegal armed groups have demobilized on an individual basis since the beginning of President Uribe's administration in 2002. Approximately 9,000 FARC, AUC, and Ejército de Liberación Nacional (ELN) members have completed the Government of Colombia's Demobilization and Reinsertion Programs.

Colombia's 2006 national budget increased by 13 percent from last year and expenditures allocated to defense increased by 15.6 percent or to about U.S. $4.5 billion. The 2006 budget allows for an increase of up to 26,500 members for its security forces and for the purchase of additional airlift. This increased defense spending emphasizes Colombia's commitment to fighting and winning its war.

The problems affecting Colombia, like most countries in our AOR, cannot be solved solely by military means. The reduction of drug trafficking and narcoterrorism, and protection of its citizens' rights and infrastructure all require an integrated, synchronized government effort. An example of Colombia's civil-military approach to these problems has been the creation of the Center for Coordination of Integrated Action (Centro para la Coordinación de Acción Integral (CCAI)). The CCAI is a cabinet level, interagency center directed by the president to establish governance in conflicted areas by developing economic and social programs, thereby complementing the Democratic Security Strategy. The key function of this interagency body is to extend government presence—governance—over national territory by planning and executing community development in the areas of security, health, documentation, food distribution, education, justice, infrastructure development, and job creation. This program is executed at national and local levels of government. Its goal is to transition short-term security gains and successes into long-term belief in, and support for, good governance. The CCAI is an innovative and new Colombian interagency initiative, which merits increased support and may well serve as a model for other nations to develop tailored approaches to better governance.

Colombia has also been successful in its efforts to increase drug eradication, seizures, and air interdiction. Aerial fumigation topped 140,000 hectares in 2005, which is higher than any previous year. Also in 2005, 223 metric tons of drugs were seized as part of a cooperative effort between Colombia and the United States. Due to an effective Airbridge Denial Program in 2005, illegal traffic over Colombia decreased by 40 percent and the illegal tracks that formerly moved all throughout Colombia have been mostly limited to the border areas.

Colombia is also continuing its focus on, and progress in, the area of human rights. Only 2 percent of the complaints received about human rights or international humanitarian law violations implicated members of the security forces. Though progress is being made, continuing emphasis and effort is essential.

While the Government of Colombia has made progress as a result of Plan Colombia support, its job is not over. For example, attacks against energy towers have increased over 100 percent and peace has yet to formally arrive. Continuing U.S. support is still needed to build on the gains already realized by Plan Colombia.

U.S. Public Law 108–375 currently provides expanded authority to support a unified campaign by the Government of Colombia against narcotics trafficking and against activities by organizations designated as terrorist organizations, such as the FARC, the ELN, and the AUC. This law allows us to provide military assistance to, and share information with, the Government of Colombia in its efforts against organizations whose narcotics and terrorist activities are inextricably intertwined. The continuation of this authority is not only necessary for effective support of the Government of Colombia, but it is essential for regional security, U.S. national security, and reduced drug trafficking.

In addition to the expanded authorities, the increased personnel cap that the U.S. Congress granted of 800 military and 600 civilians continues to be an important tool in our efforts to support the Colombian government. The highest number of U.S. military personnel in-country to date (supporting Plan Colombia) has been about 520. This flexibility is essential to sustaining the necessary level of support for operations in Colombia. We appreciate continued support as we do our best to help a country that is doing so much to help itself.

Through the President's fiscal year 2007 authorization submission, the command is requesting that both expanded authority and the personnel cap be extended through fiscal year 2008. We anticipate sending such a request to you in the near future.

Ecuador

Ecuador remains plagued by illicit trafficking and the presence of FARC members who penetrate its vulnerable northern border. We are seeing increased illicit transiting activity across this border. This includes cocaine originating in Colombia and Peru, as well as the precursor chemicals used in its production. Because the official currency in Ecuador is the U.S. dollar, it is an especially attractive location for money laundering.

Although our engagement with Ecuador is limited due to ASPA sanctions, we continue to conduct security cooperation activities within our authorities. In fiscal year 2005, we conducted six Medical Readiness Training Exercises (MEDRETEs) throughout Ecuador, treating almost 38,000 patients and more than 2,200 animals.

Also, the U.S. Southern Command conducted a Humanitarian Mine Action Training Mission in Ecuador this year. During this mission, Ecuadorian deminers were trained and equipped to conduct humanitarian demining in the jungle.

Peru

Peru has seen a resurgence of coca production. In 2005, there was a 38-percent increase in land under cultivation. There are indications that Sendero Luminoso, a regional terrorist organization, may be partnering with drug traffickers, complicating the security situation. The Peruvian government is working with its security forces to counter this threat. Additionally, Peru continues to contribute quality forces to the multinational peacekeeping force in Haiti. We continue to seek opportunities to remain engaged with our Peruvian counterparts within our authorities.

Bolivia

Bolivia is the world's third largest cultivator of coca (after Colombia and Peru). We have worked closely with the Bolivian military over several years. This past year, the U.S. military group in Bolivia and the command collaborated with the State Department to train counter-narcotics units. Today, our top priorities in Bolivia are combating drug trafficking and enhancing the Bolivian military's capability to support disaster relief and humanitarian civic action. We hope that the Government of Bolivia will continue its commitment to our mutual military engagement goals.

Venezuela

Although Southern Command continues to seek opportunities to work with the Venezuelan military, our efforts have been hindered by the Government of Venezuela. Our military-to-military relations have eroded considerably over the last 12–18 months. We will continue to seek opportunities to foster partnership and cooperation with the Venezuelan military. Additionally, we will continue to invite the Venezuelan military to participate in exercises, conferences, and training events. We believe that the politicization of the Venezuelan military is threatening our long-standing, fruitful military-to-military relationship.

Another area of concern with regard to Venezuela is the government's ongoing procurement of weapons. Their buildup of military hardware has not been a transparent process and is a destabilizing factor in a region where nations are arraying themselves to confront transnational threats, not each other. We remain unconvinced that the breadth and depth of the buildup is mandated by Venezuelan concerns for national defense.

CENTRAL AMERICA

Central American governments are increasingly working together across the spectrum of political, military, social, and economic activity. The nations within this subregion continue to dedicate military forces and other resources to the war on terrorism, peacekeeping operations, humanitarian assistance, and disaster relief. Central American soldiers are also participating in seven United Nations peacekeeping operations around the globe.

Central America remains challenged in the context of crime. It is a major transshipment point for illegal trafficking, and violent, well-organized gangs are financed by extortion and drug trafficking. We are also seeing a new phenomenon in both Central America and the Caribbean with regards to drug traffickers. In the past, drug traffickers paid for logistical support, protection, et cetera in hard currency. Today, gangs and criminal elements who provide these services are receiving payment-in-kind—a cut of the drugs! Thus, drugs are now staying in-country, which is contributing to the increase of crime and violence in these sub-regions.

To counter the threats within this sub-region, these governments have formed regional partnerships and are developing appropriate initiatives. The Central American Free Trade Agreement, CAFTA–DR, will expand and diversify export markets, introduce new technology, and bring market access and capital growth to the countries of Central America and the Dominican Republic. As a result, we believe it will strengthen the democratic institutions by promoting growth and increasing economic opportunities that are key to reducing poverty and crime.

Conference of Central American Armed Forces (CFAC)

We continue to strengthen our regional security cooperation efforts with this regional military organization. CFAC provides the U.S. military an opportunity to engage four Central American countries—El Salvador, Guatemala, Honduras, and Nicaragua—that are united in common efforts to address security issues shared by all nations in the region. These countries continue to work with the U.S. to form a multinational peacekeeping battalion as part of the Global Peace Operations Initiative (GPOI). The Presidency of CFAC rotates between the four nations every 2 years, with a recent transfer in December from Nicaragua to Guatemala. Reinforcing CFAC's role in peacekeeping, the Regional Training Center for Peacekeeping

is being established this year in Guatemala. This center will not only train the staff of the CFAC Battalion, but also assist in training other peacekeeping units from the Central American region.

El Salvador

El Salvador is a stable, developing democracy and among our closest allies in Latin America. El Salvador has demonstrated its strong commitment to the War on Terrorism through its sixth deployment rotation of troops in support of Operation Iraqi Freedom (OIF). We will continue to work closely with the Salvadoran Armed Forces. Additionally, the Salvadoran government was the first to implement the CAFTA–DR free trade agreement.

Guatemala

In 2005, the military was drawn down from 27,000 to 15,000, thus aligning the Guatemalan military with its neighboring militaries. Guatemala is one of Central America's most active participants in peacekeeping operations, with contingents currently deployed in Haiti and the Congo, as well as observers and staff members in several other peacekeeping operations.

The military leadership of Guatemala was also one of the first to embrace the U.S. Southern Command Human Rights Initiative, incorporating Human Rights doctrine, training, civilian control of the military, and effective systems for internal judicial controls as core competencies of their entire military force.

I recently visited Guatemala's national park area called Laguna del Tigre, near the Mexican border. This protected park is largely unpopulated. The lack of government presence in this region and along the border has made it an ideal transshipment point for illicit trafficking running from south to north. The landscape of Laguna del Tigre is criss-crossed with clandestine airstrips that are used by planes transporting illicit cargo. In November 2005, the Guatemalan Government stood up an interagency task force in this National Park to counter the illicit activity in the area. In its short existence, the task force has accomplished a great deal. It has established a government presence in this remote region, established law and order for the first time, reduced illegal arms possession, destroyed clandestine airstrips, and successfully denied access to drug trafficking aircraft. This interagency approach is the first step towards effective integration of security with other components of good governance.

Current U.S. law prohibits International Military Education and Training (IMET) and Foreign Military Financing (FMF) for Guatemala. However, Expanded-IMET for military and civilian officials is permitted. Expanded-IMET allows Guatemala to educate its leaders in human rights, broad resource management principles, principles of civilian control of the military as well as the principles of law and military justice. With Central American countries facing transnational threats such as trafficking in drugs, arms, and illegal aliens, Guatemala has worked to aggressively counter these threats. Although its Armed Forces are severely resource-constrained, they are continuing their efforts to transform and modernize. We look forward to continue working with Guatemala, the State Department, and Congress, so that when budget conditions allow, FMF and IMET can be renewed.

Nicaragua

Nicaragua is a transit point for illicit drugs, migrants, and arms. The U.S. is actively engaged with Nicaragua in conducting air and maritime counternarcotics operations. The Nicaraguan military demonstrated its commitment to democracy during the last election in November 2002, when it successfully guarded polling locations and delivered ballots to remote voting locations. The Nicaraguan Army has also openly stated that it wants to destroy the bulk of its man-portable air defense systems (MANPADS). The Army is currently awaiting approval from its Congress to do so.

Nicaragua, after having ably led CFAC for 2 years, has also volunteered to provide a company to the CFAC Peacekeeping Battalion. Through the Global Peace Operation Initiative (GPOI), we are working with Nicaragua to help them develop their company of peacekeepers.

Belize

About 37 percent of cocaine bound for the U.S. transits the land, sea, and air space of Belize. As one countermeasure, Belize inaugurated its new Coast Guard on 20 November 2005. The U.S. is contributing to this effort with funding and training for its new force. Despite success in counternarcotics efforts and the establishment of a Coast Guard, the volume of drug trafficking continues to overwhelm Belize's limited resources.

In addition to their efforts in counternarcotics, Belize is also posturing itself to combat other transnational threats, such as terrorism. In the next year, Belize will stand up a counterterrorism unit. The U.S. will support this effort with funding for the purchase of equipment. Additionally, as resources become available, Belize hopes to create an engineering unit that could be used to respond to natural disasters within their own country and throughout the region.

Honduras

Honduras has a gross domestic product (GDP) per capita of U.S. $1,050 and has an unemployment rate of 28 percent, the highest in the region. These high poverty and unemployment rates directly contribute to increasing criminal and gang activity, which has led to the public's primary concern of deteriorating personal security. The new government has pledged to address this problem by recruiting idle youth into the military for skills training.

Similar to Guatemala's Laguna del Tigre Park, the ungoverned region of Mosquitia in Honduras is an ideal transshipment point for illicit trafficking. The Government of Honduras is now forming a Joint Task Force in Mocorón to counter the illicit activity in this region and U.S. Southern Command is supporting that effort through enhancements to Honduran military logistical and counterterrorism capabilities.

Costa Rica

The U.S. and Costa Rica cooperate on a wide range of issues at a law enforcement level through an interagency effort. Some of the areas in which we are cooperating are increasing trade and investment in the Central American region, improving narcotics interdiction, and upgrading law enforcement capabilities region-wide. Costa Rica is an important partner in the counternarcotics mission because it is in a high illicit trafficking zone.

Panama

Panama's strategic location has long defined its role in world affairs. The United States is working with the Government of Panama on a range of initiatives for secure trade and transportation, including security of the Panama Canal, maritime and air awareness, and monitoring of cargo traffic. This will aid in the interdiction of illicit cargo such as weapons of mass destruction and illegal drugs. This year, 24 countries have been invited to participate in the annual Panamax exercise. This exercise is focused on the maritime defense of the Panama Canal and has grown in scope and scenario complexity every year since its inception.

CARIBBEAN

The countries of the Caribbean are all democratic, with one exception. Economic deficiencies, infrastructure collapse, and illegal trafficking have challenged the ability of several of the governments in the region to effectively exercise sovereignty and maintain security, leading to considerable undergoverned space. As in other sub-regions, fragile democratic institutions, government corruption, gang activity, and unequal distribution of wealth are also prevalent here and pose challenges. Regional cooperation, therefore, is essential for effective governance in this immense maritime Caribbean Basin region, which forms the third border of the continental United States. As an example of this cooperation, several Caribbean nations are working together to prepare for the unique security challenges associated with the hosting of the World Cup of Cricket in 2007.

The Regional Security System (RSS) is a collective security organization that consists of seven Eastern Caribbean island nations. Among other things, these nations cooperate to prevent and interdict illicit trafficking, control immigration, and respond to natural and other disasters. This organization has the potential to serve as a foundation upon which to build enhanced regional security cooperation. However, with additional resources there may be opportunities for increased security cooperation.

Haiti

Haiti's geographic position, weak institutions, and extreme poverty have made it a key conduit for drug traffickers who transport cocaine from South America to the U.S. as well as Canada and Europe. Contributing factors that create this environment are approximately 1,125 miles of unprotected shoreline, numerous uncontrolled seaports, clandestine airstrips, a thriving contraband trade, weak democratic institutions, a fledging civilian police force, and a dysfunctional judiciary system. Following an initial decline of drug trafficking through small aircraft in 2004, drug trafficking has increased in 2005.

The United Nations Stabilization Mission in Haiti (MINUSTAH) is one of the best examples of security cooperation in the hemisphere where Latin American partner nations have taken the lead of the peacekeeping and security efforts. The U.N. force has over 9,000 troops and law enforcement personnel deployed in Haiti, commanded by a Brazilian officer and supported by over 3,500 personnel from 10 Latin American countries. Recent successes have resulted in a reduction of gang violence, though some problem areas such as Cite Soleil, an area on the northwest coast of Port-au-Prince, largely remain under the control of various criminal elements. In addition to this ongoing work, MINUSTAH also provided a great deal of support to the successful general elections held in Haiti on 7 February.

Dominican Republic

The Dominican Republic shares the strategically-located island of Hispaniola with Haiti, a key gateway for illicit trafficking. Approximately eight metric tons of cocaine from South America are estimated to have transited through the Dominican Republic to U.S. markets last year.

The Dominican Republic's Armed Forces participate fully in counternarcotics efforts and are a future partner in the Enduring Friendship maritime security initiative. Although weak governmental institutions remain a concern, the government has increased its efforts to combat corruption in recent years. Additionally, recent initiatives to enhance border security and military training are positive indications of greater future cooperative opportunities.

Trinidad and Tobago

Trinidad and Tobago was the site of the only Islamic revolt in the Western Hemisphere—the failed coup by Jamaat Al-Muslimeen in 1990, led by Yasin Abu Bakr. Abu Bakr remains the leader of this radical Muslim organization, which continues to challenge the security and stability of this island nation. He is currently in prison, awaiting trial on terrorism charges.

To enhance Trinidad and Tobago's ability to deal with these terrorist threats, Southern Command sponsored the attendance of selected military officers to a counterterrorism course in the United States this year. Trinidad and Tobago also deployed an aircraft and a maritime vessel in support of Carib Venture, a joint counterdrug operation involving multiple Caribbean nations and led by the Joint Interagency Task Force-South.

Suriname and Guyana

Suriname is a former Dutch colony and Guyana is a former British Colony. Despite their differences Suriname and Guyana share many of the same conditions that lead to illicit activities and possibly threats in their countries. Most of the populations are concentrated in a small number of urban areas on the coast. The governments of these countries have distributed their security forces accordingly, including both police and military, in the urban areas, with small detachments present along disputed borders. The majority of the land in these nations is largely ungoverned, uninhabited jungle area that is extremely vulnerable to illicit activity. Porous borders, as well as various rivers with access to the Atlantic Ocean, provide passageways for illicit trafficking.

With regard to humanitarian assistance, Southern Command broke ground on a disaster relief warehouse in Guyana in August of 2005. We built a similar warehouse in Suriname in 2002, and have since then trained disaster relief personnel on warehouse logistics and management. These warehouses will house prepositioned disaster relief material that will reduce the need for transportation of relief supplies in the event of a natural or other disaster.

SOUTHERN CONE

We continue to have good relationships with the militaries of the Southern Cone nations. We commend the regional cooperation efforts of the countries within the Southern Cone, especially in peacekeeping operations. These countries have invested national capital over many years to create and improve their training capabilities as well as enhance the professionalism of their military forces.

Chile

Chile has a major leadership role in the region. The Government of Chile is focused on strengthening its military relations with the U.S. as an element in modernizing the role of its military and establishing its proper place in Chilean society. The modernization and transformation of the military has progressed with the fielding of the F–16 fighter jets they purchased from the U.S. The Chilean military is also reducing its footprint in the country by consolidating bases and returning key

property to civilian use. We conducted 16 security cooperation activities with Chile last year to address interoperability and anti-terrorist support team training with specific focus on force protection capabilities.

Argentina

Argentina has been a leader in the area of promoting cooperation, confidence, and security building measures. It is also the only major non-NATO ally in the region and has settled all of its boundary disputes with Chile. Argentina is currently working with Chile to stand up a combined peacekeeping brigade.

Although we have positive military-to-military relations, I am concerned that in 2½ years, we have not been able to forge an agreement on privileges and immunities that would better support our military's engagement with its military by allowing U.S. forces to conduct exercises in Argentina. We will continue to seek future opportunities for engagement and hope that the Government of Argentina will work with us on this important matter.

Argentina recently signed up to the Proliferation Security Initiative (PSI). We encourage their full participation in this initiative that is designed to prevent the proliferation of weapons of mass destruction, their delivery systems, and related materials.

Brazil

With its estimated 186 million inhabitants, Brazil has the largest population in Latin America, fifth in the world. Brazil has traditionally been a leader in the inter-American community by playing an important role in collective security efforts, as well as in economic cooperation in the Western Hemisphere. It is viewed by many as a unifier and promoter of regional stability. Brazil itself shares a border with all but two nations on the continent.

The tri-border region where Brazil, Paraguay, and Argentina converge is a popular haven for drug traffickers, terrorists, and other criminals. Also, guerrilla rebels across Brazil's northwestern frontier with Colombia pose a potential threat to Brazil's control of its own territory.

Brazil has demonstrated its military leadership in the region by providing the Commander of the United Nations Stabilization Mission in Haiti (MINUSTAH) since the inception of this mission.

Uruguay

Uruguay is a model for peacekeeping operations, as it has the most peacekeepers per capita of any country in the world. Its peacekeepers are very effective, and we are working with them to gain lessons learned.

This past year, the Center for Hemispheric Defense Studies (CHDS) in cooperation with the Uruguayan Center for Strategic Studies, conducted a seminar on transnational security and governance. The Conference brought together military and civilian defense leaders from the U.S., Argentina, Bolivia, Brazil, Paraguay, and Uruguay and provided a valuable forum for discussions on security issues. In addition, a Center for Civil-Military Relations team led a seminar on Civil-Military Responses to Terrorism in Uruguay to participants from South America and the Caribbean.

Paraguay

We remain concerned with the security situation in Paraguay, especially in the Tri-Border Area. The Government of Paraguay recognizes the threats posed by ungoverned spaces in this border region, and is working to secure these spaces. To aid in these efforts, U.S. special operations units have conducted joint training with the Paraguayan Counter-Terrorist units, which also increased interoperability with U.S. counterterrorism units.

We have also conducted numerous Medical Readiness Training Exercises (MEDRETEs) in Paraguay to help our medical troops train and to support Paraguayan medical needs.

FACING THE THREATS

Against this background, the Command strives to support our partner nations by developing within their militaries the capabilities to support security, stability, and a functioning judicial system, with an institutional respect for human rights. While anti-Americanism is rising among some nations, we enjoy strong partnerships with most nations and share a mutual understanding that we face common threats that require regional solutions. We accomplish our mission through our Theater Security Cooperation Strategy wherein we strive to build capabilities within partner nations, enabling them to protect their citizens, strengthen democracy, and ensure economic

growth. Our engagements are normally through a combination of operations, exercises, and program initiatives. These activities are the keys to safeguarding our security interests in the Western Hemisphere.

OPERATIONS

Joint Interagency Task Force (JIATF) South: Counter-illicit trafficking. JIATF-South is a model of interagency and multinational cooperation. Its staff is dedicated to protecting America's borders through around-the-clock vigilance and aggressive interdiction operations. The underlying keys to success are the collection, analysis, and dissemination of all source intelligence combined with the necessary resources to effectively operate across the vast expanses of the Caribbean and Eastern Pacific. During the past 6 years, JIATF-South supported increasing cocaine seizures, with 2005 being a record all time high of 251.6 metric tons in the transit zone.

The overarching impediment to increasing transit zone interdictions is the lack of resources in the area of airborne detection and monitoring. For every 10 suspected tracks of illicit trafficking in the region, JIATF-South can currently only detect 4 tracks and, of those, they can only intercept 2. To improve the interdiction of illicit traffic that threatens our borders, we must enhance our detection and monitoring capabilities and build partner nation capacity to interdict and arrest.

Working in an environment of constrained resources, the command is working to improve its intelligence, surveillance, and reconnaissance (ISR) capabilities. We are concentrating in two areas: 1) the ability to deploy enough assets into the theater to support established requirements, and 2) incorporating the right sensors to mitigate the atmospheric and environmental features that are problematic for collection. We are also collaborating with several defense agencies, interagency, and coalition partners to address near- and long-term needs.

Joint Task Force-Guantanamo (JTF–GTMO): Detainee Operations. JTF–GTMO continues to lead the command's operational efforts in the global war on terrorism. Trained members of al Qaeda, the Taliban, and other individuals associated with terrorist support networks are among the nearly 500 enemy combatants currently in detention. As our military wages the long war, JTF–GTMO operations continue to provide critical information regarding terrorist structures, recruiting practices, funding, operations, and training.

We routinely support visits by the International Committee of the Red Cross (ICRC) and value their recommendations in improving the conduct of our detention and interrogation operations.

The JTF–GTMO mission continues. We appreciate the support of Congress for improvements in infrastructure, facility security, and the quality of life of our service members. Additionally, we are operating detention and interrogation activities in full compliance with the Detainee Treatment Act of 2005.

Joint Task Force-Bravo (JTF–B): Regional Contingency and Counternarcotics Operations. JTF–B is a forward operating base in Honduras and supports our partner nations in a variety of missions including counterdrug, search and rescue, disaster relief, and humanitarian assistance. Most recently, JTF–B responded with both disaster relief and humanitarian assistance when Guatemala was struck by Hurricane Stan. The rapid response and immediate assistance underscored the value of forward deployed forces. JTF–B had helicopters on the ground within 24 hours of the Guatemalan request for assistance and ultimately provided over 650,000 pounds of critically needed food, water, and supplies to remote and isolated communities under harsh weather and operational conditions. The familiarity of JTF–B crews and support personnel with the topography, communications systems, and movement corridors were instrumental to mission success. This was also demonstrated when Hurricane Beta caused loss of life, damage to housing and infrastructure, flooding, and displaced persons along Caribbean coastal areas of Honduras.

EXERCISES

The Command conducts three types of exercises—operational, Foreign Military Interaction (FMI), and humanitarian. Operational exercises are typically restricted to U.S. involvement and are based on standing contingency plans. FMI exercises are multinational exercises conducted with partner nations throughout the region. The scenarios for these exercises focus on peacekeeping, humanitarian assistance/disaster relief, maritime interdiction, and security operations. Our humanitarian exercises are carried out mostly through our flagship series, New Horizons.

Foreign Military Interaction Exercises (Examples):

PANAMAX

PANAMAX remains a premier example of regional cooperation demonstrated through a multi-national exercise tailored to the defense of the Panama Canal. PANAMAX 2005 demonstrated continued growth, both in scope and participation over previous years. This year, the maritime forces of 16 nations united as the Caribbean, Pacific, and Coastal multi-national forces led by Colombian, Peruvian, and Panamanian commanders all under the temporary operational control of a U.S. admiral for the duration of the exercise.

Tradewinds

Tradewinds is a multi-national maritime exercise designed to improve inter-operability for contingencies involving threats to the Caribbean Basin. Caribbean nations have participated in this exercise for 20 years demonstrating a long history of cooperation. In 2005, the Command converted the exercise scenarios to link it to a real world event—the 2007 World Cup of Cricket. This exercise is being used to train and prepare regional forces for a wide range of security and support operations for that event.

Humanitarian Exercise (Example):

New Horizons

Southern Command carried out four New Horizons exercises last year, one each in El Salvador, Panama, Nicaragua, and Haiti. New Horizons are joint exercises conducted by the Command that incorporate humanitarian and civic assistance programs and improve the joint training readiness of the U.S. military engineer, medical, and combat support and combat service support units. Specifically, National Guardsmen and reservists from the following 13 States participated: Alabama, Florida, Georgia, Utah, Washington, Arkansas, California, Delaware, Ohio, West Virginia, Massachusetts, Kentucky, Mississippi. and the District of Colombia. In addition, Medical Readiness and Training Exercises (MEDRETEs), embedded in the New Horizons exercises, enabled the treatment of 236,000 patients in 15 countries.

New Horizons Haiti was originally planned for another location in 2005, but Tropical Storm Jean made a compelling case to shift the exercise to support the greater need in this island nation. Several U.S military units built two school houses and an auditorium, drilled three water wells, produced potable water, and provided medical and casualty evacuation support. Collectively, the three MEDRETEs operating in conjunction with the New Horizons exercise supported 27,110 victims of Tropical Storm Jean.

PROGRAM INITIATIVES

Enduring Friendship

Enduring Friendship is an initiative that this command is implementing to build maritime security capabilities for partner nations located in high illicit trafficking lanes. It supports the President's Western Hemisphere Strategy, the Proliferation Security Initiative, the Command Theater Security Cooperation Strategy, and the U.S./Panama Secure Trade and Transportation Initiative.

The fiscal year 2006 appropriation is $4 million and will be used to develop a common operational picture and interoperable command, control, communications, and intelligence (C^3I) capabilities for Jamaica, the Dominican Republic, Panama, and the Bahamas. Assessments of all four countries were conducted in 2005 to determine the capabilities that each would require in order to achieve a full maritime interdiction capacity. A follow-on program is planned to develop the surface interdiction capabilities of these nations and also a planned expansion of the initiative to other countries in the trafficking lanes, e.g., selected Central American nations.

The Global Peace Operations Initiative (GPOI)

This initiative is currently in the planning phase for the first unit within the Southern Command AOR achieving full operational capability in fiscal year 2007. If executed as planned, this initiative will expand and provide new peacekeepers and peacekeeping units to global peacekeeping missions by the end of 2007. This could include an Infantry Battalion from CFAC and nine company-sized units from countries in the region ready to deploy in support of UN peacekeeping operations around the world.

U.S. Southern Command Human Rights Initiative (HRI)

Our HRI fosters a culture of respect for human rights within partner nation military forces and closes the gap between the military and the citizens they protect.

The HRI effectively assists in the building of professional military forces by providing concrete standards and measures of effectiveness in the areas of doctrine, training, civilian control of the military, and effective systems for transparent internal judicial control. Eight regional nations either have implemented a human rights initiative or have committed to do so; they are Costa Rica, Bolivia, Guatemala, Uruguay, the Dominican Republic, El Salvador, Honduras, and Colombia. In 2005, CFAC signed the HRI Memorandum of Cooperation. Implementation of the Human Rights Initiative for the Caribbean and Southern Cone nations is the focus for fiscal years 2006 and 2007 efforts.

Although not an initiative, an area of concern is investing limited resources today to ensure the best return on that investment tomorrow. One of the most effective resources available to me is the International Military Education and Training (IMET) Program. Eleven countries remain sanctioned under the American Servicemembers' Protection Act (ASPA) and are, therefore, barred from receiving IMET funds. As a result, in 2005, one-third of the countries in our AOR were unable to participate in U.S.-sponsored military education. In 2003, the final year of IMET before the ASPA sanctions took effect, 25 percent (771) of the total number of students (3,128) trained from the AOR came from the countries that are now sanctioned. Providing opportunities for foreign military personnel to attend school with U.S. service members is essential to maintaining strong ties with our partner nations. Decreasing engagement opens the door for competing nations and outside political actors who may not share our democratic principles to increase interaction and influence within the region.

It is well known that the Peoples Republic of China (PRC) has a long-term goal of partnering with the countries of Latin America. The PRC requires access to raw materials, oil, minerals, new markets, and diplomatic recognition. PRC imports from Latin America grew an average of 42 percent per year over the last 4 years. The PRC has been making headway into the region by using economic measures, employing diplomacy, building infrastructure, negotiating trade deals, and offering resources to cash-strapped militaries and security forces with no strings attached.

CONCLUSION

The region has tremendous potential, but no single nation can achieve it alone. In large measure, the threats are not conventional. As such, the solutions cannot be conventional. Ungoverned spaces, porous borders, corruption, organized crime, drug trafficking, and narcoterrorism are demonstrating their ability to challenge freely elected leaders and undermine legitimate governments. These threats did not develop overnight nor can they be solved overnight.

As we mentioned earlier, shared security problems in this hemisphere require shared solutions. We at U.S. Southern Command recognize that not all problems and solutions are military in nature. The military can help to set the conditions to create a safe and secure environment. The region needs other agents of reform including those with political, economic, and social programs that will improve the quality of life for all citizens in the hemisphere. An effective approach requires an integrated, long-term effort.

The men and women of U.S. Southern Command are doing a superb job. Continued congressional support for our efforts will ensure that the command is capable of more effective engagement and sustained support for our regional partners.

Thank you again for the opportunity to be here today and I look forward to your questions.

Chairman WARNER. Thank you very much.

Admiral.

Admiral KEATING. Good morning, Senator. Chairman Warner, Senator Levin, and members of the committee: It's a pleasure for me as well to join my colleague, John Craddock, to appear before you. I know John joins me in expressing to the committee our sympathies for the passing of your colleague's wife, Mrs. Inouye, last night. All of us in NORTHCOM and SOUTHCOM pass our sympathy, sir.

I am proud to represent the men and women of the NORTHCOM and NORAD, who are dedicated to defending the United States and the Canadian homeland against all threats. I am privileged to be

part of this outstanding team and to report on our accomplishments and continued progress throughout 2005.

At NORTHCOM we sustain 24–7 situational awareness and readiness to protect the United States against a range of threats in all domains. We continually evaluate each threat in terms of its capability and intent to reach and harm the United States. Day-to-day, we are focused on deterring, preventing, and defeating attacks against our homeland. We also stand ready to assist primary agencies in responding quickly to man-made and natural disasters when we are directed to do so by the President and the Secretary of Defense.

To better serve our countrymen in their time of need, we actively coordinate with other Federal agencies, developing stronger working relationships with State, regional, and local partners. Although our civil support response received significant attention in 2005, be assured we remain very active in planning and coordinating homeland defense operations. Our homeland is protected from air threats primarily by the North American Aerospace Defense Command, a United States-Canadian binational command. Across the United States and Canada, armed fighters are on alert and fly frequently to identify and intercept suspect aircraft. Since the September 11, 2001, we at NORAD have flown more than 42,000 accident-free sorties and we have scrambled or diverted airborne fighters more than 2,000 times in response to potential threats.

To facilitate situational awareness and decisionmaking in the global maritime environment, NORTHCOM disseminates relevant vital information. Additionally, we conduct maritime operations to deter terrorists and prevent attacks against our homeland. At NORTHCOM we posture and position forces to deter and prevent attacks. We maintain quick response, rapid response and consequence management forces at appropriate alert levels to meet potential threats.

Our department has a long history of supporting civil authorities, providing specialized skills and assets that save lives, reduce suffering, and restore infrastructure in the wake of catastrophic events. All that support is provided at the direction of the President or the Secretary of Defense and is in accordance with the National Response Plan and applicable laws.

In 2005, we supported the Department of Homeland Security (DHS) in responding to several hurricanes, one of which of course was Hurricane Katrina. For Katrina we established a joint task force to oversee title 10 operations for that singularly complex civil support mission. Shortly after the hurricane made landfall in Louisiana and Mississippi, we were given authority at NORTHCOM by the Deputy Secretary of Defense to deploy the forces we thought necessary to save lives and reduce human suffering. The Department, through NORTHCOM, provided airborne and seaborne search and rescue forces, mobilization centers, airlift, ground transportation assets, aerial damage assessment, satellite communications, subsistence, water purification, mosquito abatement, medical support, and mortuary affairs.

In the wake of Katrina, we have invested considerable time and effort in our lessons learned process. We established a web site where lessons learned are submitted. These observations then go

through an extensive vetting process and after thorough analysis they are distributed throughout our staff and the interagency to determine appropriate corrective action.

After those actions have been implemented, we then verify through an extensive exercise program that those lessons learned are in fact applied to the proper situation. We cross-referenced our lessons learned with recent reports, including the White House report, on our Nation's response to Katrina and we are incorporating those lessons into future operations, and we exercise them frequently, one significant exercise upcoming. An important lesson we learned pertains to unity of effort and unity of command and, as we are now calling it, unity of results.

In February, we hosted a hurricane preparation conference in Colorado Springs. This conference afforded 10 adjutants general from the Gulf Coast States and NORTHCOM senior leadership the opportunity to discuss our mutual efforts to prepare for the 2006 hurricane season.

NORTHCOM has initiated collaborative planning and preparation efforts with the adjutants general from all States and we are currently integrating Defense Coordinating Officers (DCOs) into each Federal Emergency Management Agency (FEMA) region. In addition, we participated in last month's meetings of the National Governors Association and the Adjutants General Association of the United States. These face-to-face meetings provided a forum for NORTHCOM and States' leaders to discuss challenges and responsibilities and to enhance our domestic coalition.

A second lessons learned from Katrina relates to communications. We need immediate, reliable communications that are survivable, flexible, and interoperable with our civilian partners. These communications must be mobile, they should be secure, and they have to be both voice and data capable. We are currently deploying cellular-based communications systems among our subordinate and supporting commands, as is the DHS.

We are working with the DHS and FEMA and the National Guard Bureau to develop common data sets that allow everybody on the net to speak the same language when referring to events or requesting assistance real time. We are developing, in combination with the Department of Defense (DOD) and FEMA, pre-scripted mission assignments based on capability requirements in both the DHS and the DOD.

Our Air Force component is working with the United States Coast Guard and the National Guard Bureau on a joint search and rescue center for large-scale coordinated operations. We also participate in FEMA-hosted weekly videoteleconferences on logistics and supply issues.

We continue to support law enforcement agencies in the United States in the war against illegal drugs and other transnational threats. Federal laws and policies allow us to assist those law enforcement agencies in their very important counterdrug mission and in securing our borders. We employed unmanned aerial systems along the southwest border, supporting United States Customs and Border Protection. We flew nearly 2,000 hours of unmanned aerial systems in the past 2 years. These flights assisted in the detection and apprehension of illegal trafficking in New

Mexico, Arizona, and California and provided valuable training for our military forces. In 2005 we flew nearly 2,000 manned flight hours in support of detection and monitoring missions along the northern and southern borders.

Through the application of existing DOD technology and intelligence analysis, we assisted in the detection of nearly 40 tunnels along our southern and northern borders. Joint Task Force North, our joint task force headquartered in El Paso, provides nearly five soldiers per day year-round in support of tunnel detection efforts.

DOD units employ long-range surveillance systems in an operational setting. They refine acquisition reporting techniques and procedures and operate in a desert terrain and in all-weather conditions, all in support of law enforcement agencies, in conditions very similar to those they will encounter in Afghanistan or Iraq.

Our homeland defense and civil support plans are the foundation of our ability to deter, prevent, and defeat threats to our Nation and to assist civil authorities when called upon by the Secretary of Defense or the President. We have made significant progress in 2005 in developing our plans and are committed to finalizing these documents in the coming year. We refine and test these plans in frequent, demanding exercises. Each year NORTHCOM sponsors at least 5 large-scale exercises and over 30 smaller exercises to test those plans.

We integrate potential disaster scenarios such as pandemic influenza into our training and exercises, as we will do in our upcoming major exercise, Ardent Sentry. To date, over 150 Federal, State, local, and multinational agencies and nongovernmental organizations have participated in our exercises.

In everything we do, planning, exercising, conducting real world operations, we continuously hone our ability to support civil authorities in responding to natural disasters, while never losing focus on our primary mission, homeland defense. Our enemies should make no mistake about our resolve or our capabilities.

We are grateful to the members of this committee for their unwavering support. We are grateful for your efforts to ensure our men and women in uniform have the tools they need to keep our Nation and the American people safe and free. I am grateful for your time and, like John, I look forward to your questions.

[The prepared statement of Admiral Keating follows:]

PREPARED STATEMENT BY ADM TIMOTHY J. KEATING, USN

Chairman Warner, Senator Levin, and members of the committee: The men and women of U.S. Northern Command (NORTHCOM) and North American Aerospace Defense Command (NORAD) are dedicated to defending the United States and Canadian homelands against all threats. I am privileged to be a part of this outstanding team. We are pleased to report on the accomplishments and the future direction of the two Commands.

NORTHCOM

NORTHCOM is responsible for homeland defense, sustaining situational awareness and readiness 24/7 to protect the United States against a range of symmetric and asymmetric threats in all domains. These global threats emanate from other combatant commanders' areas of responsibility, but they are consistently pointed at our homeland. We continually evaluate these threats as we focus on deterring, preventing and defeating attacks against our homeland. We also stand ready to assist primary agencies in responding quickly to manmade and natural disasters, when directed by the President or Secretary of Defense. To better serve Americans in their

time of need, we are actively coordinating with other Federal agencies and developing stronger working relationships with National Guard, State, and local partners.

Homeland Defense Operations

NORTHCOM has few permanently assigned forces. Whenever mission requirements dictate, we request additional forces from the Secretary of Defense, and if approved, receive them from our force providers, U.S. Joint Forces Command and other combatant commands. This arrangement meets our operational requirements, and we work with our force providers to ensure we have access to forces that are trained and ready to deploy to meet all mission requirements.

While our civil support missions received significant attention in 2005, we were also very active in planning and coordinating operations for defense of the homeland.

- Maritime Operations. NORTHCOM conducts maritime operations to deter terrorists and prevent attacks against the United States and our allies. During the past year, we analyzed and disseminated to government leaders information on the global maritime environment to facilitate situational awareness and decision making. NORTHCOM pursued and effectively garnered national and international support and strengthened these partnerships to deter and disrupt terrorist activity. We also monitored threats of interest in the global maritime environment. Our Joint Force Maritime Component Commander, located in Norfolk, Virginia, worked closely with the U.S. Coast Guard to maintain maritime situational awareness through coordinated efforts at the sector command centers on the east and west coasts.

  In support of the National Strategy for Maritime Security, NORTHCOM hosted the Maritime Domain Awareness Implementation Team Working Group to provide baseline information and guidance to departments and agencies implementing the National Plan to Achieve Maritime Domain Awareness. NORTHCOM co-chairs the Maritime Domain Awareness Concept of Operations Working Group, which is responsible for writing a plan to combine the efforts of DOD, the Department of Homeland Security (DHS) and other interagency organizations.

  In partnership with U.S. Pacific Command and U.S. European Command, NORTHCOM is co-sponsoring the Comprehensive Maritime Awareness Joint Concept Technology Demonstration. This project is designed to demonstrate DOD's ability to coordinate international and interagency maritime domain awareness across three theaters of operation.

- Missile Defense. When directed, NORTHCOM will exercise operational control of the Ground-based Midcourse Defense System and forces, as well as all terminal defense systems allocated to protect the homeland. U.S. Strategic Command and U.S. Pacific Command support NORTHCOM with missile warning and queuing data. Over the last year, we conducted numerous capability demonstrations and exercises, significantly increasing confidence in our tactics, techniques, and procedures, as well as enhancing crew proficiency for operation of the Ground-based Midcourse Defense System. Continued support for the Command, Control, Battle Management, and Communications (C2BMC) System is vital; C2BMC is the lynchpin for uniting complex suites of sensors and weapon systems for a layered, integrated missile defense. NORTHCOM is ready to execute limited defensive operations pending direction from the Secretary of Defense.

- Anti-Terrorism/Force Protection. NORTHCOM has overall responsibility within DOD for anti-terrorism and force protection missions within our assigned geographic area. Our force protection responsibilities include assessing the threat and security posture at all DOD bases and installations, to include leased facilities. We provide overall operational direction for force protection assets and work through existing DOD elements to serve as a bridge between separate programs to create efficiencies and eliminate vulnerabilities. We ensure DOD force protection standards are applied across all continental United States facilities, and we advocate for the Services' force protection funding in the budget process.

  To address the DOD needs of force protection in North America, we employ the Joint Protection Enterprise Network. This is a web-based force protection system that permits users to share information in near-real time. It allows DOD users to post suspicious activity reports and installation

Force Protection Conditions. The Joint Protection Enterprise Network supports over 1,500 users at more than 350 installations.

• Critical Infrastructure Protection. Over the past year, NORTHCOM has integrated Critical Infrastructure Protection into our overall force protection responsibilities, which includes an "all hazards" approach consistent with comprehensive risk management activities. Working closely with the Joint Staff, the military services and agencies, we are focused primarily on protecting critical DOD owned, leased, or managed facilities that lie within our geographic area of responsibility. We are also working with the Office of the Assistant Secretary of Defense for Homeland Defense and other interagency partners in a cooperative effort to better protect non-DOD critical infrastructure, including the defense industrial base.

• Support to Operations Iraqi Freedom and Enduring Freedom. NORTHCOM is prepared to support U.S. Central Command by protecting critical defense infrastructure and ports of embarkation for units deploying in support of Operations Iraqi Freedom and Enduring Freedom. We also provide unique training opportunities for units preparing for deployments to Iraq or Afghanistan. Coordinated by Joint Task Force North (JTF–N) at Fort Bliss, Texas, numerous units have been able to train in a desert environment while providing support to law enforcement agencies along our southwest border. These exercises are excellent preparation for the mission units will conduct overseas.

Defense Support of Civil Authorities

DOD has a long history of supporting civil authorities with specialized skills and assets that can rapidly stabilize and improve the situation in the wake of catastrophic events. All DOD support is provided at the direction of the President or Secretary of Defense and in accordance with the National Response Plan and applicable laws.

NORTHCOM provides defense support of civil authorities primarily through our subordinate commands: the aforementioned JTF–N; Joint Task Force Civil Support at Fort Monroe, Virginia; Joint Force Headquarters National Capital Region at Fort McNair, Washington, DC, and Joint Task Force Alaska at Elmendorf Air Force Base, Alaska. In addition, the Army, Air Force and Marine Corps have dedicated Service Components to NORTHCOM. These commands include: Army North located at Fort Sam Houston, Texas; Air Force North located at Tyndall Air Force Base, Florida and Marine Forces North located in New Orleans, Louisiana. The Commander Fleet Forces Command, located at Naval Station Norfolk, Virginia is designated as the Navy's Supporting Commander to NORTHCOM.

We support designated events with security and other specialized military capabilities and assist other Federal agencies, as well as state and local partners, in responding to catastrophic events. A summary of our recent civil support operations follows:

• Special Events. Over the past year, NORTHCOM supported the U.S. Secret Service for the President's 2006 State of the Union Address, a National Special Security Event, in which we managed unique DOD capabilities and coordinated air defense with NORAD. Additionally, we provided DOD assistance for the United Nations 60th General Assembly. Our support included explosive ordnance disposal teams and explosive detection dog teams.

• Support to Space Shuttle Flight 114. During July–August 2005, in support of U.S. Strategic Command, our deployable command and control headquarters element, Standing Joint Force Headquarters North, provided command and control of joint military forces and coordinated with NORAD, the National Aeronautics Space Administration and the U.S. Coast Guard to support space shuttle operations in the NORTHCOM area of responsibility.

• Hurricane Relief Operations. During 2005, NORTHCOM supported DHS in responding to four hurricanes. For Hurricane Katrina, we established Joint Task Force Katrina to oversee Title 10 operations for the most complex civil support mission in the history of the U.S. military. DOD provided Defense Coordinating Officers and Elements, DOD bases for mobilization centers, airlift, ground transportation assets, aerial damage assessment, satellite communications, airborne and waterborne search and rescue, subsistence, water purification, mosquito abatement and medical support.

We are actively involved in efforts to turn lessons observed into lessons learned and incorporate them into future operations. One very important lesson we learned pertains to unity of effort and unity of command.

To enhance our ability to achieve unity of effort and unity of command in future operations, in February 2006, NORTHCOM hosted a 2006 Hurricane Preparation Conference at Peterson Air Force Base, Colorado. The conference afforded ten adjutants general and the NORTHCOM senior leadership the opportunity to better prepare for the 2006 hurricane season. The conference advanced our collective ability to respond with the full spectrum of military capabilities in a timely manner, when directed.

In addition, we participated in the recent meetings of the National Governors Association and the Adjutants General Association of the United States. These face-to-face meetings provided a forum for NORTHCOM and the National Guard to discuss challenges and responsibilities and enhance our "domestic coalitions."

As our response to Hurricane Katrina demonstrated, commanding and directing 22,500 Active-Duty Forces and coordinating the efforts of over 50,000 state status National Guard troops present many challenges under any circumstance. We embrace the fact that the National Guard will play a pivotal role in disasters. We must ensure unity of effort among Active-Duty Forces and state status National Guard forces when assembling and directing a large-scale, multi-state and international response to a catastrophic event. We stand ready to respond as directed by the President or Secretary of Defense.

Another lesson learned from our response to Hurricane Katrina relates to communications. We need immediate, reliable communications that are survivable, flexible and interoperable with our civilian partners. These communications must be mobile, secure and both voice and data capable.

• Wildland Firefighting. NORTHCOM provided Modular Airborne Fire Fighting System-equipped aircraft to support the National Interagency Fire Center in combating wildfires in Arizona, Colorado, Idaho, Nevada, Oregon, Utah, Washington, and Wyoming. Aircraft flew over 364 hours and dropped 879,000 gallons of fire retardant in support of the U.S. Forest Service and Department of the Interior.

Support to Law Enforcement Agencies

Federal laws and policies allow us to assist law enforcement agencies in their counterdrug mission and in securing our borders against transnational threats.

Operation Lakeview

In support of the U.S. Border Patrol's Buffalo Sector, JTF–N planned and facilitated Operation Lakeview from July to September 2005. Designed to improve the interdiction of transnational threats in the maritime domain of Lake Ontario, this bi-national, multi-sensor, multi-agency operation expanded to include the maritime domain of Lake Erie and the contiguous land and air domains. This was the first JTF–N mission to operationalize a DOD-funded coastal defense system designed to provide a command, control, intelligence, surveillance and reconnaissance node capable of fusing multi-sensor, multi-source information into a common operational picture. During Operation Lakeview, JTF–N documented over 7,900 vessels and tracked over 300 radar targets at any given time. This operation validated developmental technology, explored JTF–N capabilities in the maritime domain, opened lines of communication and established productive relationships among participants.

Operation Western Vigilance

In October and November 2005, JTF–N hosted a Stryker-equipped reconnaissance, surveillance, target acquisition squadron which operated on the southwest border in support of U.S. Customs and Border Protection. During this operation, the squadron employed the Stryker's intelligence, surveillance, and reconnaissance systems to detect and report the presence and movement of transnational threats crossing into the United States illegally in southern New Mexico and Arizona. The operation, which also included unmanned aerial systems and National Guard helicopters, contributed to a 60 percent increase in U.S. Customs and Border Protection apprehensions during the month-long operation.

Tunnel Detection

Applying DOD and intelligence community technology and intelligence analysis in support of U.S. Customs and Border Protection, JTF–N detected three tunnels on the southwest border with Mexico and confirmed the existence of one tunnel on the northern border with Canada. In conjunction with its homeland security and intelligence community partners, JTF–N continues tunnel detection efforts along the U.S. border.

In 2005, NORTHCOM initiated coordination with multiple Federal agencies for further development of tunnel detection technology, which will benefit not only JTF–N and our law enforcement agency partners, but also U.S. Central Command in Southwest Asia.

- Unmanned Aerial System Operation. Through JTF–N, NORTHCOM employed unmanned aerial systems along the southwest border in support of U.S. Customs and Border Protection. While obtaining unmanned aerial system training, these flights assisted in the detection and apprehension of illegal trafficking in New Mexico and Arizona.

NORTHCOM is engaged with the Federal Aviation Administration to develop airspace procedures for unmanned aerial system support to border control lead agencies and disaster response operations. While this is a complex issue, we remain confident that unmanned aerial systems will be safely employed in the National Airspace System in the near future.

Homeland Defense and Civil Support Plans

Our homeland defense and civil support plans are the foundation of our ability to deter, prevent and defeat threats to our Nation and assist civil authorities when called upon by the President or Secretary of Defense. We have made significant progress this past year in developing our plans and are committed to finalizing these documents in 2006.

- National Homeland Security Plan Initiative. The National Response Plan outlines DOD actions for support to civil authorities in the event of an attack or domestic incident. However, there is no similar, overarching national level plan that specifically coordinates the pre-attack actions of the United States Government. We advocate the development of a National Homeland Security Plan to clarify the optimum distribution of effort among Federal agencies for prevention, preparation and response. A National Homeland Security Plan would promote unity of effort and reduce uncertainty in the overlap of responsibilities and capabilities between DOD and all homeland security partners. The National Homeland Security Plan concept is advocated in the 2006 Quadrennial Defense Review (QDR).
- CONPLAN 2002. In the past year, the Secretary of Defense approved Concept Plan 2002 (CONPLAN 2002–2005), our Nation's homeland defense plan. NORTHCOM is currently executing Phase I of CONPLAN 2002–2005: Sustained Deterrence. We are coordinating, through the interagency process, diplomatic, intelligence, economic, financial and law enforcement deterrent options.
- CONPLAN 0500. We are updating CONPLAN 0500, which is designed to provide a timely military response to a chemical, biological, radiological, nuclear or high-yield explosive incident in order to save lives, mitigate human suffering, facilitate recovery operations, support civil authorities and maintain confidence in the American government. As part of our all-hazards plan analysis, we are coordinating with DHS to examine state disaster response plans. This analysis will help our planning efforts by providing an understanding of local capabilities in the event of a disaster. Our planning efforts have a singular goal—to provide the fastest and most effective DOD response in support of civil authorities in times of crisis.

Pandemic Influenza

In the event of pandemic influenza, the President or Secretary of Defense may direct DOD to support the appointed Primary and Coordinating Federal Agencies leading the Nation's response. If requested and approved, DOD is capable of coordinating a wide array of medical support through our Joint Regional Medical Planners, who are collocated with the Defense Coordinating Officer supporting the Primary or Coordinating Federal Agency. DOD medical support may include: moving patients, distributing pharmaceuticals from the Strategic National Stockpile, establishing and staffing field medical facilities and providing medical supplies, preventive medicine assistance and lab support.

Interagency Coordination

NORTHCOM and NORAD have implemented a full spectrum interagency program to enhance coordination, planning, and operations. We have liaison officers from approximately 60 Federal and non-Federal agencies, U.S. and Canadian, at our headquarters in Colorado Springs. Working through our Joint Interagency Coordination Group, they provide situational awareness and an assessment of operations and plans that their agencies are executing in support of a contingency. This coordination allows us to "lean forward" and anticipate the assistance that will be re-

quested from DOD and NORTHCOM. During Hurricanes Katrina and Rita, our Interagency Coordination Watch Cell worked around the clock supporting key resident agency representatives from the Federal Emergency Management Agency, the Army Corps of Engineers, the Transportation Security Administration, the U.S. Coast Guard, the U.S. Geological Survey, the Federal Aviation Administration, the Environmental Protection Agency and others. These representatives provided onsite interagency subject matter expertise and a critical two-way link with their parent agencies at all levels.

In addition to operational support, our interagency representatives are fully immersed in the development of plans supporting our homeland defense and defense support of civil authorities missions. We have established working groups to provide interagency support for our key planning efforts, including CONPLAN 2002 and collaboration with Department of Human Health Services for Pandemic Influenza contingency plans. Our Earthquake Working Group is coordinating with the Federal Emergency Management Agency on their catastrophic planning initiative to be better prepared for potential earthquakes in the NORTHCOM area of responsibility.

We are also working with the Departments of Transportation, Energy, as well as Health and Human Services to establish optimum liaison arrangements. DHS has placed a senior level representative at our headquarters and NORTHCOM has an onsite senior liaison within DHS headquarters.

Intelligence Fusion and Sharing

To understand and assess the threats our Nation faces, our intelligence team fuses foreign threat information that has a domestic nexus with domestic threat information having a foreign connection. Our analysts collaborate with intelligence directorates from the other combatant commands, the national intelligence community, and other Federal agencies, including the National Counterterrorism Center, the Defense Intelligence Agency's Joint Intelligence Task Force—Combating Terrorism, the Federal Bureau of Investigation, the Central Intelligence Agency, the National Geospatial-Intelligence Agency, the National Security Agency, the U.S. Coast Guard and the National Guard Bureau. To support our joint efforts, NORTHCOM hosts liaison officers from these and other national agencies and we embed our own liaison officers in their agencies.

To protect Americans' civil liberties, intelligence received from other Federal agencies or State and local law enforcement is filtered through a well-established and disciplined Intelligence Oversight Program to ensure we receive only intelligence with a foreign terrorist threat nexus and then only to the extent the intelligence is relevant to our missions. NORTHCOM and NORAD conduct their missions within the operational parameters of intelligence oversight statutes and regulations. Through a thorough understanding of intelligence oversight guidance by the intelligence community, we ensure that the intelligence information necessary to conduct our missions is legally collected, analyzed and used to develop a clear picture of the threat to the NORTHCOM area of responsibility, while ensuring that the Constitutional rights of U.S. persons are protected.

Our intelligence team is also active in our mission of providing support to civil authorities. NORTHCOM uses permissible intelligence capabilities to provide dedicated products and on-site support for National Special Security Events, and, most recently, disaster relief operations in response to hurricanes. In conjunction with the Defense Intelligence Agency and the National Geospatial-Intelligence Agency, national and tactical imagery capabilities were used to assist Federal, State, and local partners in determining the extent of hurricane damage.

Interoperable Communications

NORTHCOM is developing a concept to implement cellular-based rapidly deployable communications among NORTHCOM subordinate and supporting commands. Deployable cellular equipment will provide an autonomous infrastructure to extend communications connectivity in the NORTHCOM area of responsibility.

NORTHCOM maintains the ability to share information with our mission partners through web-based tools. Hurricane Katrina response operations demonstrated the importance of sharing information outside the military domain and with partners that do not have access to our classified systems and, in many cases, do not even have access to unclassified .mil or .gov sites. To improve information sharing, we have installed a gateway between our classified network and DHS's Homeland Security Data Network. This gateway provides robust classified information sharing between the two departments. Working with our mission partners, we anticipate a common solution to share information in an unclassified environment.

To share critical force protection information with our non-DOD partners, we are employing the Homeland Security Command and Control Advanced Concept Tech-

nology Demonstration. Through this system, we share information with DHS and public safety agencies providing emergency response to DOD facilities, bases and installations. This capability supports our strategy to publish common operational picture information to DOD, Federal, State, and local government agencies.

Theater Security Cooperation with Canada

Our Theater Security Cooperation program with Canada develops a series of contingency plans and cooperative procedures for responding to transnational threats and national disasters on both sides of the border. We have met with the commander and senior staff of Canada Command and are evaluating the appropriate structures to enhance U.S.-Canada defense cooperation.

Theater Security Cooperation with Mexico

NORTHCOM has made great strides in building effective relationships with the Mexican Armed Forces and civil agencies. Our increased interaction has promoted in-depth discussions on transnational security issues facing both countries, such as counterterrorism and counterdrug operations. Additionally, we have initiated discussions that have improved interagency coordination and facilitated an understanding of the consequence management plans, protocols and capabilities of both countries. We are currently talking with the Mexican Armed Forces about maritime and air security issues and are assisting them in establishing capabilities that support our mutual efforts in combating transnational threats. We are also exploring ways in which we can support the many security initiatives of the Security and Prosperity Partnership of North America Agreement that President Bush, President Fox, and Prime Minister Martin signed in March 2005.

Exercises

Each year, NORTHCOM and NORAD sponsor five large-scale exercises and over 30 smaller exercises. Our exercise scenarios have simulated a wide range of homeland defense and civil support challenges to include: threats from all domains, missile defense, consequence management operations, nuclear proliferation, protection of critical infrastructure, maritime interception operations, bioterrorist attacks, other weapons of mass destruction attacks and natural disasters. We also integrate potential disaster scenarios, such as pandemic influenza, into our training and exercises. To date, over 150 Federal, State, local, and multinational agencies and nongovernmental organizations have participated in our exercises. We are working to increase exercise opportunities with Canada, Great Britain, Mexico, and other nations. Lessons learned from each exercise improve our operational procedures.

Homeland Security/Defense Education Consortium

Along with military and civilian partners, we established the Homeland Security/Defense Education Consortium to develop a knowledge and research base for homeland security and defense professionals. The 175 participating schools in the United States, Canada, and Argentina seek to evolve expertise in these subject areas in the academic, military and corporate realms. We are grateful for the additional funds provided by Congress in the Fiscal Year 2006 DOD Appropriations Bill to support this effort.

NORAD

NORAD, a U.S. and Canadian bi-national command, operates an integrated system of alert fighters, tankers, airborne warning and control aircraft, as well as communications and ground-based air defense assets, to provide comprehensive aerospace warning and defense of the United States and Canada.

Operation Noble Eagle

NORAD defends the United States and Canada from domestic air threats through Operation Noble Eagle. Since September 11, 2001, NORAD has flown more than 42,000 accident-free sorties and scrambled or diverted fighters more than 2,000 times in response to potential threats.

National Capital Region Integrated Air Defense System

In 2005, NORAD made significant improvements to the air defense system in the National Capital Region. In January 2005, the all-weather Norwegian Advanced Surface to Air Missile System was integrated into the architecture to complement the existing air defense systems. In May 2005, a Visual Warning System achieved Initial Operational Capability. This eye-safe system uses laser technology to provide a clear visual warning to pilots who enter restricted airspace in the National Capital Region. This system is expected to reach Full Operational Capability in mid-2006. NORAD also continues fielding the Enhanced Regional Situational Awareness Sys-

tem, an array of strategically placed video and infrared surface-to-air cameras and elevated Sentinel Radars designed to detect and identify aircraft of interest.

In November 2005, DHS and DOD agreed to use DHS helicopters to assist NORAD in identifying and intercepting "low and slow" aircraft in the National Capital Region. We have continued to conduct numerous command-level exercises to test rules of engagement and to train designated authorities.

NORAD Common Operational Picture—Tactical Data Links

NORAD maintains a robust common operational picture of the air domain over the United States and Canada that allows us to perform air sovereignty and air defense missions while sharing air domain awareness with adjacent commands and interagency partners. Ongoing initiatives include the continued expansion of connectivity with Federal Aviation Administration surveillance systems and replacement of our aging battle control hardware.

Deployable Homeland Area Air and Cruise Missile Defense

NORAD has completed a concept of operations for Deployable Homeland Air and Cruise Missile Defense. This concept of operations that establishes procedures for employing highly responsive, scalable, integrated air defense packages designed to defend designated venues in coordination with intergovernmental partners, when directed by the President or Secretary of Defense. This effort has also been coordinated with the Canadian forces and the Canadian National Defence Headquarters.

Wide Area Air Surveillance

NORAD requires the capability to conduct real-time, continuous, all-weather, wide area air surveillance to ensure timely detection, identification and tracking of the full spectrum of threats, from sea level to 100,000 feet, within the NORAD area of operations, originating from aerospace, land and maritime platforms. NORAD is evaluating technologies that could comprise a wide area air surveillance family-of-systems including: Next Generation Over-the-Horizon Radar, elevated sensor platforms, passive coherent location systems, classified research and development air surveillance initiatives and other national capabilities.

Federal Aviation Administration Integration

Our partnerships with the Federal Aviation Administration and DHS continue to improve, ensuring our Nation's airspace is ever more secure. To date, 43 of 46 Federal Aviation Administration terminal/approach control radars have been fully integrated in NORAD's operations. The remaining three radars await integration, operations acceptance or deferment until aging radars have been replaced with a newer, short-range system later this year. A study to sustain our current radar capability, by upgrading the transmitters on the Federal Aviation Administration's oldest radars, is complete and the contract award is expected later this spring. This fiscal year the radars are funded on a 50/50 costing-share formula between DOD and DHS. We are grateful to Congress for fully funding the operations and maintenance accounts of both departments to support our Nation's air surveillance network.

NORAD Agreement Renewal

The NORAD Agreement will expire in May of this year. In November 2005, the U.S. Department of State and Foreign Affairs Canada negotiated a draft renewal which may add a maritime warning mission, extends the Agreement indefinitely, and permits either nation to request a review of the agreement at any time. As Canada Command, tasked with homeland defense missions and responsibilities in Canada, becomes fully operational, a review of roles and missions among NORTHCOM, Canada Command and NORAD will be warranted.

BI-NATIONAL PLANNING GROUP

Established in December 2002, the Bi-National Planning Group is an independent organization formed to enhance U.S. and Canadian defenses and our Nations' capabilities to respond to natural and manmade disasters. The Bi-National Planning Group has proposed revisions to the Canada-U.S. Basic Defense Document, Combined Defense Plan and Civil Assistance Plan. Before its mandate expires in May 2006, the Bi-National Planning Group will issue its final report on recommendations to enhance United States—Canadian military cooperation.

QUADRENNIAL DEFENSE REVIEW

NORTHCOM and NORAD played a prominent role in the 2006 Quadrennial Defense Review. We look forward to implementing the actions outlined in the QDR to enhance unity of effort with other Federal agencies, State and local governments,

and Canada and Mexico to improve homeland defense and homeland security. These actions include:

- Creating a National Homeland Security Plan to clearly outline national actions to detect, deter, prevent, or if necessary defeat external threats and aggression.
- Developing joint command and control capabilities for homeland defense and civil support missions to include interoperable communications systems.
- Expanding training programs to accommodate strategic planners from other agencies while working with DHS and other interagency partners to design new courses on developing and implementing strategic-level plans for disaster assistance, consequence management and catastrophic events.
- Facilitating full-scope, interagency homeland security, homeland defense and consequence management exercises which leverage DOD's expertise in planning and training.
- Continuing detailed consultations with theater allies to address security and defense issues of common concern.
- Organizing and sponsoring homeland defense tabletop exercises, in which senior leaders from civilian and military agencies practice responses to disaster scenarios.

FINAL THOUGHTS

We are grateful for the committee's efforts to ensure our men and women in uniform continue to have the best possible equipment, training, and health care. To sustain world-class health benefits for the Active-Duty Force, retirees and their families, we urge Congress to support DOD's efforts to adjust TRICARE costs. We need to rebalance the share of health care costs between retirees and the government. If we do not change the current system, health care expenses will cut into our budgets for training, equipment and other needed investments.

As we act to support civil authorities in responding to natural disasters, we will maintain focus on our primary mission of homeland defense. One fact remains constant—our enemies should make no mistake about our resolve or our capabilities. We thank the members of the Senate Armed Services Committee for their unwavering support of America's military. I look forward to your questions.

Chairman WARNER. Thank you very much, Admiral.

If I may ask the indulgence of all, the Armed Services Committee is scheduled this afternoon at 2:30 to start a hearing regarding testimony on the Joint Strike Fighter and the alternate engine program. Given that the Senate has now informed that there will be a very long series of votes starting at 3:00, this necessitates moving our commencement of this hearing from 2:30 to the hour of 1:30. So the committee will meet at 1:30 here in Hart 216 for this hearing this afternoon.

I would appreciate it if all would inform their Senators about this and other persons of interest.

Admiral Keating, I was very impressed with your comment on the border security. This is a constantly evolving program and the Senate will be, I am told, taking up various aspects of this problem in the coming weeks. Can you enlighten us as to how you work in the intergovernmental organization or whatever structure is existing to deal with this problem, and I would hope that your voice is heard because a lot of the responsibility regarding enforcement could well be reposed in your command, depending on what plan eventually evolves; and also, the procedures by which you work with the individual States and, most particularly, the governors of those States in the implementation of these programs?

Admiral KEATING. Yes, sir. All departmental efforts are in support of law enforcement efforts. The DHS, Customs and Border Protection is the lead Federal agency for border security. We have Joint Task Force North headquartered in El Paso, Texas, by an

Army Brigadier General, Joe Riojas. He has been there almost 2 years. He has developed an extensive network of intelligence-sharing and information-sharing across the interagency. Joe has to go seek the support of military organizations who are going to deploy because of those rather unique environmental conditions that we enjoy along our southern border. So he will go get, for example, Stryker battalions from the Army or expeditionary units from the Marine Corps and they will bring with them not just personnel, but equipment.

In addition, he has engineering battalions and some of these fairly high-end detection systems for seismic activity. Joe is extensively involved through our headquarters with the interagency and works closely with Secretary McHale at the DOD to provide the liaison to those law enforcement agencies, both south and north.

Additionally, we conduct exercises. We have one ongoing, as Senator Cornyn knows, down in his State, and we have conducted three or four similar exercises over the past year, that are not just national but international in scope, to ensure that on both sides of the border our allies are aware of the efforts we have ongoing.

Chairman WARNER. I thought I understood you to say that he responsible up through to you, but what is his actual chain of command?

Admiral KEATING. Yes, sir. He is a direct support into NORTHCOM.

Chairman WARNER. Direct support, so you set this up then?

Admiral KEATING. That is correct.

Chairman WARNER. I see, and it has been established for 2 years now or thereabouts?

Admiral KEATING. Sir, it was Joint Task Force 6 for years. We renamed it after legislation, as we were allowed to get a little more aggressive, if you will, in exploring the nexus between illegal immigrants and potential terrorism and terrorists who might come into the country. That allowed us to expand our mission statement slightly, so we renamed the task force Joint Task Force North. They have been in existence for years.

Chairman WARNER. I see. But ultimately you are the combatant commander that has that responsibility?

Admiral KEATING. Yes, sir, that is correct.

Chairman WARNER. Now, about the interrelationship with the governors, and taking into perspective their views and their needs and the utilization, if necessary, of their Guard and Reserve?

Admiral KEATING. Yes, sir. Through our headquarters, we, and Joe in particular, work with the adjutants general from the States along the southern and northern borders to ensure that we minimize seams to the best of our ability, but we want to eliminate a whole lot of overlap because that is inefficient. So those capabilities that we can provide in support of the adjutants general supporting their Commander in Chief, Joe would be our point man for that effort.

Chairman WARNER. Now, the Quadrennial Defense Review (QDR) highlights that U.S. forces have taken on a greater role at home and will likely continue to do so in support of the global war on terror. Likewise, I noted that one of the recommendations in the Federal response to Hurricane Katrina lessons learned published

last month by the White House stated as follows, "The Departments of Homeland Security and Defense should jointly plan for the Department of Defense's support of Federal response activities as well as those extraordinary circumstances when it is appropriate for the Department of Defense to lead the Federal response."

This raises several issues, including historical limitations on the Armed Forces in law enforcement, title 10 versus title 32, and the current high tempo of operations of all of our Armed Forces. In your view, what does this mean for our Armed Forces and would this role include any necessary changes to the authorities that govern such a response as the insurrection statutes or the posse comitatus statute?

Admiral KEATING. In reverse order, Mr. Chairman, I do not think that it requires any change to statutory authorities that are resident in title 10 forces. Nothing that we have done in response to Katrina or any other operation nor in any exercises, none of this has highlighted to us the need to change posse comitatus.

In the first part of your question, those forces that we might need in response to a significant disaster, we would work through the Joint Forces Command and the Services for the capabilities resident in Active-Duty Forces who may be currently in the United States. In our exercises, we have not yet found any situation remotely close to something that would require going elsewhere because the forces we would have at our disposal are not available. So I am satisfied that, through the current processes and current policy, we would have sufficient forces to respond even on the very high end catastrophe where the DOD would likely have the lead as assigned to us by the President.

Chairman WARNER. Thank you.

General Craddock, as I referred in my opening statement, I profited from our meeting yesterday in preparation for this hearing, and I wonder if you would share with our colleagues your overview of the fragility of a number of the political situations in Central and South America and the role that certain current elected leaders of certain countries are playing in trying to influence those elections?

General CRADDOCK. Mr. Chairman, thank you. Indeed this is a year of elections in Latin America. I know there have been several elections already over the last few months, the last quarter of the last calendar year, two already this year, and I believe eight yet to go. That includes Mexico.

In our judgment, our look at the region tells us that these elections are going to be pivotal in many cases, and that there will be potentially many external influences on the electorates, the constituents, and the voting public in many of the countries. We see, quite frankly, quite an influence from Venezuela in several of the elections that are yet to be held—for example, Peru. I think that is public information and the government of Peru has made that known. Nicaragua obviously has also been public about this.

We see this influence of this expanding populist movement, if you will, this extremist populist movement, impacting on several of these nations that have yet to hold elections throughout the remainder of the year. In these fragile democracies, that becomes a very difficult situation. It is difficult enough for these fragile insti-

tutions to be able to work through the process of elections to convince their constituents that governance is a good thing and that democracy will yield tangible benefits in the long run. Where there are unstabilizing, destabilizing, chaotic external influences, it becomes all the more difficult to realize the benefits of democracy and the institutions forthwith.

So we are watching that closely. We are concerned and we hope that these forces recede and that the internal democratic processes are strengthened and mature in these countries.

Chairman WARNER. Thank you very much. My time has concluded.

Senator Levin.

Senator LEVIN. Thank you, Mr. Chairman.

Admiral Keating, you have made reference to some lessons learned from Hurricane Katrina and, as you know both from what I said this morning and from our previous conversation, the lack of integration between Federal and the National Guards of many States is of deep, deep concern, not just to me but to so many others, including the Senate Committee on Homeland Security and Governmental Affairs members who heard the testimony.

You have set forth your plans to improve that integration here this morning. I am wondering if you have a timetable that you could lay out for us in terms of when you hope to have a fully-integrated plan in place?

Admiral KEATING. We have plans on the shelf now, Senator, and the National Guard adjutants general with whom we have dealt have copies of those plans for disaster response, Defense Support of Civil Authorities, and the high end chem-bio-radiological responses if NORTHCOM should be involved, as we certainly would.

So the Theater Army Groups (TAGs) have seen that. The National Guard Bureau has seen those plans. I repeat, we are exercising to them frequently, most specifically in this upcoming Ardent Sentry exercise, where the State of Michigan will be involved, and we have been in communication with the Michigan Adjutant General. So across the spectrum of the adjutants general, the National Guard Bureau, they know what we have in mind. We are meeting with them much more frequently than we have in the past, and I am satisfied that, in terms of the timetable, we are on or ahead of the schedule that I would have laid out prior to Katrina.

Senator LEVIN. Is there an ongoing effort to reach an agreed upon plan or, as far as you are concerned, is there now in place an agreed upon plan which is adequate to avoid the coordination problems that existed?

Admiral KEATING. There is not an agreed upon plan, Senator, to my knowledge.

Senator LEVIN. Is there an effort made to achieve one? Is that a goal or is that not a goal?

Admiral KEATING. It has been the subject of a lot of discussion and I would put it this way. In the past, growing up the way I did, I would have said C2, that military term C2, meant command and control. Today, because of the dynamic of the National Guard and the NORTHCOM, DHS, and DOD, I would say it is not command and control; it is communication and coordination. That is much more important and is likely to be more effective, and that is the

status to which the governors and adjutants general would more likely agree than a straight old-fashioned command and control notion.

Senator LEVIN. But is there a plan for that kind of coordination?

Admiral KEATING. Yes, sir.

Senator LEVIN. That is agreed upon?

Admiral KEATING. Yes, sir.

Senator LEVIN. So there is in place an agreed upon plan for coordination which you believe is adequate to meet the failures of coordination that existed in Katrina?

Admiral KEATING. There is, sir.

Senator LEVIN. Now, your number one unfunded priority is $10 million, "to provide interoperable, survivable, versatile, resilient, mobile, wireless data network that incorporates security features," as you have described it here this morning. Given the fact that coordination and coordination problems were identified in the aftermath of the response to Katrina, why should this relatively small amount in terms of the budget just not be in the budget?

Admiral KEATING. Senator, since I made that, the chairman and I had that discussion, I am assured that inside the DOD there has been some recalculation and it is likely we will get the funding. I do not know that we have received it, but there are reconsiderations being made in the Department.

Senator LEVIN. Will you just let us know if that happens?

Admiral KEATING. I will, sir.

Senator LEVIN. Also, your fifth unfunded priority is for $3.5 million for interagency coordination activities which will, "synchronize command activities with multiple local, State, Federal, and international agencies to ensure that NORTHCOM can synergistically respond to multiple, simultaneous homeland defense and civil support missions." The same question.

Admiral KEATING. The same answer.

Senator LEVIN. The same answer, good enough.

Senator Reed asked your deputy, General Inge, at last Friday's Emerging Threats and Capabilities Subcommittee hearing, and he responded that, "the intelligence sharing is not as good as it needs to be," to use his words, but he has good liaison relationships and cooperation with other agencies.

Is the NCTC fully-operational and functioning as it needs to in your estimation?

Admiral KEATING. I think it is fully operational, Senator, but we do not work in as comprehensive a fashion with them as we need to. I think I mentioned to you I am going to go see Admiral Redd tomorrow. It will be my second in a series of meetings with him and we are actively engaged in increasing the flow of information and sharing analysis. The information is flowing adequately. It could be better and it is going to get better, and Admiral Redd is committed to that, as are we. It is the analysis and the depth and quality of the analysis, and we are always working to make that better as well.

Senator LEVIN. If you could keep the committee informed on the way those conversations are moving, I think we would all appreciate it.

Admiral KEATING. I will, sir.

Senator LEVIN. General Craddock, in your opening statement you mention the negative impact of the American Servicemembers Protection Act on your engagement strategy. Can you elaborate a bit on that?

General CRADDOCK. Yes, Senator. The American Servicemembers Protection Act essentially precludes Foreign Military Financing (FMF) and International Military Education Training (IMET) from countries who have not executed an article 98 bilateral agreement which says they will not extradite serving or former U.S. officials or citizens to the International Criminal Court (ICC).

This affects 11 countries in our region. Some of these countries are critical: Peru, Ecuador, Brazil, Bolivia. In several countries here, we are now losing the opportunity to bring their officers and their senior noncommissioned officers to the United States and into our schools, whether they be leadership schools, developmental schools, or functional schools. To be able to: one, learn these skills, these capabilities, attributes, and characteristics of the military profession is key; and two, to join partner and learn about the United States Armed Forces subordination to civilian leadership are essential for the good principles of democracy.

So we are losing at that. Now, when I go throughout the region, the fact is FMF is gone, IMET is gone. The leaders I talk to, my counterparts, tell me: We really need this engagement. As much as we do not like to lose either, the FMF, it is understandable; we must have this engagement, this opportunity for the schooling.

Senator LEVIN. Well now, do you agree with their assessment?

General CRADDOCK. I do, absolutely.

The other part is, if we are not there and we cannot provide this opportunity, someone else will. Other nations are moving in. The People's Republic of China has made many offers and now we are seeing those who formerly would come to the United States going to China to take part and take advantage of their offers for this.

Second, we are going to lose contact with a generation of leaders, both noncommissioned officers and officers, that we believe will be unhelpful in the future to us and to them, because as much as when they come to the United States for school we learn from them and they learn from us, they also learn from each other because they are an international cohort here in our classes and courses.

So we think it is essential that we de-link IMET from this sanction.

Senator LEVIN. Mr. Chairman, I would ask you, if you would, to consider sending a copy of General Craddock's testimony here this morning to the DOD and the Department of State and ask them if they would be in a position to give us some recommendations for amendment to that law. We know what the purpose of the law was, but we also are losing some important national security advantages as a result of its requirements. Those advantages were just outlined by General Craddock.

Chairman WARNER. Senator, we will do that jointly in a letter. I share the General's views on indeed the importance of this program. I have seen it for all the many years I have been privileged to be associated with the Department. I have seen it work.

General CRADDOCK. Thank you, sir.

Senator LEVIN. It is an important program indeed and vital to our security. Thank you for your direct testimony on that.

Chairman WARNER. Senator McCain.

Senator MCCAIN. Mr. Chairman, maybe it would be appropriate to put that on the emergency supplemental.

Chairman WARNER. We will take into consideration that thought.

Senator MCCAIN. I agree, we have paid a very heavy price in countries where we have cut off these programs for various reasons. These relationships obviously are very vital if we are going to effectively conduct the war on terror. So I thank you for your forthrightness, General, on this issue.

General, last December, Deputy Secretary England issued a memorandum directing the implementation of the detainee legislation that became law that the Army Field Manual (FM) defines the universe of permissible interrogation techniques and that cruel, inhumane, and degrading treatment are prohibited. That was Deputy Secretary England's memorandum.

Did you receive a copy of that memo?

General CRADDOCK. I did, Senator.

Senator MCCAIN. How have you translated that memo into specific guidance for soldiers, military police (MPs), interrogators, translators, et cetera, at Guantanamo?

General CRADDOCK. Senator, upon receipt of the letter from Deputy Secretary England, I sent a letter to the joint task force commander at Guantanamo, Major General Jay Hood, and told him that he needed to comply with the Detainee Treatment Act of 2005, as promulgated by Secretary England's letter, and asked that he affirm to me that he was in full compliance with the act and with the provisions of FM 34–52, the baseline document that we are still using today.

He did so in a return letter to me. I then asked how we will train both the servicemembers who are at Guantanamo and those who will be rotating in. He has trained those in the detention group, the detention intelligence group, the interrogators, the analysts, and the linguists. He gave them information to use FM 34–52 as the basis to impart that requirement to them.

Now, in the intervening time, last month, February, we realized it is broader than that. It has to extend to the detention operations group, which are both the internal guard force and external, who may be called upon in an emergency situation; and to administrative personnel who generally have duties in and about the camps. So he has expanded his teaching, training, if you will, on the requirements of the FM to them.

Now, we also looked at, we are now in a rotational period, we are changing from the sixth rotation at Guantanamo, Guantanamo 6 to Guantanamo 7. That change is going to be a little bit different than in the past because now the Navy is picking up more of the operation with more guard requirements. So we looked at the program of instruction that has been provided and it did not fully include all the provisions that we wanted to emphasize.

He now has to as these new forces move in, both interior and exterior, implement another teaching operation, chain teaching, if you will, a program of instruction, to make sure, one, that we again train FM 34–52, that we understand the provisions now that that

is force of law, as opposed to before compliance with the Convention Against Torture through three amendments. But now it is the law of the land.

So we are complying with the requirements of the Detainee Treatment Act in that fashion, both in preparatory training before the troops move in and then once they get on the ground. Quite frankly, once they arrive on the ground their focus is on the immediate environment and they understand the issues and exactly what we are telling them much better with regard to their obligation because it is very real, it is purposeful, and it is right there in front of them.

Senator MCCAIN. Do they have specific written instructions?

General CRADDOCK. We use FM 34–52 right now as the guideline. That is the only authority we have for the interrogations. There will be, obviously, no cruel, inhumane, degrading treatment or punishment.

Senator MCCAIN. But that is in the eye of the beholder. I think that it is important that they receive specific instructions, General.

General CRADDOCK. Senator, the manual is being rewritten. We are awaiting that manual, that rewrite, and I have asked the Department that when they rewrite that give us specifics as to what "degrading treatment" means so that there is no question in a soldier or sailor's mind.

Senator MCCAIN. Thank you.

General Miller, who ran Guantanamo and helped set up operations at Abu Ghraib, we have been briefed that he failed to properly supervise the interrogation of Mohamed Qitani, the so-called 20th hijacker. Their report recommended that he be reprimanded, a recommendation that you declined to follow. Since then, General Miller has asserted his Fifth Amendment-Article 31 right against self-incrimination in two court-martial cases involving the use of dogs during interrogations.

I do not contest General Miller's right under the Constitution, but do you not think that he would at least, just obligations as a general officer, testify at these trials, General Craddock?

General CRADDOCK. Senator, I do not presume or assume to know why he elected to do that. I would not want to make judgment or speculation. I do know that during the conduct of the Schmidt-Furlow investigation, he was interviewed twice. Once he made a sworn statement, and the second time he waived his Article 31 rights. I would say that beyond that, given the proceedings are ongoing, I would not want to pass judgment or make any more comments.

What I would also say, though, is it seems to me that once those proceedings have culminated and the transcripts are reviewed as to what was said or not said as the case may be, that I would want to look at the transcripts to determine if there is any linkage back to Schmidt-Furlow that may be identified as a knowing or substantive misrepresentation of the facts in the Schmidt-Furlow. If that linkage upon review of the transcripts is there, then I would take under consideration either a reopening of the Schmidt-Furlow investigation or a new investigation. But at this point I do not feel I could do that.

[The information referred to follows:]

DEPARTMENT OF DEFENSE
UNITED STATES SOUTHERN COMMAND
OFFICE OF THE COMMANDER
3511 NW 91ST AVENUE
MIAMI, FL 33172-1217

REPLY TO
ATTENTION OF

June 6, 2006

Commander

The Honorable John W. Warner
Chairman
U.S. Senate Committee on Armed Services
228 Senate Russell Office Building
Washington, DC 20510

Dear Mr. Chairman,

During my testimony before the Armed Services Committee on March 14, 2006, Senator McCain asked me about Major General Miller's invoking of his Article 31 right against self-incrimination in two ongoing court-martial cases involving Army dog handlers accused of abusing detainees in Iraq (Sergeant Michael J. Smith and Sergeant Santos A. Cardona). In response, I told Senator McCain that I would review the testimony in these cases to see what bearing, if any, the testimony had on the Schmidt-Furlow investigation. Having reviewed the witness testimony in the court-martial of Sergeant Smith, I found no information that would either indicate false statements had been made in the Schmidt-Furlow investigation by Major General Miller or warrant reopening the Schmidt-Furlow investigation.

Sergeant Cardona's court-martial recently concluded. As soon as the transcript is made available, I will perform a similar review and report back to the Armed Services Committee with my findings.

Sincerely,

v/r

John Craddock

Bantz J. Craddock
General, US Army
Commander

Senator MCCAIN. The problem that it creates, as you well know, General, is the impression, because—and I do not contest General Miller's right to assert his constitutional rights, but it certainly brings some suspicion, at least in some quarters, that these activities were not solely conducted by low level personnel, and I am sure you are appreciative of that aspect of this issue.

Finally, Admiral Keating, you said you have flown over 2,000 hours in support of border operations in unmanned aerial vehicles (UAVs). That is not very much. As my colleagues become better educated on the border and the problems that we face down there, a virtual wall is what we need, not just building a wall at the cost of billions of dollars. It seems—it not "seems"—I am convinced that UAVs can play a vital role, particularly in the trackless areas of our border, where it is both expensive and incredibly difficult to keep people under conditions of intense heat and other difficult environment.

I am very disappointed at the lack of UAVs. I am very disappointed that for years we have been saying that we need more UAVs and there has not been very much forthcoming. I do not often act—I try to avoid acting parochial when I address these issues. But the fact is over half of the people crossing our border, our southern border, illegally are crossing in Arizona. We have one UAV, one; count them, one.

There is a compelling argument that we need more of that and other technological means of detecting and apprehending people than we are getting today, and that failure to enforce our borders, for example using UAVs and other technological capabilities, has increased the frustration level, not only in Arizona but here in Congress.

I hope you can give me a better answer than I have been getting as far as how rapidly we can deploy UAVs, not just in the Arizona-Mexico border, but our entire border, including Texas and New Mexico and parts of California.

Admiral KEATING. Senator, it is the DOD's role, in support of the DHS, to provide those assets to the best of the DOD's ability to do so. Two thousand hours is not as many as 4,000, but it is more than we were doing 4 or 5 years ago. So not to get caught in how much flight time is enough or how many UAVs are enough, we are giving those assets to the best of the Department's ability in support of the DHS.

DHS is pursuing their own UAV fleet and so the principal Federal agency has an aggressive program under way on our own behalf to provide more airborne assets and those assets we can provide. Five soldiers per day for tunnel detection is not an insignificant number of forces over the course of a year. Five soldiers per day is what we are giving now.

So Joe Riojas has an aggressive charter. He is very anxious to provide the support that he can, and to the extent that the Department is able to use those assets that are not otherwise engaged in straight DOD operations we are going to do that.

Senator MCCAIN. Thank you. My frustration should probably be directed more at the DHS and I think you make a good point. But we find it very frustrating that we are unable to get existing technology in greater numbers and greater presence on our border as we see a steady increase in the number of people who are crossing our border illegally. I thank you.

Mr. Chairman, I thank you for your generosity with the time.

Chairman WARNER. Senator, the line of questioning that you had is directly bearing on what the Senate is going to face here in the next week or 2 and therefore this record will be important to the whole Senate.

I will ask my colleagues to just indulge the chairman a minute on this question of General Miller. I had intended in the next round to explore the important questions initiated by Senator McCain, but it is not clear to me from your response to Senator McCain whether or not, General, you have reviewed the Army Inspector General (IG) report. Now, we just received a copy of it yesterday. You have not?

General CRADDOCK. I have not, Senator.

Chairman WARNER. I think that you really should go back over this entire matter. Like Senator McCain—General Miller had a perfect right under the Constitution to exercise his withholding of testimony under article 32. But you testified before this committee about your own personal findings and therefore, if I may say with respect, your accountability is on record before this committee, and I want to ensure that you are fully satisfied in this case.

Eventually this committee will have General Miller seated in that chair. But we are going to be careful not to proceed until such time as the entire proceedings under the Uniform Code of Military Justice (UCMJ) with all defendants are completed, so as not to jeopardize the cases.

I thank the committee.

General CRADDOCK. Thank you, Mr. Chairman.

Chairman WARNER. Senator Akaka.

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

I want to add my welcome to our panelists, Admiral Keating and General Craddock. I also want to express my pride and thanks to all the men and women that are under your command and in the areas that they are in. Their working really makes our people feel safer in our great country.

I wanted to in a sense change the subject. You mentioned, Admiral Keating, that you set to take care of disasters that are manmade and also natural. I am thinking of something that may be important, an important problem.

As I am sure you know, the State of Hawaii is at the front lines for the Asian flu. As the flu continues to spread, health officials are paying particular attention to Hawaii. We know that we should not be directing our major attention to health. There are other parts to that that are important. According to some experts, the Nation's gateway to Asia—as that, Hawaii is the most likely site for an initial outbreak on American soil.

My question to you is what plans has NORTHCOM made to protect and assist the citizens of Hawaii and our country in an outbreak of Asian flu?

Admiral KEATING. Senator, we have a plan on the shelf. We briefed the Secretary of Defense. It is a concept plan. It is not yet a functional plan. We are refining the various moving parts of it, if you will. But the concept plan encompasses all of those activities that we can foresee that might involve the DOD in support of the lead Federal agency, Health and Human Services (HHS).

We have worked closely with Admiral Fallon and his staff in the formulation of our plan. They have a copy of our plan and we are going now to tabletop exercises across the interagency to address the specific issues, including quarantine, DOD medical response, distribution of medicine in the case sufficient human-to-human transmission is sustained. We are working very closely. We have a full-time officer from the Pacific Command (PACOM) staff in our headquarters, and I am satisfied that PACOM has all the information that we have at our headquarters as well, sir.

Senator AKAKA. That has been a concern. I am glad to hear from you that you have been working with PACOM on this, and it is not only Hawaii; it is parts of the Pacific as well that are concerned here.

Admiral, as the recent controversy over the Dubai Ports deal continues, we also are concerned about adequate port and maritime security and worry about the national security priority as well. What is NORTHCOM doing to improve maritime security and what more needs to be done to increase our capabilities in the future?

Admiral KEATING. In the past year, Senator, the Secretary of Defense has approved our maritime concept of operations for maritime security. The principal underlying notion here is that we do this as far from our shores as possible. So that is, we rely on information and intelligence exchange with our allies and combatant commanders around the world so as to build an integrated system of systems to determine what is in the container, what is the ship on which the container will ride, and what crew is manning the ship that carries the container.

There is the Container Security Initiative. Over 40 countries have now signed up and in so signing they place their stamp of approval, if you will, their guarantee, that the container has been secure for 24 hours prior to its being loaded on the ship. The country verifies the accuracy of the cargo manifest for each container, and they also verify the accuracy of the manifest of the crew that is manning the ship.

So there are 40 countries, including for example the People's Republic of China. We work very closely with the DHS, Customs and Border Protection, United States Coast Guard, and we are making tremendous progress with our commercial partners to make sure that the seaways remain a safe and secure manner for moving the 90 percent of the world's trade that travels by sea.

Senator AKAKA. I am glad to hear that. I am sure PACOM is of course working on this, as Hawaii's ports are important to our country and to Hawaii.

Admiral KEATING. Yes, sir. Everything we do is seamless between NORTHCOM and PACOM, and again we share everything we have, the information and intelligence we have, continuously with the PACOM operations center.

Senator AKAKA. Admiral, I understand that one of the strengths of NORTHCOM is its ability to pull forces and capabilities from across the DOD. I have some concerns about how many forces would be immediately available in the event of an emergency. Given the large number of units required to sustain the current operations tempo outside of NORTHCOM, what is the force availability for NORTHCOM?

Also, what is being done to ensure that there will be an adequate number of forces available in case of a natural disaster or some other form of national emergency?

Admiral KEATING. In every exercise we have conducted so far and in every real world operation, most notably Katrina, there has not been one example where we went to Joint Forces Command or the Services requesting a certain capability and the attendant force structure that would have to fulfill that capability where the DOD has not been able to satisfy our request.

In Katrina, it ended up being almost 23,000 Active-Duty soldiers, sailors, airmen, and marines working in concert with nearly 50,000 National Guardsmen and Air Guardsmen. So that is a force of 75,000 some folks responding to a fairly localized and extended re-

sponse requirement. There are still 250 National Guardsmen in title 32 status who are in Louisiana helping the citizens of principally New Orleans get back in business, if you will.

So there has been no case where I was not able to get the forces that I requested. We work very carefully day-to-day, hour-to-hour, with Joint Forces Command and the Services to make sure we can monitor readiness. We are able to monitor very carefully and specifically the readiness of specific units we might require as we are analyzing the threat situation and the current civil support situation in the United States.

So I am satisfied, before you today, that we have the visibility into the readiness, we have the capability to reach the forces, and they will respond very quickly when we need them.

Senator AKAKA. Thank you for your response.

My time has expired, Mr. Chairman.

Senator INHOFE [presiding]. Thank you, Senator Akaka.

General Craddock, there is no group that I think that we should be more concerned with than Hugo Chavez and all of his anti-American rhetoric and the deals he is making with China and with Argentina on some of the civilian use nuclear technology and all his anti-American rhetoric. Is there anything further you would like to share with us, either ideas of your own or the current policy with Venezuela, during the course of this hearing?

General CRADDOCK. Senator, again I think we are in agreement with regard to this concern and what we believe to be a very destabilizing influence. A couple of facts. The fact is that Venezuela has enormous petrodollars available and those dollars are available for either use in Venezuela or for use throughout the region. It appears that, based on what we see today and what we understand, more of those dollars are going throughout the region than they are being invested in that country, Venezuela, that has been a longstanding over many, many years great partner of the United States, great people.

We see some infrastructure problems. We see poverty still far above levels. With the wealth in that country this should not be acceptable.

What we see throughout the region is an unsettling influence with regard to the political process. I read somewhere recently that the fundamental principle of a democracy is the freedom of the people to hire and fire their government. What we are seeing more and more is the spread of a system where checks and balances, and the separation of powers, starts to dissolve. It starts to deconstruct, and the ability to fire your government is lost.

Senator INHOFE. A lot of us at this table—not a lot of us. Maybe I am the only one that disagreed with a lot of the Guantanamo, some of the torture aspects that have been addressed by this committee. But I am concerned recently that I have seen that a lot of those who have been released from Guantanamo have reappeared. Are you monitoring these people or do you have any idea what their recidivism rate would be? Or are these just a few isolated cases?

General CRADDOCK. We do not know. What we do know are the numbers—and they are hard to track. We have two categories, transfer with conditions and release. Most we transfer with condi-

tions. Now, unfortunately, there are no guarantees in life, and it is hard to make some of these things stay in enforcement once they are back in their country of origin.

The number I have been using is 12 to 15 individuals who have been transferred with conditions or released have shown up again on the battlefield and have either been recaptured or killed.

Senator INHOFE. Do you wonder how many others there are out there that we do not know about?

General CRADDOCK. Exactly, we do not know.

Senator INHOFE. Should we maybe readdress this policy that we currently have if it is that many? It seems like quite a few.

General CRADDOCK. That is out of about, what we know, 265 or so have been transferred with conditions or released and we know about 15 or so. There may well be others that we do not know about. Indeed, it is of concern and I think that as we go through the process for working, the State Department works the modalities with these nations, that that must be taken into consideration and there must be agreements for transfer that have some force behind them.

Senator INHOFE. Admiral Keating, for so many years now I have been concerned about our ability to do something with a missile coming in. I know that in your written statement you mention that your command is ready to exercise operational control of the ground-based midcourse defense system as well as the terminal defense missile system. Very briefly, I would like to have you maybe elaborate, give us a comfort level. I do not have a lot of faith in our intelligence. I am the one that back on August 24, 1998, wrote a letter trying to determine as best our intelligence could tell us at that time how long it would be before the North Koreans would have have a multiple stage rocket that could reach the United States. They said between 5 and 10 years, and 7 days later, on August 31, 1998, one was released.

So in terms of what that threat is now in an open session and our ability, is there any comment, any more assurance you can give us other than what was in your written report?

Admiral KEATING. Yes, sir, I will try, Senator. There are missiles in the ground, about nine or so, up at Fort Greeley, the ground-based interceptors, in the ground at Fort Greeley and two down at Vandenberg. We of the NORTHCOM, if current policy is what is eventually signed by the President, will be the folks who will be authorized to launch those missiles against incoming threats.

So we are training aggressively and actively with the Missile Defense Agency (MDA) and civilian contractors to make sure that we are ready to execute the operation when the President gives us the authority to do so. I report to the Secretary of Defense that we are trained, we are ready. We have crews at Greeley, at Shriever Air Force Base, at Peterson. I am involved personally in exercises on about a weekly basis, no notice simulations, where I would be apprised of a threat launch, the track of the incoming missile, and how many ground-based interceptors I would launch to counter that threat.

So we are trained and we are ready to execute when the President so dictates. As far as tippers from whatever country might launch them, as you probably know in open source reporting, North

Korea launched three very short-range surface-to-surface missiles about a week ago. In this session, I think I am okay to say we are aware of their plans to launch and we were aware in very short notice or short order after those missiles actually did launch that they had in fact launched. So I am more satisfied than I was 5 years ago that we have the systems in place to monitor countries who might intend to launch against us.

Senator INHOFE. Good. That is very reassuring.

One last thing, General Craddock. You mentioned the—I guess you were talking about our IMET program, that we are not able to get a lot of these people in training from South American countries. Is that mostly because of the obstacle imposed by article 98?

General CRADDOCK. Exactly.

Senator INHOFE. We are suffering this—we have the same problem in several countries in Africa. I keep running into that. They are our allies and yet they are unwilling to be able to enter into that kind of an article.

General CRADDOCK. Yes, sir. I think there are roughly 30 countries around the world now under article 98 sanction, if you will. I know 11 are in my region, several in Africa.

Senator INHOFE. Let me tell you, Mr. Chairman, it did not go unnoticed that when they are unable to do it with us the Chinese are standing by. I cannot think of anything that is worse than having those people go over there and get indoctrinated by them. I think maybe we should address that because that is a very serious thing.

How prevalent is that in terms of the Chinese bringing them in for training?

General CRADDOCK. Widespread and growing every day. We see more and more that military commanders, officers, noncommissioned officers are going to China for education and training. We see more and more Chinese nonlethal equipment showing up in the region, more representation, more Chinese military. So it is a growing phenomenon.

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

Chairman WARNER [presiding]. Thank you, Senator. As you heard in the colloquy with Senator Levin and myself, we are going to pursue this, and I hope that you will join us in representations to our administration.

Senator Clinton.

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

I want to agree completely with Senator Inhofe's last comments. Many years ago when I was in college, I wrote a paper about the competition between the then-Soviet Union and the Chinese for military and economic influence in Africa and Latin America. This is like deja vu all over again, and I think we are neglecting our neighbors to the south in a way that is going to be very difficult to repair unless we begin moving immediately.

It is not only the long-term contracts that are being entered into for natural resources. It is the building of relationships. It is the funding of a number of projects, everything from soccer fields to resort hotels. I think this is one of the most serious problems we face and we are not addressing it in any comprehensive way. We need, perhaps on this committee, to not only sound the alarm, but try to demand or suggest a much more comprehensive approach, starting

with the undoing of the IMET restrictions, because I think that that has sent exactly the wrong signal and it has provided a big opening.

I was encouraged when Secretary Rice seemed to at least signal some willingness to reconsider it when she was recently in Bolivia. But I hope that is on a fast track, because every day we do not, more and more people take off for wherever the Chinese facilities and training are to develop those relationships. The same thing is happening in Africa. When you have a terrible dictator like Mugabe in Zimbabwe telling little children in Zimbabwe they should learn Chinese because those are the new best friends, this is a serious threat. So I appreciate Senator Inhofe zeroing in on it.

There are so many issues to discuss with the two of you and of course this is the most frustrating of forums because our time and yours is so limited, and a lot of ground has already been covered that I will not replow. But I just want, Admiral Keating, to be sure that I understand two points that were made before I came, and I apologize for being late.

Is it your testimony that, with the work that is now going on to try to enhance coordination between DOD and Guard and Reserve troops in the event of natural or manmade disasters, that there are no suggested changes in posse comitatus?

Admiral KEATING. Yes, ma'am, that is our position.

Senator CLINTON. It would be very helpful, if that is going to be the position of the Department, to play out for us at some point, not now, some of the situations that I know we can run into. I have some personal experience with this and then some observations. The disconnect between local law enforcement and policing functions, especially in the middle of a crisis or a disaster, is sometimes so great as to undermine the effectiveness of the military role.

So I would like additional information if I could.

Admiral KEATING. Yes, ma'am.

[The information referred to follows:]

As DOD operations in response to Hurricane Katrina demonstrated, title 10 and title 32 forces can work together to achieve unity of effort while in strict compliance with the Posse Comitatus Act. Specific real-world scenarios follow:

- National Guard (title 32/State Active-Duty) can provide security for Active-Duty Forces (title 10).
    - Title 10 forces provide trucks and drivers to transport fuel, food, and medical supplies to stranded motorists and hospitals. Title 32 forces provide security for the trucks in the form of armed soldiers and escort vehicles (title 10 forces always have the inherent right of self-defense).
    - While title 10 mortuary affairs teams collect bodies, title 32 forces provide security for the teams and the civilian staging area.
- Title 10 forces can perform search and rescue operations requiring them to go house to house looking for injured people, with or without National Guard Forces. Title 10 forces may not enter a building without the consent of the building owner/occupant except when there are visible or audible signs indicating a person is in distress and/or there is a request for assistance. However, if they are accompanying National Guard Forces with law enforcement authority, the National Guard Forces may have the authority to conduct nonconsensual entries.

Senator CLINTON. I can go into more detail later about some of my concerns, but I am not against the position that we do not change posse comitatus. I think there are very good reasons for it. But I would like more information about how we are going to work

with it, how it will in the real world function effectively when disaster has struck.

General CRADDOCK. Can I offer an example, Senator, perhaps?

Senator CLINTON. Please.

Admiral KEATING. In the case of Katrina, on the Friday following the storm coming ashore, General Blum reported that there were between 4,000 and 4,500 National Guardsmen who were trained in security. They were highway patrolmen or sheriffs at home. They came forward. In their State Active-Duty or title 32 status, they have civilian law enforcement powers.

So Steve Blum moved those folks forward and we brought in the 82nd Airborne, First Cav, elements of the 82nd First Cav, and 11–24 MEU. Rather than put Active-Duty soldiers in the situation of finding themselves perhaps in an untenable situation, through coordination, we put National Guardsmen and those local law enforcement officials that were still available and Active-Duty title 10 forces in the same patrols and allowed them to communicate back to the headquarters that the mayor and the governor and the adjutant general had set up after the hurricane.

So by coordinating in advance and combining the assets from the Guard and Active-Duty Forces, we were able to instill a certain sense of security by the mere presence of uniformed forces, and within each of these patrols were folks who did have law enforcement capability.

Senator CLINTON. So they were essentially double-hatted, in effect, the ones who were in the Guard?

Admiral KEATING. Yes, ma'am.

Senator CLINTON. If they were like a police officer also in the Guard, they performed both functions in the patrol?

Admiral KEATING. They were empowered to perform law enforcement. They had the authority to perform law enforcement actions that were most assuredly not in the Active-Duty Forces. But it was a uniform, next to a uniform, next to a uniform, and the folks of New Orleans or wherever throughout the affected area simply saw uniformed forces coming, and within these patrols were embedded law enforcement authorities.

It worked out just fine.

Chairman WARNER. If I might interject on my time, because I have spent a lot of attention to this subject and it concerns me. They were all wearing basically the same uniform, were they not?

Admiral KEATING. They were, sir.

Chairman WARNER. So if an incident occurred, only the title 32 Guard are authorized to go up and perform law enforcement functions, and the 82nd Airborne or whatever title 10 forces simply have to step back. That could be very confusing to the locals. The title 10 people can only utilize force under those situations when they are protecting themselves, not citizens over there who need the protection of some law enforcement help.

Admiral KEATING. Mr. Chairman, for title 10 forces, to a large extent I think you are exactly correct, and there is the inherent right of self-defense. But title 10 forces, if they are in a situation where there is clear urgent need to respond to protect the lives of American citizens, they have the authority to take very limited and commensurate action to save lives and mitigate human suffering.

Chairman WARNER. And perform police functions?

Admiral KEATING. In extreme cases, yes, sir.

Chairman WARNER. Where is the definition of what is extreme, because I think this is a new——

Admiral KEATING. It is not clearly defined, sir.

Chairman WARNER. Senator, I join you. We are going to get this straightened out. I have repeatedly written to the Secretary of Defense urging that you have a review of this and as yet have not gotten back, I do not believe, all the responses we had hoped to receive, that they were thoroughly reviewed.

If that is going to be the policy of the country and posse comitatus has been the law since the late 1800s, so be it. But in these situations you cannot predict all the scenarios. To have the uniformed personnel of the United States military, the title 10, the 82nd, whatever it is, unable to move in and help the citizens fend off criminals to me is an awkward situation.

Anyway, please continue and you have your full time.

Senator CLINTON. Thank you, Mr. Chairman.

It is a very awkward situation and there are so many hypothetical and real incidents that we can look to, so I hope we can explore that further.

I think, Admiral Keating, you said that you are aware of the DHS working on a UAV project. Could you tell me a little more about that?

Admiral KEATING. I will tell you what I know, Senator, is that before 2005 the DHS had no assets of their own. They had no UAVs, whether Predator down to small hand-helds. I am happy, for the record, to give you what DHS currently has. It is my understanding they have purchased one Predator or at least leased one Predator and are in the process of obtaining several smaller and, if you will, less expensive unmanned aerial systems, is the term I am told we are supposed to use now. So DHS is aggressively pursuing increased capability in unmanned systems, and I will be delighted to send you what DHS has and what they are expecting to have in the next year or 2.

Senator CLINTON. I would very much like to have that information.

[The information referred to follows:]

According to the Department of Homeland Security (DHS), U.S. Customs and Border Protection (CBP) currently owns and operates one Predator B Unmanned Aerial System (UAS). It operates from Libby Army Airfield on Fort Huachuca, Arizona. The Predator B works with the U.S. Border Patrol and other CBP ground and air units in support of the CBP mission along the Arizona/New Mexico land border with Mexico. A second Predator B UAS will be delivered to CBP in the summer of 2006. This second UAS will also be operated from Fort Huachuca to sustain operational tempo along this section of the southwest border.

The President's fiscal year 2007 budget request includes funding for a third UAS. The operational location of this asset will be dependant on the requirements of DHS, CBP, and the Security Border Initiative.

Senator CLINTON. Again, I just worry that we have so many different agencies of the government that are competing, in a sense, for assets and technology, and I do not know that that is the smartest, most cost effective way to proceed. So I would very much appreciate some additional information.

If I could, Mr. Chairman, I have so many questions, but let me ask one last question.

Chairman WARNER. Why do you not take your time. We are all right. Senator Collins, you will indulge our colleague?

Senator COLLINS. That is all right.

Senator CLINTON. Thank you. I do not want to take Senator Collins' time. She is a very busy person, chairing an important committee.

We did have a lot of political reaction to the story about Dubai Port (DP)-World Ports and I think that much of it, at least from my perspective, arose because of our feelings that we are not yet as secure as we should be. I know Senator Collins' committee is working on this.

But Admiral Keating, what is your responsibility so that, for example, on March 11 when the Associated Press reported a 3-year, $75 million DHS study that found cargo containers can be opened secretly during shipments to add or remove items without alerting U.S. authorities, that there have been serious lapses by privacy companies at foreign and American ports and aboard ships and on trucks and trains that would enable unmanifested materials or weapons of mass destruction (WMD) to be introduced in the supply chain?

Number one, are you familiar with this DHS study? Number two, is NORTHCOM working with DHS and the Coast Guard and the other agencies to try to address these findings?

Admiral KEATING. Yes, ma'am. We are aware of the report, I have been fortunate to have command for a year and a half, and the domain in which we are spending more of our time pre-Katrina, I will say, is the maritime domain. We have a Coast Guard one-star at our headquarters. DHS has a flag officer and now a Senior Executive Service (SES) to be their senior representative at our headquarters, and we are reciprocating in kind.

We have direct access second by second to the very significant database that is maintained and shared between the DOD and the DHS out here in Suitland, Maryland, at the Office of Naval Intelligence. Folks contributing to that database are not just military. They are all-source, from very sophisticated, highly classified systems down to the manifests that are vouchsafed by the individual countries that I described, the Container Security Initiative cosignees.

So it is an extensive, comprehensive, system of systems that assures me that, while there are cases to be sure as mentioned in the security report where the possibility exists for tampering with cargo or containers, the likelihood of that tampering being undetected, while not zero, is smaller than most folks would believe, I am assured that because of the ongoing, increasingly effective efforts and this large coalition of commercial, military, diplomatic, and coalition partners, that our security is much better than folks might be led to believe in open source reporting.

Senator CLINTON. Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much, Senator.

Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman.

I want to follow up on the question raised by my colleague from New York. Admiral, I think we have a long ways to go on port security. The Government Accountability Office (GAO) last fall did a study of the container security initiative and the Customs Trade Partnership Against Terrorism (CT–PAT) program, which are the two major initiatives that we have to secure our ports, and found egregious deficiencies in the way that they were being implemented. I think the programs are very good ones, but they have not been sufficiently funded and they have been unevenly implemented, to the point where GAO found that 17.5 percent of the high-risk cargo that had been identified as needing scrutiny was given further scrutiny, only 17.5 percent. The rest of that high-risk cargo was loaded on ships bound for America. So I think we have a lot of work to do in that area.

I want to switch to Hurricane Katrina and the role of NORTHCOM, an issue which you and I have discussed many times, and you did testify in February before the Senate Committee on Homeland Security and Government Affairs. You mentioned in your testimony today that NORTHCOM is responsible for homeland defense, sustaining situational awareness 24–7. But one of the lessons that we learned from our investigation is that situational awareness for NORTHCOM was not very good in the case of Hurricane Katrina. I think the best evidence of that is the fact that an official of the DHS reported back to Washington, to headquarters, at 11 o'clock on Monday morning August 29 that there had been breach in the levees, but that information did not reach NORTHCOM until Tuesday, until 24 hours later. Is that a correct rendition of what happened?

Admiral KEATING. Senator, I do not remember the specific time, but generally speaking you are correct. I think I went to bed, if you will, Monday night unaware of a significant levee issue, to the best of my ability to recall.

Senator COLLINS. Of course, that was a major reason that the catastrophe was so devastating in New Orleans. So we have learned from that situation that situational awareness was not as good as it should be, not only at NORTHCOM but in several other agencies and departments.

What are you doing specifically to improve situational awareness in the case of natural disasters?

Admiral KEATING. One, we are meeting with the folks with whom we are going to have to coordinate and communicate, as I described.

Two, we are exercising in as aggressive a fashion as we can with the very self-same folks who would be required to respond, not just in the hurricane States, but in Ardent Sentry. For example, we have folks in Maine and in Senator Levin's State and in Senator McCain's State, as it happens, who are going to be engaged in the exercise.

Three, we are conducting these weekly videoteleconferences, chaired by FEMA, not by NORTHCOM, that have a broad interagency representation. We are going through in a very methodical fashion the Katrina lessons learned and we are addressing those communications challenges and developing a common operational

picture, or what other folks are calling your user-defined operational picture.

We have the databases in our headquarters and in the DHS's operations center where information flows from all agencies who are involved in the situation, and we now have improved simple bandwidth access to and from those operations centers so that more folks can avail themselves of the information in a real-time or near-real time fashion in the event of an emergency.

Senator COLLINS. One of the recommendations that the Senate Committee on Homeland Security and Government Affairs is looking at is having regionally based task forces that would train across the Federal Government and with State and local officials. NORTHCOM and the whole defense coordinating official potentially is a very important player. Do you think that kind of regional approach would help to improve preparedness and response?

Admiral KEATING. I do, yes, ma'am, and we are pursuing that program.

Senator COLLINS. Admiral, another problem that became evident during the government's response to Hurricane Katrina was the limited visibility that NORTHCOM had over the movements of the National Guard troops into the Gulf region the week after landfall, and also identifying the capabilities of those National Guard troops. Again, we talked about this at the hearing before the Senate Committee on Homeland Security and Government Affairs.

During the Katrina response, key decisions about the movement of military units, which Secretary McHale has described as the largest deployment of troops within the United States since the Civil War, were not made by NORTHCOM. Instead they were made by the National Guard Bureau, working with the State adjutants general.

What should be the role of NORTHCOM in coordinating the kind of large-scale troop deployment of the type we saw in Katrina? I think this is an issue that we really need to sort out, to be more efficient, and to have better integration of the capabilities of National Guard troops versus Active-Duty troops.

Admiral KEATING. Yes, ma'am. It is an issue on which we have spent a significant amount of time during Katrina and post-Katrina: Who will be in charge of the forces responding to a natural or manmade disaster? On the lower end of the spectrum—and you get into a relative measure here, to be sure. But on the lower end it is clear in NORTHCOM and I think in the DOD that first responders, whether they be National Guard or local or State law enforcement agencies, sheriff's department, fire department, are appropriately positioned and are familiar with the situation and have sufficient resources to act as the overall commander, if you will, for the disaster response, for the, I will say, lower end.

Then there comes a point where, at about the Katrina level, where you have significant forces coming from the National Guard under the Emergency Management Assistance Compact (EMAC) and forces flowing by direction of the President and the Secretary of Defense in a title 10 status. About two-to-one is what we had in Katrina, and there were considerations being made for command and control of all of those forces, and the President decided that he would allow the adjutants general and the governors to retain con-

trol of the National Guard and the title 10 forces would remain under the control of NORTHCOM through the offices of Lieutenant General Honoree as task force commander.

So that in my view defines about the area, the range below which the Guard and State and local responders are perfectly capable and should command. From Katrina on up to, let us say, three chem-bio events throughout the country or the international incidents where national security may be jeopardized or the magnitude of the disaster is so comprehensive that State and local responders are simply overwhelmed, then the DOD should be ready to and capable of assuming command or at least having a major effort in coordinating and communicating with whatever responders are able to muster under the aegis of EMAC following the disaster.

So there is a spectrum of consequence management: Katrina and lower, title 32 or National Guard Forces and State and local responders in control; Katrina as perhaps the dividing point higher, the DOD should be ready to, and only at the decision of the President of the United States, actually execute command and control of the consequence management.

Senator COLLINS. Thank you.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much, Chairman Collins.

Senator Levin and I will have brief wrap-up questions and I will proceed.

Chairman Collins made reference to the maritime issues. As I understand it, you are examining the necessity of a maritime strategy, perhaps even an organization to protect the maritime approaches to the United States, somewhat like NORAD has done with the air space through the years. Am I correct in that assumption?

Admiral KEATING. The President signed out a directive, and I wrote it down. It is the Maritime Security Policy Coordination Committee. So it is an international committee examining maritime security policy. NORTHCOM is a relatively small player here, but we have an active role working with the DOD and the DHS.

There are many other agencies involved: Commerce, Justice, Transportation, State. So it is a big creature, if you will.

I do not know that we are necessarily advocating creation of an agency similar or an organization similar to NORAD. I would recommend to you that by working with the system and the agencies and improving the flow and sharing of information, I currently have sufficient authorities under the new plan signed by the Secretary of Defense, to ensure between the United States Coast Guard, Department of Transportation, Department of Homeland Security, Customs and Border Protection, the United States Navy, and the United States Marine Corps, we have sufficient forces to move on very short advance warning if we get it or no warning to put forces where they need to be to enhance our national security in the maritime domain.

Chairman WARNER. That helps with some clarification of that. But it sounds like there are so many players. Who is the boss?

Admiral KEATING. DHS.

Chairman WARNER. So they will be the command, is that it?

Admiral KEATING. If it is inside the 12 nautical mile limit, as you are well familiar. If it is beyond that——

Chairman WARNER. Go slowly. Let us get this straight. If it is inside the 4-mile limit——

Admiral KEATING. 12 nautical miles.

Chairman WARNER. 12 miles.

Admiral KEATING. Coast Guard, through the DHS, would be the lead Federal agency.

Chairman WARNER. Lead Federal agency.

Admiral KEATING. Yes, sir.

Chairman WARNER. Beyond that, you?

Admiral KEATING. United States Navy, DOD.

Chairman WARNER. Now, of course if a hostile vessel or platform were proceeding, it will quickly transit to 12 and get into the 4.

Admiral KEATING. We do it all the time, Mr. Chairman. I am comfortable with that.

Chairman WARNER. I just want the assurance that our ports are to be protected with some overall plan. Do you give that assurance?

Admiral KEATING. I do, sir.

Chairman WARNER. It is a workable plan in your judgment?

Admiral KEATING. It is exercised frequently and it works.

Chairman WARNER. Fine. Now, are Canada and Mexico participants in that?

Admiral KEATING. Yes, sir. The short answer is yes, sir, they are.

[Additional information provided for the record follows:]

Testimony did not reference the Maritime Operational Threat Response (MOTR) Plan, which became effective in October 2005. This plan sets forth the roles and responsibilities of lead and supporting agencies with respect to planning, preparation, and response operations against maritime threats.

Maritime response is coordinated under the MOTR Plan which became effective in October 2005. Under the plan, the Department of Defense (DOD) is the lead agency for tactical response to threats from nation states operating in the maritime domain whether inside or outside the 12 nautical mile limit of the territorial seas. Based on its forward-deployed resources and global reach, DOD is also the lead agency for maritime terrorist threats that occur in the forward maritime areas of responsibility.

The Department of Homeland Security is the lead agency for law enforcement interdiction of maritime threats in waters subject to U.S. jurisdiction and maritime approaches and offshore waters of the Atlantic and Pacific Oceans, as well as the Caribbean Sea.

The Department of Justice (DOJ), through the Federal Bureau of Investigations (FBI), is the lead agency for investigations of terrorist acts or terrorist threats by individuals or groups inside the United States, or directed at U.S. citizens or institutions abroad. Accordingly, DOJ, through the FBI, is responsible for coordinating the activities of other members of the law enforcement community to detect, prevent, preempt, and disrupt terrorist attacks against the United States.

The MOTR identifies supporting roles for the Department of State, the Department of Energy, the Department of Transportation, the National Counterterrorism Center, and others. Regardless of which agency is predesignated as the lead, each has a responsibility to provide accurate and timely information to all involved agencies to support a fully-informed decision.

The MOTR takes advantage of complementary authorities, capabilities, and capacities of all Federal agencies that have an interest in protecting our homeland from maritime threats. Interagency consultation, notification, and assessment are vital to ensure a coordinated response to threats against the United States and its interests in the maritime domain.

Chairman WARNER. All right. Shifting to you, General Craddock, a recent United Nations report calls for the closure of Guantanamo Bay detention center, now located of course in Cuba. The Arch-

bishop of Canterbury recently said the United States' disregard of international law sends the wrong message. Would you like to comment on these reports and calls for the closing? Establish for us this morning your professional judgment, which I think that judgment reflects the judgment of the Secretary of Defense and the President, that Guantanamo remains a necessary facility in the war on terrorism for our country? So if you would cover that I would appreciate it very much.

General CRADDOCK. Thank you, Mr. Chairman. With regard to the report from the United Nations rapporteurs, the fact of the matter is they have not been there. They are using second- and third-hand information gained from attorneys for detainees, based upon information detainees have told them. So my judgment of that report is that it is completely erroneous. It does not reflect the reality of the situation.

I think one should look at the recent visit by the representative from the Organization for Support and Cooperation in Europe (OSCE). She took a team down recently and visited, she did everything that was offered to the U.N. rapporteurs. The preliminary reports from folks who were with her on the delegation were very positive. One gentleman said that what he saw was better than anything, any prison he saw in Belgium.

So I think that we have to take stock of the credibility of the allegations. It is one thing to have first-hand knowledge, to be there and see it. Now, it is general practice, other than the International Committee of the Red Cross, that visitors do not have access to detainees, for good reason, good order, discipline, and other maintenance and operations of the camp.

So with regard to that U.N. report, I just deplore the fact that those types of reports gain credibility in the public eye.

Chairman WARNER. That is just the world in which we live, and they have a voice. But I want you to clearly say that this policy has been reviewed from the President on down by our government and that detention facility is judged to be needed and essential to the many uncertainties that face this Nation in the war on terrorism.

General CRADDOCK. Mr. Chairman, that was the second part, the necessity for that facility. The fact is that we have some dangerous people down there. They routinely will tell the guards, the people who work at the camp, given the opportunity they will inflict harm on anyone they have the chance to do that.

Just for the record, from 1 September through 1 March——

Chairman WARNER. Of what years, now?

General CRADDOCK. 1 September 2005 to 1 March of 2006, about 6 months; there were 189 assaults by hunger strikers against either medical personnel or their guards. So this is not a benign environment.

We know that there are some number of detainees who, if released, as we talked earlier from Senator Inhofe's question, will come back to fight against the coalition forces in the global war against terror. We know that there are some who still retain information and intelligence value. Now, we know there are some that should be returned to their countries. They have already been iden-

tified through the administrative review board. We are waiting for the modalities to be in place to do that.

I think it was a State Department official who said, we probably do not want to do this 1 day longer than we have to. I would tend to agree with that. The question is when is that date, and I do not see it in the near future.

Chairman WARNER. So from that, I think the record should reflect unequivocally it is the policy of this administration, and one which I personally support, that we should maintain this facility for the indefinite future, given the uncertainties in the war on terrorism?

General CRADDOCK. Sir, that would be my judgment. I cannot speak for the administration policy, but I would agree with that, Mr. Chairman.

Chairman WARNER. I thank you very much.

At this time, Senator Levin, I am going to ask you if you would chair the hearing with our colleague, Senator Bayh. You and I have a meeting with General Abizaid at 11:30.

Senator LEVIN. [presiding]. So we will try to join you there in 10 minutes.

Senator Bayh.

Senator BAYH. I will be mercifully brief, gentlemen. Thank you for your service to our country, gentlemen. I just had three quick——

Chairman WARNER. Excuse me. I just want to thank our witnesses. It is a personal pleasure and indeed I am greatly impressed with the performance that each of you are doing in these important responsibilities. Thank you once again for your contribution and those of the men and women of the Armed Forces and the very significant civilian force that is associated in the responsibilities of your respective commands. I wish you both luck.

Thank you.

Admiral KEATING. Thank you, Mr. Chairman.

Senator BAYH. Thank you, gentlemen, for your service and for your presence here today. I apologize for being a little tardy. I hope that my questions are not redundant. If they are, please feel free to tell me so.

I am interested first in the topic of the missile defense system that we are developing. Based upon the data that we have developed so far, what would—how would you characterize the efficacy of the system in terms of percentages of possibility. If there is a single missile launched against the West Coast of the United States, what would the chances of taking that down be?

Admiral KEATING. Senator, I think that the classification of this hearing precludes a numerical answer.

We will get you the P-sub-K, the probability of kill, of single-shot and multiple-shot missiles. But I would characterize our capability as robust and significant and very healthy.

We exercise to it frequently. You probably know, there are nine missiles in the ground at Greeley and two at Vandenberg. Those systems are exercised on a near-daily basis. When the President declares limited defensive operational capability, we are prepared as the shooter to execute the mission to defend our country, and

I am very confident in the efficacy of that system. We will get you the numerical value, sir.

[The information referred to follows:]

[Deleted.]

Senator BAYH. Thank you, Admiral. I appreciate that.

Would you anticipate that the system would become more robust moving forward, whatever the numerical figure would be, that that would increase and improve with the passage of time?

Admiral KEATING. I am confident, Senator, the program that the MDA has and is executing and is funded will improve, will make even better, those shot probabilities.

Senator BAYH. This takes into account possible countermeasures by any country launching it?

Admiral KEATING. It does, sir.

Senator BAYH. Very good. Thank you.

What about the time line for it being fully operational, fully deployed? Is that something we can discuss in this forum?

Admiral KEATING. I do not think so, Senator. We at NORTHCOM, we are ready today.

Senator BAYH. Very good. I have come with all kinds of easy questions to answer.

The final two questions I would like to explore deal with SOUTHCOM. How would you assess the state of the Revolutionary Armed Forces of Colombia (FARC) insurgency in Colombia and our efforts to help combat that? Are we making progress? Is it sort of stable? How would you characterize that?

General CRADDOCK. Senator, I would characterize it as steady progress. The operative capability of the FARC has been diminished considerably over the past several years. Now, the fact is that they have changed their tactics. They do not stand and fight the Colombian military. They are now into small unit terrorist tactics throughout the countryside. They realize that they cannot measure up to the main line forces fighting in the Joint Task Force Omega area.

Because it is an election period, they are looking to conduct terrorist attacks, to interdict roads and highways, to attack infrastructure, pipelines, electrical pylons, to convince the electorate that the country is still not secure. So these are known, expected, anticipated attacks throughout the country.

The Colombian military secured the polling places for the congressional elections on Sunday. Very minor disturbances, so it was very well done. That is an indication. There is another indication and that is the increase in the number of deserters from the FARC ranks. Just recently there was a report that 70, 7–0, had come in. Never before had a large unit done this. Normally it is individual desertions. So those are indicators and I think they are all very positive.

Senator BAYH. So the Colombian capability seems to be ramping up?

General CRADDOCK. Absolutely.

Senator BAYH. The FARC seems to be becoming somewhat discouraged.

General CRADDOCK. Also, concomitant with that is the fact that the paramilitaries, the United Self-Defense Forces of Colombia (AUC), are demobilizing. So the Colombian military has to be very careful to watch the vacuums that could be created. So, if the FARC tries to move in security forces, government forces have to be there first. The National Liberation Army, the smaller insurgent group, is at the negotiating table now. So there are, I think, some positive signs that there may be some demobilization of that group also. That would leave the FARC. If they marshall their resources against a smaller group, there will be much more success faster.

Senator BAYH. My final question has to do with Venezuela and what role they might be playing, not only in Colombia but throughout the region. How would you assess their activities and any destabilization that results from those activities?

General CRADDOCK. I think there is a destabilizing effect throughout the region. I think it is the export of what we now come to know, rightly or wrongly, as radical populism. With immature and unstable democracies, it is a troubling aspect. Left to their own designs, it is hard enough internally to maintain the checks and balances and the separation of powers and ensure that elections are all done as fairly as possible in that environment. With destabilizing external influences, with the contribution of influence in terms of funds and resources, it becomes even more difficult.

Senator BAYH. Are they playing a role with the Colombian insurgency? Again, I know we cannot discuss classified information here, but there have been some published reports in the past to the effect that Venezuela was not being helpful with regard to the Colombian situation.

General CRADDOCK. I think the fact that there has been an apprehension of some high-level FARC leaders in Venezuela is the first indication. The second indication is that we know it is a porous border and that we know there are FARC columns operating along that border. So that is probably about as far as I could go in this forum, Senator.

Senator BAYH. Gentlemen, thank you very much.

General CRADDOCK. Thank you.

Senator LEVIN. Thank you, Senator Bayh.

Admiral Keating, Senator Bayh asked you about the missile defense system. Is it true, however, that there has not been a single successful intercept test yet of that system?

Admiral KEATING. Senator, I do not mean to be coy, but I think the answer is "it depends." There have been successful tests of parts of the system, including Navy surface to air missiles, including tracking by very sophisticated radar systems. But to the best of my knowledge, we have yet to conduct a test incorporating all elements of the entire system, where an intercept was conducted successfully. I think that is on the books, I will say, soon.

Senator LEVIN. This year?

Admiral KEATING. Yes, sir.

Senator LEVIN. Let me ask General Craddock this question. It goes back to the Schmidt-Furlow investigation which Senator McCain asked you about, and I think Senator Warner asked you about as well. There have been probably dozens of documents that were released recently which were FBI documents, which had less

redactions than previously-disclosed documents. So that there is material now that is available that was not available, at least publicly. I do not know whether it is true whether it was available to Generals Schmidt and Furlow or not.

But the FBI has re-released, in effect, dozens of documents with less redactions. The material that is now available is significant material. I want to just give you a couple of examples of what is now observable to our eyes, which was not at the time of the Schmidt-Furlow report.

One of the documents that the FBI has now redacted less says that: "Members of the Defense Intelligence Agency were being encouraged at times to use aggressive interrogation tactics at Guantanamo which are of questionable effectiveness and subject to uncertain interpretation based on law and regulation. The continued use of these techniques has the potential of negatively impacting future interviews by FBI agents as they attempt to gather intelligence."

Another document says the following, that: "The investigators of the Department of Defense showed a detainee homosexual porn movies and used a strobe light in the room. We the FBI moved our interview to a different room. We have learned that those interrogators routinely identify themselves as FBI agents and then interrogate a detainee for 16 to 18 hours, using tactics as described above and others—wrapping in an Israeli flag, constant loud music, cranking the AC down, et cetera. Next time a real agent"—they are talking about FBI agent—"tries to talk to that guy, you can imagine the result."

The bottom line is there is now significant available additional evidence that there were strong FBI objections to DOD tactics relative to detainees at Guantanamo. My question to you is whether or not you would take a look at these documents and as part of your review of this whole matter reach your own conclusion as to, one, whether or not Generals Schmidt and Furlow had access to those and that information; and number two, if not, whether or not the investigation should be reopened. Would you add that to your material?

General CRADDOCK. Yes, Senator. If I may comment, I would disagree that this is strong evidence. I would say these are allegations, much like the allegations that were the basis of the decision to investigate. We will investigate any credible allegation.

Now, with regard to the former, I am not aware of that.

Senator LEVIN. You are saying there was significant evidence before that the FBI strongly objected to the tactics which were being used?

General CRADDOCK. No, I am not saying that was evidence. I am saying I consider this an allegation.

Senator LEVIN. I am reading from FBI e-mails.

General CRADDOCK. I have not seen them, sir.

Senator LEVIN. That is what I am saying. Would you take a look at these e-mails. These are FBI e-mails.

General CRADDOCK. I was going to say that I do not know about the former. The latter, we already have directed General Hood to make an inquiry to determine if this is a credible allegation. If it

is, we will investigate it. We will investigate any credible allegation. So we will look for these additional unredacted e-mails.

As I understand, the one that you read about the pornographic material was an e-mail that was included in the original Schmidt-Furlow report, but that part of it was redacted and has since been unredacted. So when we took a look and asked, is this credible? Is this new information? Because, it was not in Schmidt-Furlow. Yes, it is new information. So, we are relooking at it.

We will, Senator, look at any credible allegation and investigate it to ensure that we answer again the allegation truthfully.

Senator LEVIN. Thank you for your willingness to do that. But I must say, when you say "any credible allegation," these are contemporaneous FBI e-mails. So they are credible. It seems to me that is not the issue, whether they are credible or not. The question is whether or not they were taken into consideration by Generals Schmidt and Furlow. They may find that the FBI lied in their own contemporaneous e-mails and those things did not happen. But so be it, they are at least credible going in.

General CRADDOCK. Sir, I would submit to you, that they are allegations that may or may not be credible. Just because an FBI did the e-mails, you know from Schmidt-Furlow if you read the report, Senator, there were a lot of allegations that were unfounded. No one could find anyone who had knowledge of that other than the person who wrote that e-mail.

Senator LEVIN. Whose name will not be given to us, despite many requests.

Okay, but I just want to say it is one thing to say an allegation is credible, it is another thing to say that it proves to be accurate. But in terms of it being on its face a credible allegation does not—it seems all that is is a threshold statement. Of course it is credible. Whether or not you find it to be accurate and true as it turns out is a different issue.

General CRADDOCK. I understand.

Senator LEVIN. But at any rate, so long as you are willing to look at the recently redacted material that is now available as a result of these Freedom of Information Act requests and to determine whether or not, based on that material, there should be a reopening of this investigation, that is all I can ask of you.

General CRADDOCK. We are doing that.

Senator LEVIN. I appreciate your willingness to do that. Again, I appreciate your service, both of you, to our Nation and the services of those you command, and again, the services of your families. We cannot ever say that enough.

Thank you both.

This hearing is adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

ILLEGAL IMMIGRATION

1. Senator MCCAIN. Admiral Keating, the Department of Defense (DOD) often works with local and Federal agencies to help with our ongoing battle against illegal immigration. Please describe what Northern Command (NORTHCOM) is doing to increase the cooperation and any plans to reinstitute the use of unmanned aerial vehicles (UAVs) in patrolling our southern borders.

Admiral KEATING. The Homeland Security Act of 2002 assigns the Secretary of Homeland Security (DHS) the responsibility for security of our Nation's borders. NORTHCOM's role in the border security mission is to provide support to civil authorities, principally DHS. We provide such support under chapter 18 of title 10. When DHS requests DOD's support, the Office of the Secretary of Defense evaluates their request, and as directed, NORTHCOM provides the necessary support.

Joint Task Force North (JTF–N) is NORTHCOM's operational headquarters responsible for supporting law enforcement operations to counter the flow of drugs and other transnational threats. JTF–N's relationship with our interagency partners is excellent and continues to grow. To enhance cooperation, JTF–N regularly meets with law enforcement agencies to synchronize efforts to deter and prevent threats from entering the homeland.

JTF–N coordinates unmanned aerial system (UAS) flight activity in support of law enforcement agencies. Last year, JTF–N coordinated approximately 2,000 hours of UAS flight activity along the southern U.S. border. This year however, we believe JTF–N's UAS support to U.S. Customs and Border Protection will be degraded unless the Federal Aviation Administration (FAA) grants approval for UAS operations outside of existing military airspace.

Recently, the FAA restricted DOD UAS flight activity to existing military airspaces: Fort Huachuca, Barry M. Goldwater Ranges and Yuma Proving Grounds, all of which are located in Arizona. We will continue to coordinate with the FAA to ensure continued support to law enforcement border operations.

SPECIFIC GUIDANCE FOR IMPLEMENTING MCCAIN AMENDMENT

2. Senator MCCAIN. General Craddock, on December 30, 2005, Deputy Secretary England issued a memorandum directing the implementation of the detainee legislation that became law this winter—that the Army Field Manual (FM) defines the universe of permissible interrogation techniques, and that cruel, inhumane, and degrading treatment are prohibited. As the Southern Command (SOUTHCOM) Commander, in whose area of responsibility Guantanamo falls, you received a copy of this memo. How have you translated this high-level memo into specific guidance for soldiers, military police, interrogators, translators, intelligence officers, medical personnel, et cetera at Guantanamo?

General CRADDOCK. As I stated in my testimony, upon receiving the memorandum from Deputy Secretary England, I forwarded it, on 1 January 2006, to Major General Jay Hood, the Joint Task Force Guantanamo (JTF–GTMO) commander. On 2 January 2006, Major General Hood confirmed that JTF–GTMO was in compliance with Army FM 34–52, Intelligence Interrogation, and the Detainee Treatment Act. On 3 January 2006, I endorsed a memorandum from Major General Hood to Deputy Secretary England that informed Deputy Secretary England of JTF–GTMO's compliance. Additionally, as I previously testified, I have directed that all JTF–GTMO troops receive appropriate training concerning the treatment of detainees prior to, and again upon arrival at, Guantanamo.

3. Senator MCCAIN. General Craddock, have you issued directives with instructions?

General CRADDOCK. As discussed above, Major General Hood was directed to comply with the provisions of the Detainee Treatment Act in early January 2006. I will issue further guidance once DOD publishes two references currently under review, DOD Directive 2310.1E, The Department of Defense Detainee Program; and FM 2–22.3, Human Intelligence Collector Operations. My guidance will also incorporate pertinent provisions from DOD Directive 3115.09, DOD Intelligence Interrogations, Detainee Debriefings, and Tactical Questioning, published on 3 November 2005.

4. Senator MCCAIN. General Craddock, has the DOD developed regulations to implement the legislation?

General CRADDOCK. As discussed above, the DOD is working on the approval and release of DOD Directive 2310.1 E, The Department of Defense Detainee Program, and FM 2–22.3, Human Intelligence Collector Operations. Both references will implement portions of the Detainee Treatment Act. I have provided input on drafts of both references.

5. Senator MCCAIN. General Craddock, how are you communicating the new rules down the chain of command?

General CRADDOCK. As discussed above, I directed Major General Hood to ensure compliance with the Detainee Treatment Act and FM 34–52. I will provide more for-

mal and comprehensive guidance following DOD approval of DOD Directive 2310.1E and FM 2–22.3.

MILLER TAKING THE FIFTH

6. Senator MCCAIN. General Craddock, military investigators who briefed this Committee found that Major General Geoffrey Miller, who ran Guantanamo from October 2002 to March 2004 and helped set up operations at Abu Ghraib, failed to properly supervise the interrogation of Mohammad Qatani—the so-called "20th hijacker." Their report recommended that he be reprimanded, a recommendation that you declined to follow. Since then, General Miller has asserted his Fifth Amendment, Article 31 right against self-incrimination in two court-martial cases involving the use of dogs during interrogations. I do not contest General Miller's right under the Constitution, but would you agree that he also has a duty as an officer, especially a general officer, to take responsibility for his actions and orders?

General CRADDOCK. As I stated in my testimony, I do not presume or assume to know why Major General Miller invoked his Article 31 rights regarding court-martial charges involving actions that occurred in Iraq. I cannot speak for Major General Miller. As General Pace stated on this matter, "(W)e expect our leaders to lead by example, but we do not expect them to give up their individual rights as people."

7. Senator MCCAIN. General Craddock, do you believe, given everything we know now, only low-level personnel were responsible for detainee abuse at Abu Ghraib, Guantanamo Bay, in Afghanistan, and elsewhere?

General CRADDOCK. I cannot address Abu Ghraib and Afghanistan. I have held, and will continue to hold, those under my command responsible and accountable for detainee abuse. At JTF–GTMO, to date, there have only been a very small number of substantiated detainee abuse allegations during more than 4 years of operation and over 32,000 interrogations. Given this very small and isolated number of substantiated abuse allegations, I believe the leadership at JTF–GTMO has done a remarkably good job.

8. Senator MCCAIN. General Craddock, do you have second thoughts about declining to reprimand General Miller?

General CRADDOCK. No. I disapproved one of the Schmidt-Furlow report recommendations, that Major General Miller be held accountable for failing to supervise the interrogation of Qahtani and be admonished for that failure, because the interrogation of Qahtani did not result in the violation of any U.S. law or policy in effect at the time, and the degree of supervision provided by Major General Miller did not warrant admonishment under the circumstances. I have received no new and material information or evidence since then to change my opinion.

The evidence shows that he was not misguided in his trust, since there was no finding that law or policy was violated. Major General Miller adequately supervised the interrogation of Qahtani in that, by his own admission, he was aware of the most serious aspects of Qahtani' s interrogation: the length of interrogation sessions, the number of days over which it was conducted, and the length of segregation from other detainees.

Additionally, I have been informed that the U.S. Army Inspector General (IG) has completed their investigation of the allegations against Major General Miller as a result of the Schmidt-Furlow investigation. The Army IG concluded the allegation that Major General Miller was derelict in the performance of his duties with respect to the interrogation of a high value detainee was unsubstantiated.

ACCEPTABLE TECHNIQUES IN THE ARMY FIELD MANUAL

9. Senator MCCAIN. General Craddock, in the hearing before the Senate Armed Services Committee on July 13, 2005, you asserted that the following interrogation techniques are authorized by the Army FM on Intelligence Interrogation (FM 34–52): forcing a detainee to wear a woman's bra and placing underwear on his head; tying a leash to the subject and leading him around the room, forcing him to perform dog tricks; and standing naked for several minutes with female interrogators present. In written answers for the record, you reaffirmed your response, saying that these three techniques (among others) are authorized under the "ego down" or "futility" approaches. In written responses to the same question pursuant to a hearing held the next day, the top Judge Advocates General (JAGs) from the DOD's various branches—including Rear Admiral McPherson, Brigadier General Sandkuhler, and Major General Romig—all said explicitly that these techniques are not per-

mitted under FM 34–52. Please explain these discrepancies. How is it possible that the committee received diametrically opposed answers to questions posed within the space of 24 hours on key questions related to interrogation practices?

General CRADDOCK. FM 34–52 provides broad guidance on a number of approach techniques to include "pride and ego down" and "futility." FM 34–52 does not specify each and every application that is authorized under a particular technique. In fact, FM 34–52 states: "To every approach technique, there are literally hundreds of possible variations, each of which can be developed for a specific situation or source. The variations are limited only by the interrogator's personality, experience, ingenuity, and imagination." Thus, FM 34–52 recognizes that its broadly defined approach techniques may be translated into any number of applications.

The interrogation techniques described above involved the interrogation of one detainee, Mohamed Qahtani. Qahtani is a high value detainee who is believed to be al Qaeda's intended 20th highjacker for the September 11, 2001, terrorist attacks on our Nation. The general interrogation approach techniques used against Qahtani, an unlawful enemy combatant, were approved by the Secretary of Defense. The specific applications of the techniques were developed by JTF–GTMO interrogators and their supervisors and were designed to counter Qahtani's long resistance to more conventional interrogation techniques. The intent in using these techniques was to use legally permissible methods to gain intelligence from a key al Qaeda member, intelligence that could save lives.

The JAGs from each Service responded to isolated questions about whether the techniques were "consistent with the intent and spirit of the Army FM." These questions were different from the ones that were asked of me. My duty was to thoroughly review and approve the entire Schmidt-Furlow investigation. In doing so, I approved the investigation's finding that the applications of the interrogation techniques described in your question were authorized under FM 34–52. Specifically, I affirmed the Schmidt-Furlow investigation's determination that these techniques were "legally permissible under the existing guidance" at that time. My approval of specific factual findings concerning events that occurred before I took command does not constitute combatant commander guidance for those I presently command.

The Schmidt-Furlow investigation determined that the creative, aggressive, and persistent interrogation of Qahtani "resulted in the cumulative effect being degrading and abusive treatment." However, the investigation did not identify at what point the cumulative effect became degrading or abusive, or point to any violation of U.S. law or policy from the purported "degrading and abusive" treatment. Because that point was not identified, I approved the report's recommendation that a study be conducted of the DOD authorized interrogation techniques to establish a framework for evaluating their cumulative impact in relation to the obligation to treat detainees humanely. I forwarded this recommendation, along with others concerning policy level issues, to the DOD for further consideration.

Finally, regarding your question on the diametrically opposing answers given to the committee, I cannot speak for the JAGs, nor can I explain the reasoning behind their opinion on this matter. I can only explain my actions as they apply to the specific questions directed to me.

10. Senator MCCAIN. General Craddock, which understanding was operative and used as guidance for our troops—yours or the JAGs'?

General CRADDOCK. The operative guidance at the time was U.S. law and policy. This included FM 34–52, as described above, and DOD interrogation policy, as approved by the Secretary of Defense.

I took command of SOUTHCOM on November 9, 2004. On December 29, 2004, I ordered the Schmidt-Furlow investigation following the ACLU's public posting of FBI e-mails obtained through a Freedom of Information Act (FOIA) request. The FBI e-mails contained allegations of the use of improper interrogation techniques at JTF–GTMO. The alleged events took place in the 2002–2003 timetrame. I was not the commander during that period. I am responsible for investigating credible allegations of detainee abuse whenever they may have occurred.

As I was not the combatant commander during the 2002–2003 interrogation of Qahtani, I never issued any guidance pertaining to the interrogation of Qahtani. My approval of specific factual findings in the Schmidt-Furlow investigation concerning events that occurred before I took command does not constitute combatant commander guidance for those I presently command.

The differences between the 2002–2003 time period and the present at JTF–GTMO are substantial. In the aftermath of September 11, 2001, JTF–GTMO was striving to produce actionable intelligence, particularly from Qahtani and other high value detainees. Since I took command, in contrast to the more creative and aggressive applications of FM 34–52 used in 2002–2003, the interrogation focus at JTF–

GTMO has been on direct approach techniques that build rapport with the detainees.

11. Senator MCCAIN. General Craddock, have these discrepancies been resolved? If so, how?

General CRADDOCK. The Detainee Treatment Act mandates that detainees must not be "subject to any treatment or technique of interrogation not authorized by and listed in the United States Army Field Manual on Intelligence Interrogation." The Detainee Treatment Act also restates the U.S. Government's prohibition on cruel, inhuman, or degrading treatment as defined through U.S. Reservations to the Convention Against Torture. The DOD is doing a top-to-bottom review of interrogation and detention operations. This has resulted in changes to and clarification of DOD policy. Last fall, DOD published DOD Directive 3115.09, DOD Intelligence Interrogations, Detainee Debriefings, and Tactical Questioning. I anticipate that DOD Directive 2310.1E, The Department of Defense Detainee Program, and FM 2–22.3, Human Intelligence Collector Operations, will be published shortly. The FM, especially, will provide interrogators on the ground better clarity on proper versus improper interrogation techniques.

I am committed to providing clear guidance to the men and women at JTF–GTMO who must carry out interrogations against al Qaeda and Taliban members. In this regard, I have requested that the DOD provide a definition of "degrading treatment" in both DOD Directive 2310.1E and FM 2–22.3.

12. Senator MCCAIN. General Craddock, has the resolution to these and any other discrepancies been communicated down the chain of command? If so, how?

General CRADDOCK. Every member of JTF–GTMO is carefully and repeatedly trained in the principles for treatment of detainees, including those interrogation techniques that are authorized by applicable law and directives.

As part of pre-mobilization training prior to their arrival at Guantanamo, military members of the Joint Task Force are trained at Fort Lewis, Washington; Gulf Shores, Mississippi; and/or Fort Huachuca, Arizona on the applicable law, DOD Directives, the Army FM, and the Detainee Treatment Act.

In addition to that training, after arrival at Guantanamo, all members of the Joint Task Force are trained again on the proper treatment of detainees, including the requirements of the Detainee Treatment Act during an extensive newcomers' briefing.

Finally, to emphasize the importance of the Detainee Treatment Act, I have required that separate training be implemented by the chain of command or directors, as appropriate, to provide an annual update on the requirements of the Detainee Treatment Act and the applicable provisions of international law and DOD policy on the treatment of detainees. This redundant training is being provided to every person, including civilians and contractors who have contact with detainees, with duties at JTF–GTMO.

In addition, as discussed above, we are awaiting the final approval of DOD references on detainee matters. Upon approval, I will issue further implementing guidance throughout SOUTHCOM and JTF–GTMO.

QUESTIONS SUBMITTED BY SENATOR JEFF SESSIONS

MISSILE ATTACKS

13. Senator SESSIONS. Admiral Keating, I am aware that a number of studies are being conducted by various commands and I would very much like to understand your position on this particular threat to the homeland: What is the considered opinion of the NORTHCOM leadership and your primary staff planners regarding the threat to the U.S. homeland posed by the possibility of a terrorist missile attack launched from seagoing platforms off the coast of the United States?

Admiral KEATING. [Deleted.]

PANDEMIC INFLUENZA

14. Senator SESSIONS. Admiral Keating, I consider the potential for a major crisis significant and the impact on the Nation's economy and populace potentially severe if the interagency process is not thoroughly resourced and all elements of coordination and planning executed with a high degree of precision. I would also hope that all the authority you need to get or keep the process moving in order to reach the level of sophistication desired is in place, or if not I would like to know what we

might consider changing in the law. Regarding the potential for a pandemic influenza outbreak (based upon avian flu or some other precursor), what is NORTHCOM's/DOD's role in the interagency response to such a crisis?

Admiral KEATING. DOD will support the primary and coordinating Federal agencies appointed by the President to lead the Nation's response to a flu outbreak. This support can be requested by the primary Federal agency or through individual States. The President or the Secretary of Defense would direct DOD to provide this support. Commander, NORTHCOM would be the supported Commander for the coordination of the DOD response within the continental United States and Alaska.

For a widespread outbreak across the United States, Commander, NORTHCOM may elect to designate a Joint Force Land Component Commander, who would orchestrate nation-wide efforts in support of the primary Federal agency. NORTHCOM, in conjunction with the Services, would also be responsible for ensuring force health protection of DOD personnel within its area of responsibility.

We have sufficient legal authorities regarding the use of military forces in support of civil authorities. We continue to monitor the global pandemic influenza situation and adapt our planning efforts to best meet the requirements of the American people.

15. Senator SESSIONS. Admiral Keating, specifically, what is NORTHCOM's role in planning, allocating resources, command and control, deploying force packages, training and preparation for and the execution of interagency crisis exercises to confront a pandemic influenza outbreak?

Admiral KEATING. NORTHCOM has developed a concept plan [2591] for pandemic influenza, which outlines the command's major support functions in the event of a national emergency. This plan supports DOD's role as a supporting agency to the Department of Health and Human Services (HHS) for public health and medical services (Emergency Support Function #8) under the National Response Plan. The DHS is the primary agency responsible for coordinating all other activities associated with a pandemic. The Assistant Secretary of Defense for Homeland Defense, in collaboration with the Joint Staff is responsible for developing the DOD implementation plan for pandemic influenza.

We are working with U.S. Joint Forces Command to identify sourcing options for forces to support events ranging from a small outbreak to a nationwide pandemic. We will align our command and control structure with that of the primary agency and allocate force packages accordingly. Our ability to defend the homeland must be preserved to guard against enemies who view a pandemic as an opportunity to attack.

The command has coordinated with State, local, and interagency partners to train for and exercise our response to a potential pandemic:

- In December 2005, we attended a cabinet-level tabletop exercise on pandemic influenza.
- In January 2006, NORTHCOM sponsored an interagency pandemic influenza day and conducted an interagency exercise.
- In April 2006, we will host a State planners conference with the National Guard.
- In May 2006, our Ardent Sentry exercise will include exercising Concept Plan 2591.

16. Senator SESSIONS. Admiral Keating, what shortfalls in funding or other resources are evident in the current stage of planning and what resources are needed in the future to create robust pandemic crisis plans?

Admiral KEATING. As directed in the Homeland Security Council Implementation Plan for National Strategy of Pandemic Influenza, we are working crisis action plans to respond to a national flu emergency. At this early stage, we estimate a $3 million shortfall in our fiscal year 2007 operations and maintenance budget. Additional resources would allow NORTHCOM to:

- Refine concept plans to respond to requests from civil authorities as directed by the President and Secretary of Defense
- Build and integrate disease surveillance and characterization capabilities
- Conduct collaboration conferences with Federal, State, and local emergency response agencies
- Integrate DOD and civilian disease surveillance capabilities
- Develop and employ modeling and simulation tools
- Construct data warehouses that can be accessed by civilian agencies
- Establish communications and data links with external agencies, and be able to test and exercise these tools with our civilian partners

• Acquire the requisite contractor support to facilitate these actions

NORTHCOM will continue to conduct joint planning and execution community reviews and obtain assessments from the Services and agencies regarding their capabilities to respond to a pandemic disease situation.

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

GROUND-BASED MIDCOURSE DEFENSE SYSTEM

17. Senator LEVIN. Admiral Keating, the National Missile Defense Act of 1999 says it is U.S. policy to deploy an "effective" national missile defense system against limited attack. Given that the Ground-based Midcourse Defense System has not yet had a single successful intercept test, has the system demonstrated that it is currently "effective"?

Admiral KEATING. [Deleted.]

As the MDA successfully completes more flight and ground tests, we expect to gain more confidence in the predicted values needed to project the capability of the missile defense system. Currently, all NORTHCOM crews are trained and ready to perform the mission as directed by the Secretary of Defense.

18. Senator LEVIN. Admiral Keating, do you believe it is important that the system demonstrate through testing that it is operationally effective before it is placed on permanent alert?

Admiral KEATING. We support the MDA's plan for testing the system. The success of integrated ground tests and element-level ground and flight test events indicates the Ballistic Missile Defense System is maturing. Resumption of limited defensive operations system flight testing by the MDA will further increase our confidence in its operational effectiveness. NORTHCOM is ready to assume operational control of the Ground-based Midcourse Defense System upon the direction of the Secretary of Defense, and we are fully confident in the ability of our crews and staff to perform the mission.

IRANIAN MISSILE THREAT TO THE UNITED STATES

19. Senator LEVIN. Admiral Keating, at a committee hearing on March 7, John Negroponte, Director of National Intelligence, and Lieutenant General Michael Maples, Director of the Defense Intelligence Agency, indicated that Iran is focusing its ballistic missile efforts on regional missiles. They made no mention at all of an Iranian intercontinental ballistic missile effort. Do you agree with their assessment that Iran's missile efforts are regional?

Admiral KEATING. [Deleted.]

20. Senator LEVIN. Admiral Keating, when do you assess it is likely Iran would be able to deploy an ICBM capable of reaching the United States?

Admiral KEATING. [Deleted.]

TERRORIST MISSILE THREAT TO THE U.S.

21. Senator LEVIN. Admiral Keating, last year you told the committee that you had no active intelligence that a terrorist group had the capability to launch a ballistic missile against the United States from a ship. Do you have the same assessment today?

Admiral KEATING. [Deleted.]

22. Senator LEVIN. Admiral Keating, does the Intelligence Community judge that it is more likely that terrorists would use non-missile means of delivery to attack the United States than using ballistic missiles?

Admiral KEATING. [Deleted.]

CRUISE MISSILE DEFENSE OF THE HOMELAND

23. Senator LEVIN. Admiral Keating, we hear concerns about the potential for adversaries to use cruise missiles to attack our homeland. Who is responsible for planning and executing the defense of the homeland against cruise missiles or other aerial threats?

Admiral KEATING. NORTHCOM is the U.S. geographic combatant command tasked with defending our homeland against all threats. NORTHCOM is working with the North American Aerospace Defense Command (NORAD) to address all air breathing threats to the United States. This includes defense against cruise missiles and other aerial threats.

NORTHCOM is responsible for detecting, deterring and, if required, defeating sea-launched or ground-launched cruise missile threats prior to launch against targets in the Command's area of responsibility. For air-launched cruise missiles, NORAD is responsible for destroying both the airborne launch platforms and the cruise missile.

As cruise missiles themselves are very difficult to detect once launched, it is preferable to deter the enemy or destroy the launch vehicle prior to launch. The detection of launch platforms involves intelligence collaboration between NORTHCOM, NORAD, and Federal agencies—a process that is exercised on a regular basis.

24. Senator LEVIN. Admiral Keating, last year's National Defense Authorization Act required the DOD to prepare a plan for the defense of the homeland against cruise missile attack. What is the status of the planning for such a defense?

Admiral KEATING. In March 2006, the Joint Chiefs of Staff designated U.S. Strategic Command (STRATCOM) as the single integrating authority for cruise missile defense. The plan directed by section 905 of the National Defense Authorization Act for Fiscal Year 2006, "Plan to Defend the Homeland Against Cruise Missiles and Other Low-Altitude Aircraft," will be a collaborative effort among NORTHCOM, STRATCOM, NORAD, and the Joint Theater Air and Missile Defense Organization. The Joint Staff is the DOD overall lead for developing the plan.

COLOMBIA-AUTHORITIES

25. Senator LEVIN. General Craddock, how have you used the authority you received from the committee last year to increase the cap on military and civilian personnel? Please explain what you will do with the authorities you have asked the committee renew.

General CRADDOCK. The authority received last year from the committee allowed SOUTHCOM to employ sufficient forces to satisfy the training and technical assistance requirements critical to the success of Plan Colombia. While competing global resource requirements resulted in a lower number of personnel than would have otherwise deployed to Colombia, the current cap level alleviated a constraint that often hindered our efforts. SOUTHCOM needs the higher cap level in order to provide enhanced assistance in the areas of Planning, Intelligence, Logistics, Force Protection, Surveillance and Reconnaissance, Civil Affairs, Military Group Support, Command and Control, and Counternarcotics Training. The increased cap level has also permitted the Command to take advantage of time-sensitive information, surging numbers of personnel in support of search and rescue operations and high value targets.

Extension of this authority will permit SOUTHCOM to plan for new initiatives to assist the Government of Colombia in combating terrorism as Colombia continues to exert pressure on illicit activities, gain control of ungoverned spaces, defeat the FARC, and prevent terrorist activities from dispersing into the region. New efforts that will require additional resources may include:

- Increased planning assistance to the Colombian military to support counterterrorism operations.
- Assistance to the Colombian military in improving regional cooperation and interoperability between the Colombian military and other regional security forces.
- Increased Colombian capacity to protect its critical infrastructure.
- Assistance in establishing schools to train partner nation counterterrorism forces. Increased surveillance and reconnaissance support.
- Establishing an alternate/additional aircraft basing option within Colombia to migrate assistance efforts with Colombian operations.
- Assistance to Colombian military to conduct full spectrum information operations.

COLOMBIA-INTERDICTION

26. Senator LEVIN. General Craddock, how do you explain the fact that the street price for cocaine in the United States hasn't gone up significantly?

General CRADDOCK. The Office of National Drug Control Policy (ONDCP) released a report in November 2005 stating the retail price of cocaine increased 19 percent over a 6-month period, February–September 2005.

27. Senator LEVIN. General Craddock, a November 2005 Government Accountability Office (GAO) report found that, according to Joint Interagency Task Force-South, a subordinate command under SOUTHCOM responsible for international drug interdiction, "it cannot detect many of the known maritime cocaine movements reported in the western Caribbean Sea and the eastern Pacific Ocean because it cannot get ships or aircraft to the suspected movement in time." The report added that Joint Interagency Task Force-South officials "expressed concern that continued declines in U.S. on-station ship days and on-station flight hours will limit their ability to monitor the transit zone and detect illicit drug trafficking. Is the price of cocaine linked to the insufficient resources for interdiction?

General CRADDOCK. The GAO report is correct in that we are not detecting an acceptable level of known maritime trafficking events. A review of maritime events of which we had some level of knowledge (go-fast and fishing vessels) in calendar year 2005, is illustrative.

In the Eastern Pacific (EPAC), there were 164 actionable maritime events. Of the 164 events, 47 events were detected. Thus, of the events we knew about, there was a detection rate of 29 percent. Of the 47 events that were detected, 38 were interdicted—a rate of 81 percent. Bottom line for the EPAC—we detect 3 of 10 known events, of the 3 we do detect, 80 percent of the time, they go to jail.

The biggest challenge is detection. This process is very complex. Drug traffickers use a variety of decoy vessels, security vessels, logistic vessels, and drug-carrying vessels in an elaborate shell game, particularly in the EPAC. Drugs are passed among vessels as they transit deep into the EPAC then north towards Mexico. We do not yet have a persistent surface surveillance capability in support of maritime domain awareness requirements.

Regarding the link between the lack of D&M resources and the price of cocaine on the streets of America, SOUTHCOM does not have the detailed data to answer the question, and defers to the ONDCP and the DEA. It seems logical that higher levels of interdiction will most likely adversely affect the drug market. I note that ONDCP released a report in November 2005 stating the retail price of cocaine increased 19 percent over a 6-month period, February–September 2005. An increase in price can generally be linked to a decrease in supply. According to ONDCP, cocaine production in the Andes is decreasing, and both eradication and interdiction are increasing.

28. Senator LEVIN. General Craddock, what remedy do you see to the problem identified by GAO, and what, if, anything, have you requested from the DOD for fiscal year 2007 for maritime drug interdiction?

General CRADDOCK. In preparation for the August 16, 2005, Global Force Management Board (GFMB), my staff submitted force requirements for fiscal year 2007–2009, which included maritime drug interdiction assets. Forces requested addressed requirements outlined in the SOUTHCOM counterdrug (CD) plan. Within the submission to the GFMB, SOUTHCOM requested the following maritime CD assets from the DOD:

- Increased surface combatant presence
- Increased submarine presence
- Increased maritime patrol aircraft flight hours per month
- A fleet oiler to support maritime operations and extend on-station time

On August 30, 2005 my Director of Operations, BG Cambria, presented a brief to the Chairman of the Joint Chiefs of Staff (CJCS) tank regarding SOUTHCOM CD force sourcing. In that brief, we clearly outlined the disparity between allocated forces and validated requirements.

Upon completion of the tank brief, SOUTHCOM submitted a request for forces (RFF) for all forces related to CD. The RFF reiterated requirements submitted during the August GFMB, requested fulfillment of all SOUTHCOM CD requirements, and articulated the requirement that U.S. Navy rotary wing assets be able to conduct airborne use of force. This submission led to a review of the fiscal year 2004 CJCS CD execute order (EXORD). A new CJCS CD EXORD is in staffing now, however, initial coordination indicates little change in allocated forces.

Full sourcing of CD assets would allow SOUTHCOM to interdict more illicit narcotics and directly impact the problems identified by GAO.

It is important to note, however, that the Joint Interagency Task Force—South (JIATF–S) is an interagency organization. As such, the DOD is not the sole resource

provider for detection and monitoring, but rather a partner along with the U.S. Coast Guard, Customs and Border Protection, and allies. The level of resourcing is constantly changing due to competing demands for scarce assets, aging equipment, changing priority of national objectives, and decreasing funding streams—all of which affect the effort to provide adequate forces. SOUTHCOM does not have visibility of the out-year contributions of the other organizations to maritime drug interdiction.

COLOMBIA-DEMOBILIZATION OF NARCOTERRORISTS

29. Senator LEVIN. General Craddock, please give me your assessment regarding the latest reports that demobilized paramilitaries are infiltrating the political process.

General CRADDOCK. Colombia's Peace and Justice law prohibits demobilized paramilitary leaders from participating in politics prior to the completion of the demobilization process. The Colombian government and political parties are paying close attention to this issue. For example, five congressional candidates were removed from the list of the "U" party for having met with AUC leader Jorge 40 to design an electoral strategy for the departments of the Sierra Nevada region. In another instance, Mario Uribe, cousin and political ally to the President, dropped AUC sympathizers Congresswomen Eleonara Pineda and Rocia Arias from the membership in the Colombia Democratica Party.

30. Senator LEVIN. General Craddock, what are the weaknesses of the program and how can the U.S. Government—DOD or other agencies—help?

General CRADDOCK. The success of the demobilization program depends on the Government of Colombia implementing it vigorously. The current program is not fully funded, which limits the scope of the program and impacts the amount and type of reinsertion and vocational training available to the demobilized fighters. The Colombians are addressing this concern by seeking international and private sector funding to add to their own contribution. The Netherlands, Sweden, Ireland, the Organization of American States, and other donors, including the European Union, are supporting the demobilization program. The U.S. Government (USG) has made a modest contribution thus far. The Departments of State and Justice and the United States Agency for International Development (USAID) provide the USG assistance for demobilization.

Another key weakness is the program's inability to address the power vacuums created by demobilizing paramilitaries in certain strongholds without having a sufficient security force presence to stabilize these areas. Without a significant security force presence in certain areas, there is no way to prevent remaining illegal armed groups from establishing dominance over the population.

HAITI

31. Senator LEVIN. General Craddock, how long do you estimate will the United Nations forces—military and police—have to remain in Haiti?

General CRADDOCK. United Nations Security Council Resolution 1658 extended the mandate of MINUSTAH to maintaining a presence in Haiti, as contained in resolutions 1608 (2005) and 1542 (2004), until 15 August 2006, with the intention to renew for further periods. Based on the weak democratic institutions, a fledging civilian police force, and a dysfunctional judiciary system, I estimate this effort needs to be long-term and well beyond the next U.N. mandate renewal—most likely requiring several renewals.

We are working closely with the Department of State to review the current force structure and positioning of MINUSTAH with a view toward restructuring to better reflect current conditions and get postured for future development efforts.

32. Senator LEVIN. General Craddock, what, if anything, is SOUTHCOM doing to help improve the security situation in Haiti, and to address the drug trafficking occurring via Haiti?

General CRADDOCK. We are increasing the effectiveness of the Haitian Coast Guard through the Foreign Military Financing (FMF −$1 million), Foreign Military Sales (FMS −$2.7 million) and International Military Education and Training (IMET −$213,000). The Coast Guard is the only security institution we are allowed to assist since Haiti disbanded its Army and only has a national police force.

The SOUTHCOM's Joint Interagency Task Force South detects and monitors traffickers and passes information to the Haitian Coast Guard to assist their interdiction efforts.

FORCE FEEDINGS OF HUNGER STRIKERS AT GUANTANAMO

33. Senator LEVIN. General Craddock, does the McCain amendment banning cruel, inhuman, and degrading treatment of detainees apply to the treatment of hunger strikers at Guantanamo?

General CRADDOCK. Yes. The Detainee Treatment Act prohibits the cruel, inhuman, or degrading treatment of all detainees, including hunger strikers, in the custody or physical control of the U.S. Government.

34. Senator LEVIN. General Craddock, has the military resorted to punitive measures against detainees in order to break the hunger strike?

General CRADDOCK. No. Punitive measures have never been used against detainees in order to break a hunger strike. However, engaging in a hunger strike is an act of indiscipline and therefore a violation of camp rules. As with other infractions of camp rules, hunger striking detainees only lose their comfort items, which are a privilege reserved for detainees who comply with camp rules. At no time do detainees, including hunger strikers, ever lose their basic issue items.

VENEZUELA-NUCLEAR

35. Senator LEVIN. General Craddock, on October 3 of last year the Miami Herald reported that Venezuelan President Hugo Chavez stated during a radio address, "Brazil has advanced in its nuclear research, nuclear power, and that's valid. Argentina too, and we also are starting to do research and in the area of nuclear energy, with peaceful aims of course." Last month, Ambassador Negroponte, Director of National Intelligence, told the committee that Venezuela "is seeking closer economic, military, and diplomatic ties with Iran and North Korea." Yesterday's Washington Times reported on speculation that the Venezuelan government could be planning to provide Tehran with uranium for its nuclear program. Do you believe that President Chavez's statement about nuclear energy is just bluff and blunder, or do you believe there is more to it?

General CRADDOCK. We have no reason to disbelieve President Chavez's publicly stated desire to pursue nuclear energy. Venezuela did have a research and experimental applications reactor that was shut down in 1990.

36. Senator LEVIN. General Craddock, what can you tell us in open session about his nuclear intentions, if any, and his relationship with North Korea and Iran, including whether your analysts believe he is prepared to supply Iran with uranium?

General CRADDOCK. Venezuela recently signed an agreement with Iran that provides for the exploitation of Venezuela's strategic minerals. This has prompted Venezuelan opposition figures to warn that President Chavez's government could be planning to provide Tehran with uranium for its nuclear program. However, in early-March 2006, President Chavez ridiculed those opposition statements as being part of an "imperialist plan" propagated by international news media.

Venezuela's former representative to the International Atomic Energy Agency (IAEA), Leancy Clemente Lobo, publicly stated that studies undertaken during the past decades detected the presence of uranium but that officially, no progress was made in the matter. Lobo went on to say that tests should be done to determine the quantity of proven reserves in Venezuela and devise a utilization plan.

Venezuela is deepening its relationship with both Iran and North Korea. President Chavez has said he fully supports Iran's nuclear program and Venezuela was one of three countries to vote against the U.N. resolution to refer Iran to the Security Council due to its nuclear program. Venezuela's ambassador to Iran has called its support of peaceful nuclear technology "irrevocable." Iran has signed over 80 agreements with President Chavez since his 1998 inauguration. Chavez has visited Iran four times, and the estimated value of proposed trade agreements between the two countries is approximately U.S. $11 billion.

The North Korean Vice President signed a commercial cooperation agreement with Venezuela in September 2005. The North Korean Foreign Trade Minister visited Venezuela in November 2005 to sign an additional commercial cooperation agreement.

BOLIVIA

37. Senator LEVIN. General Craddock, what is the state of our military-to-military relations with Bolivia, and what are your expectations regarding the likelihood that Bolivia will cooperate with U.S. counterdrug efforts?

General CRADDOCK. We have worked closely with the Bolivian military over the last several years. While the Morales administration has not made any official announcement of a changed policy with regard to military-to-military contact between our two nations, some of the administration's recent actions have begun to undercut our relations.

The U.S. Embassy in La Paz indicates that Morales will be tough on interdiction, but will not support eradication as have past Bolivian administrations.

QUESTIONS SUBMITTED BY SENATOR EDWARD M. KENNEDY

RESTRAINT CHAIR AT GUANTANAMO BAY

38. Senator KENNEDY. General Craddock, recent news reports raise troubling questions about the use of the restraint chair in connection with hunger striking detainees at Guantanamo Bay. Did you approve the use of restraint chairs at Guantanamo? If so, how many restraint chairs have been obtained for use at Guantanamo Bay?

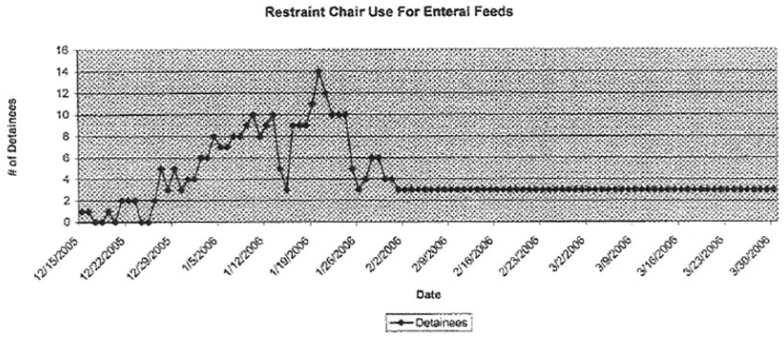
General CRADDOCK. The use of the restraint chair was studied by the Joint Medical Group and Joint Detention Group at JTF–GTMO, in consultation with medical experts including a forensic psychiatrist and a team of consultants from the Federal Bureau of Prisons. Major General Hood authorized the use of the restraint chair and informed me of his decision. To date, JTF–GTMO has obtained 25 restraint chairs, but has only used 6 of them.

39. Senator KENNEDY. General Craddock, how many detainees have been placed in a restraint chair?

General CRADDOCK. Twenty-nine different hunger-striking detainees have been safely fed utilizing the restraint chair protocol.

40. Senator KENNEDY. General Craddock, please provide a schedule showing the dates each detainee was placed in a restraint chair, and indicate how long each detainee was in the chair on each occasion, with an unclassified summary, if necessary.

General CRADDOCK. Feedings of hunger strikers utilizing the restraint chair began on 15 December 2005. Since that date, over 750 feedings have been conducted for 29 different detainees utilizing the restraint chair protocol. Detainees fed using the restraint chair protocol are fed twice per day and, in accordance with established protocol, they remain in the chair for not more than 120 minutes. Below is a graph depicting the feedings in the restraint chair.



41. Senator KENNEDY. General Craddock, is there any limit on how many days, consecutive or not, that a detainee can be force fed in the restraint chair?

General CRADDOCK. No. Detainees are provided nutrition enterally until they choose to begin eating and have eaten at least three consecutive meals. Each hunger-striking detainee gets an opportunity to choose to eat before every enteral feed-

ing. As long as a detainee continues to be fed enterally, the restraint chair is used to ensure that the detainee receives and absorbs adequate nutrition and to ensure the safety of the detainee and the treating medical personnel.

42. Senator KENNEDY. General Craddock, please provide the instructions, procedures, orders, protocols, regulations, and/or guidelines that are followed by personnel at Guantanamo for both restraint chairs and when force feeding is utilized and/or when dealing with hunger strikers generally.

General CRADDOCK. A redacted version of the JTF–GTMO Joint Medical Group Standard Operating Procedures for managing hunger-striking detainees is attached at Tab A. As the involuntary feeding of hunger-striking detainees is currently at issue in pending habeas litigation, I have been advised to provide only the redacted version at this time.

DETENTION HOSPITAL GUANTANAMO BAY, CUBA	SOP NO: 001
Title: VOLUNTARY AND VOLUNTARY TOTAL FASTING AND RE-FEEDING	Page 1 of 12 Effective Date: 15 Oct 03 Revised: 11 August 05 1830
SCOPE: Detention Hospital/Delta Clinic	

I. Encl: (1) Refusal to Accept Food or Water/Fluids as Medical Treatment Form
(2) Voluntary and Voluntary Total Fasting Medical Evaluation Sheet
(3) Voluntary and Voluntary Total Fasting Medical Flow Sheet
(4) Clinical Protocol for Re-Feeding

II. BACKGROUND

Refusals of food and water can be expected in any detained population as individuals may use fasting as a form of protest or to demand attention from authorities. Thirst strikes, although rare, can be more rapidly damaging given the local climate. The reasons for food refusal can be varied as can the level of fasting (not necessarily total). Religious fasting, which may be seen in Muslim detainees during Ramadan, should not be considered a hunger strike. While hunger striking has traditionally been used to describe a spectrum of situations involving fasting, for the purposes of this standard operating procedure (SOP), the term will be used as defined below.

III. POLICY

A. Joint Task Force (JTF)-GTMO policy is to avert death from hunger strikes and from failure to drink as well as to monitor the health status of detainees who are fasting voluntarily. Every attempt will be made to allow detainees to remain autonomous up to the point where failure to eat or drink might threaten their life or health. The Detention Hospital (DH) is responsible for providing health care monitoring and medical assistance as clinically indicated for detainees who are voluntarily fasting or on a hunger strike. The Officer in Charge (OIC) of the DH will ensure that the appropriate standards of care for the medical and administrative management of fasting detainees are adhered to. The DH OIC will do everything within his/her means to monitor and protect the health and welfare of hunger striking detainees including involuntary intravenous hydration and/or enteral tube feeding if necessary. DH medical personnel will make every effort to obtain consent from a voluntary faster for treatment.

B. In the event a detainee refrains from eating to the point where involuntary feeding is required, no direct action will be taken without the knowledge and written approval of

the JTF-GTMO Commander. If the JTF-GTMO Commander, as the approval authority, makes the decision to authorize involuntary re-feeding of a detainee, he will immediately inform the Commander, USSOUTHCOM, of his decision. In turn, the Commander, USSOUTHCOM, will notify appropriate Joint Staff and Department of Defense offices of the need to initiate involuntary re-feeding of a detainee.

C. Definitions.

Voluntary Fasting (VF). A voluntary fast occurs when a detainee communicates his intent to JTF-GTMO personnel to undergo a period of fasting for a specific purpose, has had no solid food intake for a period of 72 hours (9 consecutive meals), but is taking adequate liquids/fluids by mouth.

Voluntary Total Fasting (VTF). A voluntary total fast occurs when a detainee communicates his intent to JTF-GTMO personnel to undergo a period of fasting for a specific purpose and has not taken any solids or liquids for a period of more than 48 hours.

Hunger Striker. A hunger striker is a detainee who communicates his intent to JTF-GTMO personnel to undergo a period of voluntary or total voluntary fasting as a form of protest or to demand attention from authorities. The designation of a detainee as a hunger striker is based on intent, purpose, and behavior and will be determined by the JTF-GTMO Surgeon in conjunction with input from the DH medical staff, the Commander, Joint Detention Group (JDG), and the Commander, Joint Intelligence Group (JIG). Certain situations may exist where the detainee is on a VF or VTF, but is not a hunger striker (ex. religious fast, severe depression with suicidal intent manifested by not eating or drinking).

Meal. The combined or individual consumption of fluids and/or solid food required to maintain daily metabolic requirements. These requirements vary by individual. For the purpose of this instruction, three 8 fluid ounce bottles of Ensure constitute one meal.

IV. PROCEDURES

A. Effective management of individuals or groups who refuse to eat or drink requires a close partnership between the DH medical staff and the Joint Detention Group (JDG) security force.

B. Security forces under the JDG will monitor each detainee's daily intake of meals and water.

C. The JDG will notify the DH medical staff of each detainee who meets the definition of VF or VTF as outlined above, and maintain a current missed meals list on that detainee. This list will be communicated via e-mail, phone or memorandum to the Director of Clinical Services and Support (DCSS) and the Senior Nurse Executive (SNE) each day. Included in this list will be a running total of consecutive missed meals by each

detainee who is on a VF or VTF. In addition, the JDG can include detainees of concern who have not met the criteria for a VF or VTF, but who may not be taking in adequate nutrition or fluids.

D. Once notified, DH medical personnel will evaluate each detainee. Part of this evaluation will be to determine the intent and purpose of the VF or VTF. The JTF-GTMO Surgeon, in conjunction with input from the DH medical staff, the Commander, JDG, and the Commander, JIG, will determine whether the actions of a detainee meet the criteria for a hunger strike as outlined above. A list of those detainees on hunger strike will be forwarded by the DCSS to JDG/S3 and to the SNE and this information will be included in the daily SITREP.

E. If during the course of a hunger strike, involuntary re-feeding is required, the JTF-GTMO Surgeon will make specific recommendations to the JTF-GTMO Commander as to the timing and requirement for such involuntary re-feeding. The JTF-GTMO Commander will decide, in writing, whether to order the involuntary re-feeding of a detainee. If the JTF-GTMO Commander, as the approval authority, makes the decision to authorize involuntary re-feeding of a detainee, he will immediately inform the Commander, USSOUTHCOM, of his decision. In turn, the Commander, USSOUTHCOM, will notify appropriate Joint Staff and Department of Defense offices of the need to initiate involuntary re-feeding of a detainee.

F. Enclosure (1), *Refusal to Accept Food or Water/Fluids As Medical Treatment,* will be verbally translated at the initial assessment, alerting detainees of the dangers of failure to eat or drink. The DH medical staff shall make every effort to convince the detainee to accept treatment. Medical risks faced by the detainee if treatment is not accepted shall also be explained. A note will also be put in the out-patient chart.

V. MEDICAL EVALUATION AND MANAGEMENT

A. The DH medical staff will monitor the health of any detainee who is on a VF or VTF. Upon notification, DH medical personnel will do the following:

1. A complete medical record review
2. An intake (food/fluids) history
3. General physical examination to include: Vital signs (HR, BP, RR, T), weight and body mass index (BMI).
4. Consultation with Behavioral Healthcare Service (BHS) for an assessment of the mental and psychological status.
5. Document the evaluation on enclosure (2), the *Voluntary and Voluntary Total Fasting Medical Evaluation Sheet.*
6. A BHS provider will document the psychological evaluation on a Standard Form 600.
7. Once the detainee is being evaluated on a periodic basis, all evaluations will be recorded on the *Voluntary and Voluntary Total Fasting Medical Flow Sheet* (enclosure

3). This form will be maintained with the detainee's Medication Administration Record (MAR).

B. Detainees on a VF or VTF will be prioritized in the following manner:

1. Priority One: [redacted] (b)(2)

2. Priority Two: [redacted] (b)(2)

3. Priority Three: [redacted] (b)(2)

C. If a DH medical officer has reason to believe that the continuation of the fasting state could endanger a detainee's health or life, the detainee will be admitted to the DH. Clinical protocols for refeeding can be found in enclosure (4). When, as a result of inadequate intake or abnormal output, a DH medical officer determines that a detainee's life or health might be threatened if treatment is not initiated immediately, the DH medical officer shall give consideration to forced medical treatment of the detainee. When, after reasonable efforts, or in an emergency preventing such efforts, a medical necessity for immediate treatment of a life or health threatening situation exists, the DH medical officer may request that treatment be administered without the consent of the detainee. Once again, no direct action will be taken to involuntarily feed a detainee without the written approval of the JTF-GTMO Commander as set out above. DH medical staff shall document their treatment efforts.

D. [redacted] (b)(2)

E. [redacted] (b)(2)

[redacted] and the monitoring continued. An (b)(2) entry will be made in the health record to this effect.

F. Only the JTF-GTMO Surgeon will remove a detainee from the Hunger Striker list. The DCSS or his/her designated representative will notify JDG/S3 personnel via phone call, SIPR net, or in writing upon discontinuation of the hunger strike. No detainee will be removed from the monitoring phase until a DH medical officer has evaluated him and has determined that he is no longer on a VF, VTF, or hunger strike.

VOLUNTARY AND VOLUNTARY TOTAL FASTING AND RE-FEEDING
SOP: 001

Refusal to Accept Food or Water/Fluids As Medical Treatment

Detainee Number _____Age _____ Date _____

The above detainee has refused to accept food or water/fluids as medically indicated by the Camp Delta Medical Officer of the Day.

It has been explained to the detainee the grave risks involved with not following the medical advice directing him to eat life-sustaining food and to drink water/fluids. As a direct result of his refusal to eat and/or drink, he understands that they may experience: hunger, nausea, tiredness, feeling ill, headaches, swelling of their extremities, muscle wasting, abdominal pain, chest pain, irregular heart rhythms, altered level of consciousness, organ failure and coma. He understands that his refusal to eat life-sustaining food or drink water/fluids and to follow the medical advice may cause irreparable harm to himself or lead to his death.

He understands that this is not a complete list of the risks involved with the refusal to follow medical advice and that he may experience other severe complications.

He understands the alternatives available to him including oral food and fluid, oral rehydration solutions (Gatorade), oral nutritional supplements (Ensure), intravenous hydration, and intravenous nutrition (total parenteral nutrition and peripheral parenteral nutrition).

He fully understands the prognosis if he does not accept food as directed above.

Translator Signature

_____

Witness Signature

_____

Medical Provider Signature

_____

Enclosure (1)

004989

VOLUNTARY AND VOLUNTARY TOTAL FASTING AND RE-FEEDING
SOP: 001

Voluntary and Voluntary Total Fasting Medical Evaluation Sheet

Detainee Number _____ Date of Evaluation_____

Date of Onset _____

CC: Hunger striker: Food Fluids Both

HPI:

H/O depression?	Y	N	MEDS:
H/O Suicidal ideation?	Y	N	
Mood problems?	Y	N	
Anxiety problems?	Y	N	ALLERGIES: NKDA or _____

PMH:

Reason for Strike? _____

Physical Assessment:

Inprocessing BMI: _____

Current Weight: _____ Current BMI: _____

Heart Rate _____BP _____RR _____T _____LOC: Yes No

Other Pertinent Physical Exam Findings:

Assessment:

Plan:

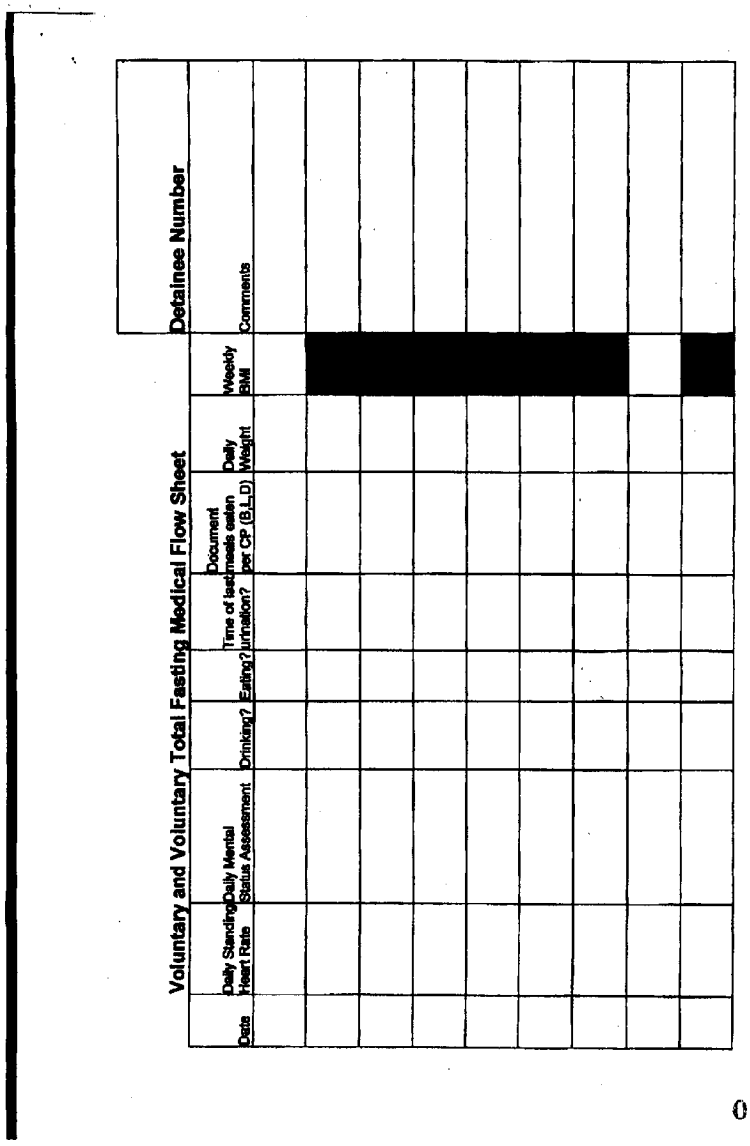
1. Explained risks of inadequate intake of food and/or water to detainee. Risks include, but are not limited to: headache, fatigue, malaise, nausea, abdominal discomfort, muscle wasting, heart problems/cardiac dysrythmias, and death.
2. Detainee given informational handout and expressed understanding after all his questions were answered.
3. Continue follow-up as per Voluntary and Voluntary Total Fasting and Re-feeding SOP.
4. Other:

Translator: _____

Provider: _____

Enclosure (2)

004590



Voluntary and Voluntary Total Fasting Medical Flow Sheet

Detainee Number

Date	Daily Standing Heart Rate	Daily Mental Status Assessment	Drinking?	Eating?	Time of last urination?	Document meals eaten per CP (B,L,D)	Daily Weight	Weekly BMI	Comments

Enclosure (3)

004391

b(2)

(b)(2)

[redacted]

b(2)

[redacted]

Enclosure (4)

VOLUNTARY AND VOLUNTARY TOTAL FASTING AND RE-FEEDING
SOP: 001

STANDARD OPERATING PROCEDURES
Detention Hospital
Guantanamo Bay, Cuba

REVIEWED AND APPROVED BY:

_____ _____
Officer In Charge Date

IMPLEMENTED BY:

_____ _____
Director for Administration Date

_____ _____
Senior Enlisted Advisor Date

ANNUAL REVIEW LOG:

By:_____ Date:_____
By:_____ Date:_____
By:_____ Date:_____
By:_____ Date:_____
By:_____ Date:_____
By:_____ Date:_____

SOP REVISION LOG:

Revision to Page:_____ Date:_____
Revision to Page:_____ Date:_____
Revision to Page:_____ Date:_____
Revision to Page:_____ Date:_____
Revision to Page:_____ Date:_____
Revision to Page:_____ Date:_____

ENTIRE SOP SUPERSEDED BY:

Title:_____
SOP NO:_____ Date:_____

004395

12

43. Senator KENNEDY. General Craddock, have any detainees been injured or lost consciousness for any reason while restrained in the chair?

General CRADDOCK. No. Insertion of a nasogastric tube may cause discomfort and, on rare occasions, can lead to some minor bleeding. However, no detainees have been injured by the enteral feeding process and no detainee has lost consciousness during the enteral feeding process.

44. Senator KENNEDY. General Craddock, what type of records are kept to track injuries, accidents, or adverse events during the forced feeding of detainees? Please provide a copy of those records to the committee.

General CRADDOCK. Every medical procedure, including enteral feeding, is carefully monitored and documented in each detainee's medical record. Enteral feedings are monitored from preparation of the detainee for the feeding through completion of the feeding and the post-feeding observation period. All procedures performed and

the amount of nutrition provided are documented in each detainee's medical record. Any injuries, accidents, or adverse events occurring during the course of this entire procedure would be documented in the detainee's medical record.

These medical records are protected to maintain the privacy of the detainees. Any requests to view detainee medical records should be addressed to the DOD.

45. Senator KENNEDY. General Craddock, are the personnel who treat the detainees for any such injuries, accidents, or adverse events the same personnel as those who use the restraint chairs?

General CRADDOCK. All enteral feedings are done by either a uniformed doctor or a credentialed registered nurse. These same medical professionals would attend to any adverse reaction to an enteral feeding that might occur, in order to provide the most immediate and effective care.

46. Senator KENNEDY. General Craddock, are the personnel who conduct enteral feedings in the restraint chair uniformed members of the Armed Forces, permanent employees of the Federal Government, or employees of a contractor to the Federal Government? If the force feeding is performed pursuant to a contract, please provide a copy of the contract to the committee.

General CRADDOCK. As stated above, all enteral feedings are done by either a doctor or a credentialed registered nurse. All of these medical professionals are uniformed members of the U.S. Armed Forces.

47. Senator KENNEDY. General Craddock, I have heard reports that detainees may be left to defecate and urinate on themselves while restrained in the chair after the feedings. Are detainees permitted to leave the chair after a feeding if they request, for example, to use the bathroom?

General CRADDOCK. Every detainee is alerted 30 minutes, and again 10 minutes, in advance of a feeding and is given the opportunity and strongly encouraged to use the toilet before being enterally fed. Despite such efforts, some detainees have chosen to urinate or defecate on themselves during the feeding process in an attempt to subvert the enteral feeding. Once the enteral feeding begins, detainees are not permitted to leave the restraint chair until the feeding and post-feeding observation process is successfully completed.

48. Senator KENNEDY. General Craddock, I have also heard reports that detainees are fed through the nasogastric tubes until they vomit. Is this true?

General CRADDOCK. No. The amount of nutrition that is medically indicated and appropriate for each detainee is carefully calculated in advance of each feeding. The rate of flow of the nutrition is regulated so as to be tolerated by the detainee with minimal discomfort and without any adverse reaction, such as vomiting. Despite these precautions, on rare occasions, vomiting may occur.

49. Senator KENNEDY. General Craddock, does the feeding cease when a detainee vomits?

General CRADDOCK. Yes. A registered nurse closely monitors each detainee during the feeding process. If a detainee demonstrates intolerance of the feeding such as vomiting or abdominal pain, the feeding is discontinued and the detainee's problems with the feeding are evaluated prior to any further feeding.

50. Senator KENNEDY. General Craddock, how is the amount to be fed determined?

General CRADDOCK. The amount to be fed is carefully calculated based on the nutritional needs of each detainee and their individual body mass index.

51. Senator KENNEDY. General Craddock, I have heard reports that detainees claim that the tubes are inserted, removed, and reinserted in a manner that causes great pain. What type of training do the personnel who insert the tubes receive?

General CRADDOCK. This standard medical procedure is only conducted by trained, uniformed medical professionals (physicians and credentialed registered nurses) in a careful and compassionate manner using a medically appropriate protocol.

52. Senator KENNEDY. General Craddock, would the use of restraint chairs, enteral feeding tubes, and nasogastric tubes be consistent with Army Regulations, including FM 34–52, for the care and treatment of persons in custody?

General CRADDOCK. FM 34–52 provides doctrinal guidance on the intelligence gathering and interrogation techniques and has nothing to do with enteral feeding.

Enteral feeding is a medical procedure, conducted in a safe, humane manner by trained medical professionals, to save the lives of the men in our custody. Enteral feeding as conducted at Guantanamo is consistent with DOD directives. The procedures used at Guantanamo, to include the use of a restraint chair, are patterned after procedures utilized by the United States Bureau of Prisons, with whom Joint Task Force officials conferred prior to establishing the protocols for use of the restraint chair for enteral feeding.

UIGHURS

53. Senator KENNEDY. General Craddock, I understand that there are a number of ethnic Uighurs from China who are being held at Guantanamo, and that our government has declared that they are not enemy combatants, yet they continue to be held. On what basis are the Uighurs currently being held?

General CRADDOCK. There are a number of ethnic Uighurs from China currently being held at Guantanamo. Five of the Uighurs were determined to be No Longer Enemy Combatants (NLECs) as part of the Combatant Status Review Tribunal (CSRT) process. The remaining Uighurs were and still are enemy combatants. Typically, if the CSRT made a determination that a detainee was a NLEC, the detainee would be returned to his native country. The five NLEC Uighurs are being detained at Guantanamo, pending the outcome of diplomatic efforts to release them to an appropriate country.

54. Senator KENNEDY. General Craddock, what current efforts are being made to repatriate them or to find a safe haven in a third country?

General CRADDOCK. The Department of State is responsible for finding a third country willing to take the NLECs.

55. Senator KENNEDY. General Craddock, how long will they be held if efforts to repatriate them or find them another place to go are unsuccessful?

General CRADDOCK. The five NLEC Uighurs will be held in a safe and humane manner until the Department of State arranges for their transfer to a third country.

56. Senator KENNEDY. General Craddock, what will you do with them then?

General CRADDOCK. As soon as directed, I will release the five Uighurs in accordance with arrangements made by the Department of State. In the interim, the five Uighur NLECs remain housed in a camp with a communal living arrangement, including free access to all areas of that camp. The camp includes an exercise/recreation yard, a bunk house, and activity room. The NLECs also have access to a television set with VCR and DVD capability, a stereo system, recreational items (such as soccer, volleyball, ping pong), unlimited access to a shower facility, air conditioning in all living areas, special food items, and library materials.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. AKAKA

INFRASTRUCTURE PROTECTION

57. Senator AKAKA. Admiral Keating, you told us that NORTHCOM is working to protect non-DOD critical infrastructure such as the defense industrial base. The DHS is the lead Federal agency on critical infrastructure protection. Could you explain how you are augmenting DHS's role in this area?

Admiral KEATING. As a partner in interagency cooperation, we have supported the efforts of the Joint Staff and Assistant Secretary of Defense for Homeland Defense to develop DOD policy for the protection of DOD critical infrastructure, the defense industrial base, and non-DOD critical infrastructure. This support includes implementing a comprehensive means of identifying critical infrastructure, assessing its vulnerability, and planning and implementing mitigation, response, and remediation options. The DOD shares the results of these vulnerability assessments with the DHS and the States. If directed by the President or Secretary of Defense, NORTHCOM would protect non-DOD critical infrastructure in support of DHS.

NATURAL DISASTER RESPONSE

58. Senator AKAKA. Admiral Keating, I understand that one of the strengths of NORTHCOM is its ability to pull forces and capabilities from across the DOD. All the same, I have some concerns about how many forces would be immediately available in the event of an emergency. Given the large number of units required to sus-

tain the current operations tempo outside of NORTHCOM, what is the force availability for NORTHCOM?

Admiral KEATING. We can draw from the pool of DOD forces available within the Continental United States (CONUS) to support civil authorities in an emergency. This pool includes active component forces from all Services, as well as a limited number of identified and sourced response forces such as the Chemical, Biological, Radiological, High-Yield Explosive Consequence Management Response Force. We would request specific capabilities as required to respond to any emergency. Although certain types of combat support and combat service support units are in high demand for overseas operations, we remain confident that sufficient capabilities remain in CONUS to support any magnitude of DOD humanitarian assistance and disaster relief response.

In addition to any forces that NORTHCOM may access to support an emergency, the States have considerable National Guard assets that could be applied by the respective governors. State National Guards also have Emergency Management Assistance Compacts with other States to prearrange assistance from one State to another; these are the governors' Interstate Mutual Aid Compacts that facilitate sharing of resources, personnel, and equipment across State lines during times of disaster or emergency. NORTHCOM maintains situational awareness of National Guard employment by States, including when one State provides support to another.

59. Senator AKAKA. Admiral Keating, what is being done to ensure that there will be an adequate number of forces available in case of a natural disaster or some other form of national emergency?

Admiral KEATING. We have an active, integrated, layered defense that allows us to rapidly take operational control of military assets needed to protect the United States and provide support to civil authorities in times of crises. Active-Duty DOD forces from all Services within the CONUS are available to NORTHCOM to defend the homeland and support civil authorities in an emergency.

NORTHCOM defends the homeland primarily through our dedicated Service components:

- Army North located at Fort Sam Houston, Texas
- Air Force North located at Tyndall Air Force Base, Florida
- Marine Forces North at New Orleans, Louisiana

The Commander Fleet Forces Command, located at Naval Station Norfolk, Virginia, is designated as the Navy's Supporting Commander to NORTHCOM.

We provide defense support of civil authorities primarily through our subordinate commands:

- Joint Task Force North at Fort Bliss, Texas
- Joint Task Force Civil Support at Fort Monroe, Virginia
- Joint Force Headquarters National Capital Region at Fort McNair, Washington, DC
- Joint Task Force Alaska at Elmendorf Air Force Base, Alaska

For land domain operations, NORTHCOM postures and positions forces to deter and prevent attacks. Quick and rapid response forces and consequence management forces are maintained at appropriate alert levels to meet potential threats. We are prepared to execute operations to provide support for multiple chemical, biological, radiological, nuclear and high-yield explosives (CBRNE) events. An initial CBRNE Consequence Management Response Force (CCMRF) is postured to quickly respond to a CBRNE event with additional CCMRF forces for subsequent events identified for employment as needed.

To defend the Nation's airspace, we have aircraft on alert throughout the United States based on a tiered response system. As threat levels intensify, we increase the number of aircraft on alert and on patrol.

If the intelligence stream points to a credible threat in the maritime domain, we position U.S. Navy and U.S. Coast Guard assets to support a comprehensive and active layered defense that uses all elements of national power to defend the homeland. This can include air and surface assets assigned to NORTHCOM from any Service or location.

DOD forces that may be needed for homeland defense and civil support operations are outlined in the following NORTHCOM Concept Plans (CONPLAN):

- CONPLAN 2002, Homeland Defense
- CONPLAN 2501, Defense Support of Civil Authorities
- CONPLAN 0500, Defense Support of Civil Authorities for Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives Consequence Management Operations

In addition to any forces that NORTHCOM may access to support an emergency, the States have considerable National Guard assets, such as WMD-Civil Support Teams, that can be applied by the respective governors. NORTHCOM maintains situational awareness of National Guard employment by States, including when one State provides support to another.

In addition, we are working with the Joint Staff to gain authority to deploy capabilities, with minimal impact on forces, to facilitate a quick and flexible DOD response. For example, we would be authorized to deploy a Defense Coordinating Officer and Defense Coordinating Element to provide Defense Support of Civil Authorities in response to primary Federal agency requests. In addition to these authorities, we would also gain the ability to have select assets placed on increased alert levels to enable quick response to any incident. These select assets are those that would enhance our ability to support search and rescue operations.

60. Senator AKAKA. Admiral Keating, at the recent Senate Homeland Security and Government Affairs Committee hearings on Katrina, the Secretary of Homeland Security, Michael Chertoff, expressed some confusion regarding the relationship between PACOM and NORTHCOM. As you can imagine, this has raised some concerns for me regarding the ability of PACOM, NORTHCOM, and DHS to work together and effectively respond to a crisis situation in Hawaii. Even though both you and Admiral Fallon have assured me that the DOD is working on establishing open lines of communication and a clear chain of command between the DHS, PACOM, and NORTHCOM in the case of a natural disaster or national emergency in Hawaii, I am hoping to get more details on your progress. What, specifically, is being done to ensure there is effective interagency cooperation in the event of an emerging crisis?

Admiral KEATING. NORTHCOM and PACOM have permanent liaison officers assigned to each command who ensure that information is shared and open dialogue is maintained. NORTHCOM will support PACOM during times of crisis in the PACOM area of responsibility, including Hawaii. If a Joint Task Force is required to support operations in PACOM's area of responsibility, NORTHCOM would augment the task force as needed.

The Hawaii State National Guard is the primary military entity that would respond to any natural disaster on the islands. The Governor of Hawaii would request DOD/PACOM's assistance when it appears resources for the islands are not adequate for the response.

PACOM, NORTHCOM, and the other combatant commands participate in a monthly Joint Interagency Coordination Group video teleconference. During these meetings, issues are addressed that affect the relationship between DOD and State and local response agencies. PACOM and NORTHCOM participate in many of the same exercises, conferences, and workshops, and our staffs work closely together to coordinate actions.

61. Senator AKAKA. Admiral Keating, can you also tell me if the DOD is working with State and local agencies in its efforts to ensure effective communication and a clear chain of command?

Admiral KEATING. We have several ongoing initiatives:

- We are working with the DHS and the National Guard to develop common data sets that allow everyone to "speak the same language" when referring to events or requesting assistance real-time.
- Our deployable forward command and control element, Standing Joint Force Headquarters North, conducts quarterly State National Guard engagement meetings to ensure effective communications and coordination.
- Members of NORTHCOM attend State and regional workshops to exchange information on capabilities and emergency response operations.
- We participate in several State and regional exercises and conferences to prepare for a timely coordinated response to emergency situations.

QUESTIONS SUBMITTED BY SENATOR BILL NELSON

VENEZUELA

62. Senator BILL NELSON. General Craddock, recently, the Miami Herald reported that Venezuela received its first three Russian helicopters. Venezuela has signed contracts with Russia for other armed helicopters, as well as 100,000 rifles. Why does President Chavez think he needs these weapons and what do you think he really plans to use them for?

General CRADDOCK. The government of Venezuela has said the 100,000 rifles are a part of its military modernization program. It has not said what it plans to do with the FAL Light Assault rifles that will be replaced. Included in the purchase is a licensing agreement that authorizes Venezuela to manufacture both the rifles and ammunition. Venezuelan military officials have stated the helicopters will be used in support of rescue and evacuation missions.

63. Senator BILL NELSON. General Craddock, Venezuela is sending thousands of barrels of oil daily to Cuba, propping up President Castro's regime and financing travel for thousands of Cuban 'doctors, coaches, and teachers' who work in poor neighborhoods throughout Latin America. What is the daily dollar value of assistance that Venezuela is providing to Cuba through oil transfers and direct cash?

General CRADDOCK. Venezuelan crude oil currently sells for approximately U.S. $53 per barrel on the open market, but Venezuela is selling oil to Cuba for U.S. $27 per barrel. Therefore, Venezuela is providing Cuba approximately U.S. $2.44 million per day or approximately U.S. $891 million per year. We have no information regarding direct cash payments to Cuba.

Oil equation	
Real market value of oil:	95,000 bbd/day × $53 = ~ $ 5.00 million/day
Discounted price to Cuba:	95,000 bbd/day × $27 = $ 2.56 million/day
Total discount for oil:	$ 2.44 million/day

AL QAEDA

64. Senator BILL NELSON. General Craddock, on February 21 you warned that "the opportunity exists for al Qaeda to operate in the tri-border region"—Brazil, Paraguay, and Argentina. Have we detected al Qaeda or other terrorist activity in the tri-border region?

General CRADDOCK. [Deleted.]

AMERICAN HOSTAGES IN COLOMBIA

65. Senator BILL NELSON. General Craddock, please tell us about the search for the three American hostages in Colombia. There is a report that remains have been located in a mass grave in Tolima. Has the appropriate DNA analysis been conducted on these remains and can you share any conclusions from these tests with the committee?

General CRADDOCK. Forensic evidence collected at Gaitan grave site did not match the DNA of the three American hostages. The search for the American hostages continues with the DOD collaborating with other U.S. Government organizations and Colombian authorities. One ongoing effort is a radio transmission campaign in Colombia designed to increase the perceived benefits to the narcoterrorists of releasing the hostages unharmed. We are also advertising a reward program for information leading to the recovery of the hostages.

[Whereupon, at 11:35 a.m., the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2007

TUESDAY, MARCH 14, 2006

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

JOINT STRIKE FIGHTER F136 ALTERNATE ENGINE PROGRAM

The committee met, pursuant to notice, at 1:38 p.m. in room SH–216, Hart Senate Office Building, Senator John Warner (chairman) presiding.

Committee members present: Senators Warner, McCain, Thune, and Lieberman.

Committee staff members present: Charles S. Abell, staff director; Leah C. Brewer, nominations and hearings clerk; and John L. Quirk V, security clerk.

Majority staff members present: Ambrose R. Hock, professional staff member; Gregory T. Kiley, professional staff member; Stanley R. O'Connor, Jr., professional staff member; Lynn F. Rusten, professional staff member; and Scott W. Stucky, general counsel.

Minority staff members present: Creighton Greene, professional staff member; Bridget W. Higgins, research assistant; and Peter K. Levine, minority counsel.

Staff assistants present: Micah H. Harris and Jessica L. Kingston

Committee members' assistants present: Stuart C. Mallory, assistant to Senator Thune; Mieke Y. Eoyang, assistant to Senator Kennedy; and Frederick M. Downey, assistant to Senator Lieberman.

OPENING STATEMENT OF SENATOR JOHN WARNER, CHAIRMAN

Chairman WARNER. The committee will come to order. I thank our witnesses for readjusting your schedules to comport with what the Senate schedule is. I've been a member of this institution some 28 years now, and you can never quite predict exactly what's going to occur, but when I was advised that we were going to have a minimum of six and I now hear from a colleague, just moments ago, it could be well up to nine consecutive votes beginning at 3 p.m., it was imperative that we move this schedule up.

I'm also grateful for those who have come from long distances, particularly our friends from the United Kingdom (U.K.), others here that I'll recognize in Panel II, because it's my judgment that this is a very serious issue and it requires the most careful attention, fairly and objectively of a recent decision made by the Department of Defense (DOD) to suspend the research and development, and other steps, leading towards having a second engine for this important aircraft.

So we meet today to receive testimony from our international partners, and may I underline the word partners, in the Joint Strike Fighter (JSF) program on the proposed termination of the F136 alternate engine.

Lord Paul Drayson, Minister for Defense Procurement, and Sir Jock Stirrup, Chief of the Air Staff will represent the U.K. on the first panel today and I welcome you gentlemen and again, acknowledge the distances that you have traveled. But that conveys to any fair-minded member of this committee, and we're all fair-minded, the importance of the decision to your country, and not only your country, but to the other partners abroad.

On the second panel of the hearing, representing Australia will be Air Commodore John Harvey and I'll introduce the balance of that panel when they come up.

Several nations were not able to have representatives here today and they have sent statements. Denmark, Netherlands, Norway, and Turkey, and each of those statements will be incorporated in today's record in lieu of the live testimony.

So we welcome all of our witnesses and we are here to not only look at the importance of the partnership, but how in the face of a shrinking industrial base here in America, and I imagine in your respective countries, a greater and greater degree of dependence that comes on the ability on a consortium of nations to get together and share again as partners, the responsibility for the development and the production of defense requirements.

I recall when I was privileged to serve as Secretary of the Navy in the period of 1969 to 1974, the Department of the Navy at that time had 1.2 million men and women in uniform. That was sailors and marines. Today that's roughly the entire size of the Active Forces of the United States. We had some 700,000 civilians, and we had a number of aerospace companies building for us all types of equipment for air, a number of ship builders, and on and on went the industrial base.

Now this program, as I said, includes eight nations, in addition to the United States, who've pledged $4.6 billion towards the development costs, just the development costs, of the JSF. All of the parties, in my judgment, have not only a stake, but a voice in the successful management of this program. The program is the largest dollar acquisition program in the defense history of our Nation. It will produce a single engine Strike Fighter that will be used by our three Services and our allies for the next 30 years, with a possible program exceeding well over 3,000 to 4,000 aircraft worldwide.

Historically the United States and its allies have operated fighter and attack aircraft manufactured in their own countries. That will change with this program. The JSF is planned to replace the F–16, the A–10, the AV–8B, the F/A–18C/D, the British Sea Harrier,

and the GR–7. It will likely replace other aircraft in countries, and I'm certain they'll testify to that effect when they take the stand.

By 2030, the JSF and F–22 will represent 85 percent of the U.S. and allied tactical air power. Close collaboration therefore, is mutually beneficial because it promotes the interoperability, the joint training, joint learning, similar tactics, and growing service-to-service relationships that are vital in the conduct of coalition operations, and indeed the war on terrorism.

Joint development of the JSF could also create efficiencies in the production of the aircraft, and greater control over the costs, to reduce the fiscal burden on each of the countries. The DOD has proposed cutting the second engine, as I said, and this would be an immediate turnabout from a contract in just late summer to continue this program of $2 billion plus. So this rapid turnaround is quite perplexing, and we wish to know clearly, among the factors to be considered in this committee, the extent to which you were consulted by the United States, the extent to which we allowed you to participate in evaluating the decision to stop the two engine program and go to the single engine.

There are many in this room, far better than I, able to address the issues of, can we ourselves tolerate situation of a technical flaw in the engine design, what would we do if there were an across-the-board standdown of this aircraft were that to develop? Is the entire fleet in all eight nations to be stood down, or is it not more advisable to have a certain proportion of the worldwide fleet with a different engine in the event of that contingency? Then you have to look at the possibility that relying on a single engine design, one producer, could increase the costs over the life of the program, and whether in the absence of competition, you could control those costs?

I shall put the balance of my statement in the record. I will yield now to my distinguished colleague, Senator Lieberman.

[The prepared statement of Senator Warner follows:]

PREPARED STATEMENT BY SENATOR JOHN WARNER

The committee meets today to receive testimony from our international partners in the Joint Strike Fighter (JSF) program on the proposed termination of the F136 Alternate Engine Program.

Lord Paul Drayson, Minister for Defence Procurement; and Sir Jock Stirrup, Chief of the Air Staff, will represent the United Kingdom on the first panel of today's hearing.

On the second panel of this hearing, representing Australia will be Air Commodore John Harvey, Director General, New Air Combat Capability, Royal Australian Air Force; and Rear Admiral Raydon Gates, Head of the Australian Defence Staff in Washington. Representing Italy will be Lieutenant General Giuseppe Bernardis, Chief of the Department for Armament Programs, General Secretariate for Defence and National Armaments; and Major General Pasquale Preziosa, Defense and Defense Cooperation Attache, Embassy of Italy.

Denmark, the Netherlands, Norway, and Turkey have submitted letters for the record in lieu of testimony here today. Their letters will be included in the record of this hearing.

We welcome all of our witnesses and the written statements of other nations. Our longstanding alliance relationships are of immense value to the United States and are critical to addressing the common security challenges we face today and in the future.

As the industrial base serving America's national requirements diminishes in size, the United States must become more reliant upon other nations to meet our requirements.

The international partnership for the JSF is one of the largest and most important partnerships in contemporary military history. It includes eight nations in addition to the United States who have pledged $4.6 billion toward the development costs of the JSF. All of the partners have a stake and a voice in the management of this program.

The JSF program is the largest dollar acquisition program in DOD history. It will produce a single engine strike-fighter that will be used by our three Services and our allies for the next 30 years, with the possible program of over 3,000 aircraft to the United States.

Historically, the United States and its allies have operated fighter and attack aircraft manufactured by their own nations. That will change with the JSF. The JSF is planned to replace the F–16, A–10, AV–8B, F/A–18C/D, the British Sea Harrier, and GR–7. It will likely replace other aircraft as well. By 2030, the JSF and F–22 will represent 85 percent of U.S. and allied tactical air power.

Close collaboration is mutually beneficial because it promotes interoperability, joint training, joint learning, similar tactics, and growing service-to-service relationships that are vital in the conduct of coalition operations.

Joint development of the JSF should also create efficiencies and control costs for countries seeking to develop the next generation of fighter aircraft.

As our witnesses are aware, the DOD has proposed cutting from the program the development of the F136 Alternate Engine. An immediate turn around on a contract that was signed just last year. This committee is closely examining the matter to determine whether or not that proposal is in the best interest of our national security and the JSF program.

Among the factors we must consider are: What are the risks in relying on a single engine design? Could we find ourselves in a situation where a technical flaw in the engine design could preclude the capability to conduct combat operations on a broad scale? The other important factor, of course, is cost: Would relying on a single engine design reduce, or increase, costs over the life of the program? While the upfront cost of developing one engine is lower than the cost of developing two engines, experience has shown us that the lack of competition tends to drive up costs over the life of a major weapons system.

Senator LIEBERMAN. Thank you, Mr. Chairman. I join you in thanking our witnesses who've come some distance and I appreciate that you are here. When you were talking about the difficulties of the Senate schedule, for the first time, one of my favorite Mark Twain-ism's and Twain spent, what we in Connecticut believe were his most literary productive years in Hartford, Connecticut. He said famously about weather in New England, that if you don't like it, wait a moment it will change. That's the way it is with the Senate schedule, isn't it? If you don't like it, wait a minute, it will change. But thank you for changing with us as we try to accommodate to the schedule.

I do thank you all for being here. I'm particularly impressed by the international representation and it speaks to the international nature of the JSF program, which is a most positive element of the program.

We have a disagreement here, and I thanked the chairman for providing the opportunity to air this disagreement. This is a disagreement among not just allies but friends, and it's in that spirit that I certainly intend to go forward in expressing my point of view today, and after in questioning the witnesses who have been good enough to come before us.

The fact is, that the United States, both in the administrative and legislative branches, wants the JSF to be the first of many future defense collaborations with our allies abroad. So, one of the tests of our ability to do that is to deal with disagreements in a way that is not ultimately divisive.

We share some interests here, of course. We in the United States and all of our international partners want the production of the

JSF to proceed in a timely and economic fashion. The goal of the JSF program is to produce after all, the most affordable, lethal, supportable, and survivable aircraft in the history of warfighting.

It is our responsibility, as Members of Congress, to oversee the acquisitions process of major military weapons systems, and to make sure that they are developed with the best operational performance at the lowest possible cost.

In that regard, it seems to me that President Bush's fiscal year 2007 budget request to cease funding for the alternate engine of the JSF program is a wise decision. I understand the opposition of those who will testify today and I look forward to the dialogue back and forth.

I do want to say historically that this is short history, not long history, that this decision in some sense follows on a major decision made a few years back when the DOD decided to award the single production line to Lockheed Martin. There was then a lot of debate about the wisdom of the approach. I do want to cite a RAND study in April 2001, that concluded that the DOD would not recoup costs through establishing a second production line, in that case of course, for the airframe.

It also concluded that a winner-take-all strategy would not push the losing company out of the fighter aircraft business and some of those same factors are at work here. I recognize that a great British company, a great global company, Rolls-Royce, has partnered with General Electric to produce the alternate engine and of course, we have deeply valued the special relationship that the U.S. has with the U.K. But it is my understanding and my belief, that Rolls-Royce will still remain an important contributor to the JSF's development in its role as a subcontractor to Pratt & Whitney on the vertical lift version of the JSF and furthermore, not directly Rolls-Royce, but in terms of international partnership, a U.K./U.S. partnership, the BAE Systems and Smiths Industries, two additionally great British companies, will work as significant subcontractors for Lockheed Martin.

I'm going to argue today that the elimination of the alternate engine program actually applies the principles of competition to keep costs down. I know that we are going to hear the reverse argument today, that the only way to reduce the price—or one of the best ways to reduce the price is by retaining the alternate engine program, but I believe that significant competition on the JSF engine has already taken place. In three separate contests, the engines produced by Pratt & Whitney have emerged as the winner.

Since government guidelines have determined that the primary engine and its alternate version must be interchangeable, I don't understand how much is to be gained from further competition between these two versions. I want to stress the primary engine, the facts will show, has outperformed its competitor, and is at least 18 months ahead in development, and those are very important factors for all nations involved in the JSF program. Given those facts, it seems to me not to be sensible to invest an additional $1.8 billion by the DOD on administration numbers in the alternate engine program. That's $1.8 billion, that members of this committee know, and certainly people in the Pentagon do, is urgently needed and

can be urgently spent in support of other very critically necessary acquisitions by the DOD.

As I mentioned earlier, one of the most important goals of our partnership internationally, is to produce the most powerful aircraft, at the best possible price. As our level of expected JSF procurement decreases, it becomes less likely that we will recover the substantial upfront investment in the alternate engine. If funding for both engines continues, I fear that we will double the cost of all future upgrades and increase logistics costs.

Let me say for the record, what I'm sure most, if not all of you know, Pratt & Whitney happens to be located in the State of Connecticut, which I represent in Congress. I'm not unmindful of that, but I truly believe that the facts argue for the recommendation that the administration and the DOD have made this year, and the fact this decision has to be viewed in a larger context.

Senator McCain is the chairman of the Airland Subcommittee, I'm privileged to be the Ranking Democrat on that subcommittee. We've spent a lot of time in recent years on that subcommittee focusing on the skyrocketing costs of military acquisition programs. Viewed in the context of our increasingly resource-constrained budget and our inability to produce major weapons systems in the numbers that we believe we need, part of that is because money is going to the war in Iraq and Afghanistan, part of it is because of personnel costs.

But one way to go at this and try to produce more major equipment systems needed by our military, high-tech ones, is to push hard to reduce the costs of acquisition of each system, and the people in the Pentagon are doing that. In that context, it seems to me that the DOD's difficult, but I would say ultimately a sensible decision to eliminate the alternate engine program for the JSF to keep it an affordable program, is the right decision.

We not only promised our international partners a first class aircraft, but we promised to deliver the product at a reasonable price. I think it's in the interest of all of us that we keep our pledge to do that, and one good way is to stand by the administration and DOD's recommendation in this regard.

Mr. Chairman, I thank you and I look forward to the witnesses' testimony.

Chairman WARNER. Thank you, Senator. We're very fortunate on this committee to have a very accomplished and distinguished aviator, Senator McCain.

Senator MCCAIN. I'd love to hear from the witnesses, Mr. Chairman, thank you.

Chairman WARNER. Thank you.

Lord Drayson.

STATEMENT OF LORD PAUL DRAYSON, MINISTER FOR DEFENCE PROCUREMENT, UNITED KINGDOM

Mr. DRAYSON. Thank you, Chairman. Mr. Chairman, Ranking Member Levin, and members of the committee, I'm grateful to have the opportunity this afternoon to set out the U.K.'s position on participation in the JSF program. I'm fortunate to have with me, Air Chief Marshal Sir Jock Stirrup, Chief of the Air Staff, and soon to be Chief of the Defence Staff.

I know it is unusual for a member of Her Majesty's Government to offer testimony to the United States Senate, and I welcome the opportunity to do so here, to highlight the importance that the U.K. attaches to JSF. It's a key component of our future national military capability.

I'm conscious that my invitation to testify before this committee stems from your desire to hear our views about the F136 engine. My government's position on this is straightforward. The F136 is a strategically important collaboration between our two defense sectors, which we agree is a crucial factor underpinning our wider defense relationship.

Cancelling this program would not only be a blow to such cooperation, but could also damage the commercial and military robustness of the JSF program. This is of crucial strategic importance to the future defense of our two nations we believe. The F136 inserts an important competitive element to the JSF program by providing an alternative choice for the aircraft engine both at initial acquisition and importantly through-life with all the monetary savings that this will offer us both.

There is also the potential growth capability that the F136 offers as a new generation engine. For these reasons and given the importance of the project to Rolls-Royce, as the Minister responsible for the U.K. defence industrial base, I would still wish to see funding for F136 included in the DOD program.

One of the findings of our recent defence industrial strategy has been the need to pay greater attention to minimizing the through-life costs of equipment. Given that as a rule of thumb, for every dollar spent in initial acquisition, a further $4 are spent subsequently on support and upgrades.

We believe the F136 engine may lead to lower through-life costs and deliver the best outcome for both our warfighters and our taxpayers. To cancel this important collaborative engine program has significant commercial and industrial implications. We need to understand why the administration has made this decision.

One of the reasons I am here this week is to discuss with the administration the business case behind their decision to cancel the F136 program. As a level one partner, we expect to be properly consulted on decisions of this magnitude. I shall be following this up with the administration this week.

Of course, the F136 decision is only part of the wider JSF program, and this is why I am particularly grateful for the opportunity to provide evidence on this issue and the JSF program as a whole today. U.K. defence and security policy is rooted in the transatlantic alliance, at the heart of which is the uniquely close and enduring relationship between our two countries.

Our unique friendship has its roots in a shared language and cultural heritage. But at its most fundamental level, this is a relationship founded on the rock of common values and forged in the fire of a shared determination to defend them. We in the U.K. are grateful for the role that the U.S. has played in the past—and continues to play now in defending civilized values and freedom, and we are proud that you count us as and trust us to be your closest ally.

At present, our Armed Forces are working together in Iraq, Afghanistan, and the Balkans, within the North Atlantic Treaty Organization (NATO), and in coalition to bring stability to those troubled parts of the world, and the opportunity for the people who live there to gain control of their own destinies. We stand side-by-side against the terrorists who seek to attack our homelands and those of others as we have seen in the attacks on New York, the Pentagon, London, Madrid, Bali, and elsewhere.

Our aim is to ensure that future generations of the U.K. and U.S. service men and women can continue to stand shoulder-to-shoulder in pursuit of common goals. Increasingly, we recognize that this will depend on access to common technology. The British public expect us to equip our warfighters with the very best.

With the increasing complexity of technology and its growing importance to fighting power, the ability to share information and technology between our two countries is ever more vital. This is why the U.K. freely provides technology and support to the United States. This has been an area in which we have, with the administration, expended much effort over recent years. I'm grateful to the committee for the leadership, friendship, and support that you have shown in this regard.

Notwithstanding the slowness of progress, which has disappointed many on both sides of the Atlantic, we remain committed to working closely with you and the administration to resolve this problem once and for all. With the JSF entering a key phase over the next 12 months, 2006 is a crunch year.

A key element of the U.K.'s defence policy is to maintain credible, flexible, expeditionary combat power within striking range of an adversary. Our carrier strike program will do just that. It will include two new aircraft carriers, and crucially the JSF. It will ensure our military have the ability to launch air power from both land and sea, at a time and place of our choosing. This will maximize our political and military freedom of action, even when access basing and overflight may be uncertain.

JSF will be the key to our precision strike capability and our ability to make significant contributions to future coalition operations. Our ability to identify and attack high value, time sensitive targets will depend upon JSF's combination of advanced sensors and low observability.

Interoperability with our partners will be essential and will depend upon the aircraft being integrated, upgraded, operated, and sustained efficiently and effectively by the U.K. JSF is a transformational military capability using transformational collaborative acquisition. As a model for international collaboration, JSF is highly innovative.

But as well as rewards, this innovation brings challenges. We're determined to meet those challenges, particularly as we approach the production, sustainment, and follow-on development phases of the project. We are working with the administration and other partner nations towards the signature at the end of this year of the Memorandum of Understanding (MOU) that will enable these phases. It will commit the U.K. to the whole life of the JSF program. We must, therefore, be sure and understand the nature and the balance of the obligations between our nations consistent with

the principles of the agreements on JSF we have signed to date. We are not asking for anything new.

Now I fully understand that there are excellent reasons, of course, to protect American defense technology. However, as a key ally standing shoulder-to-shoulder, we do expect you to understand how sensitive these technology transfer issues are for us.

In December we published a Defence Industrial Strategy, which explicitly established as U.K. government policy the primacy of the requirements of our armed forces in all of our equipment decisions. It identifies the need to ensure we have what we term operational sovereignty over our equipment. Put more succinctly, in the case of JSF, this means being able to fly and fight the aircraft when and where we need to.

We have identified a number of issues that we believe will give the U.K. assurance of the operational sovereignty we need to ensure the successful operation of the JSF by the Royal Air Force and the Royal Navy. We need to be able to integrate the JSF into the British operating environment and be confident that we can maintain, repair, and upgrade the U.K. fleet to meet the through-life needs of our forces.

Through our level one status, we have embedded our firm national requirements for systems and weapons into the System Design and Development program. However, it is the through-life aspects of the program that must now come into focus. Whilst ensuring that we maintain maximum commonality and configuration control with the aircraft in service with U.S. forces, inevitably, there will be differences in configuration driven by the capability needs of the U.K. user to meet emerging threats. The route to satisfying these requirements needs to be taken into account at the outset of the production, sustainment, and follow-on development phase of the program.

While recent history tells us that U.K. and U.S. forces usually fight together, we will need to be able to fly the JSF alongside other coalition allies too. There also may be occasions when we undertake operations on a national basis, as we did so effectively in Sierra Leone. This means that we need to be able to reconfigure the JSF weapon system to meet U.K. specific operational threats and scenarios. We need also to be able to meet U.K. and international legal requirements in having the aircraft and its systems certified for safe use.

At one level, this reflects the need to be satisfied on the very real operational and value for money considerations. Many of the processes will be very similar to U.S. requirements, but they are not identical, and to achieve the level of confidence that certifying authorities will require, we must be able fully to understand the key characteristics of the JSF system to meet our duty of care to the brave young men and women in uniform who will fly and fight the aircraft.

To support the U.K.'s aircraft, we expect to use Team JSF, led by Lockheed Martin. However, due to the unique understanding and record of U.K. industry supporting our services' aircraft, we expect that Team JSF would make best use of its U.K. industrial partners in the support and maintenance solutions for JSF. But I am explicitly not here to lobby for their commercial interests. I am

here today to present a baseline of military requirements and so I do not rule out that some elements of this requirement will have to be met using U.K. government and service resources and personnel.

The U.K. joined the JSF program at a very early stage. My task and that of my governmental colleagues, is to give the British armed forces the best we can. We have already invested $2 billion in the system development and demonstration (SDD) phase of the project, a very significant proportion of our total equipment budget. Our whole life financial commitment to JSF will be many times more. That is one reason we are the only level one partner on the program. It confers a particular partnership status in the JSF program.

The U.K. contributes also to the success of the program. The JSF showcases the very best of British as well as American technology. For instance, precision production techniques and technology derived from our experienced short take-off and vertical landing (STOVL) aircraft flight control laws and the STOVL lift system, are key contributors to the success of the JSF program.

The key point is that the flow of technology is a two-way street. Collectively I hope members of the committee can agree that it needs to stay that way. We are discussing the issues with the administration, and it would not be appropriate to get into the detail here. Our objective is to have resolved these issues as soon as possible, so we have the confidence to sign the MOU later this year.

Let me state our bottom line. These issues are important to us because they enable us to make the judgment that the aircraft are fit to fight, and we can send our men and women into action in that knowledge. This decision has to be one for the U.K. The British government's responsibility to our armed forces and their families means that this judgment can only be made by the U.K.

If we do not have the information and technology needed to make that decision, then I shall not be able to sign the MOU. I recognize the consequences that that would have on the U.K.'s continuing participation in the program, but let me be blunt. We have no reason to believe that our discussions with the administration will not be successful. But without the technology transfer to give us the confidence to deliver an aircraft fit to fight on our terms, we will not be able to buy these aircraft.

I'm spelling this out because it is so important to make our intentions clear. I know the British can sometimes be accused of understatement. This is about ensuring that the investment of billions of U.K. tax dollars in the JSF program will deliver the capabilities that we need as your ally and as a sovereign nation. It's about reflecting in the JSF project the trust and a mutual interdependence that characterizes our deep cooperation in each other.

Equally sensitive areas of our bilateral joint endeavors demonstrate this. It is not about industrial politics. As I said, our dialogue with the administration on these issues continues. I am optimistic that we can find a way through that will meet our requirements for sovereign capability, while having in place a rigorous control regime that protects your national security requirements. I say this because it seems to me that it must if we are to live up to your recently published Quadrennial Defense Review (QDR),

which highlights the closeness of our military relationship, and states it as a "model for the breadth and depth of cooperation that the United States seeks to foster with allies and partners around the world." I say it because the evidence that we can be trusted to do so seems to me to be irrefutable.

For example, we already share extremely sensitive data and information in other operational contexts. Today, right now, the lives of U.S. forces depend on information and technology provided by the U.K. We have a formal General Security of Information Agreement on a government-to-government basis. It works and it has teeth.

To the extent that industry would need to be involved, British companies are well use to operating in compartmented and firewalled environments to protect classified information, and this is underpinned by longstanding agreements that work, are inspected by your security people, and have protected your and our vital interests for many years.

We are approaching important decisions on JSF, where we will need to be assured that we will have operational sovereignty that we require. I hope, Mr. Chairman, that we can look forward to the support of your committee.

Mr. Chairman, with you permission I would like to ask Air Chief Marshal Stirrup to set out his military perspective of our requirements.

Chairman WARNER. Permission granted.

Mr. DRAYSON. Thank you, sir.

Chairman WARNER. We welcome you.

STATEMENT OF SIR JOCK STIRRUP, CHIEF OF THE AIR STAFF, UNITED KINGDOM

Mr. STIRRUP. Mr. Chairman, Senator Lieberman, members of the committee, I'm delighted to have this opportunity to offer the military perspective on the U.K.'s participation in the JSF program. The Minister for Defence Procurement has set out the strategic context and outlined the importance of JSF to our future force structure, to our military capability, and to our contribution to coalition operations with the United States and other allies.

Quite simply, the JSF is central to our plans for projecting offensive military power over the coming decades. So, it is crucial that our modalities for delivering and sustaining this capability are robust and enduring. Crucial I think, for both of us. Our two nations have long had, and will continue to maintain, an extremely close military relationship. It's brought our armed forces together in a variety of operations throughout the last century, and most recently of course, in Iraq and Afghanistan.

Our men and women have fought alongside one another. They've worked as close knit teams in a range of operational theaters, and they forge the bonds of mutual trust and respect that are essential if we are to work together seamlessly at all levels as a common force for good. Nowhere, I think, is this more apparent than in the domain of air power.

Our people and our systems need to be able to mesh instantly and effortlessly, if we are to deliver the air power effects on which the success of our operations and the safety of our people depend

and our current track record in that regard is evident. Our Harrier GR–7s in Afghanistan, for example, have played a decisive role and they've saved the lives of many brave young people on the ground, including U.S. military personnel. That's exactly how it should be. That's how coalitions are supposed to function. We need to be able to rely on one another implicitly, and we work very hard at the military level to ensure that we can.

General Moseley and I have an extensive program that brings our people together in a range of endeavors to sustain and build our common understanding, and we developed that innate understanding of one another's strengths and weaknesses by working and exercising together at every level. We ensure that we are joined in both the conceptual and the doctrinal aspects of warfare and that we understand the ways in which we both operate. We embed people in each other's organizations at every level on both sides of the Atlantic. We have a highly successful exchange officer program and we continue to see the fruits of this effort on operations.

But there are two critical aspects to the Harrier success in Afghanistan. First, of course, they are able to link into and operate with U.S. systems and U.S. people, and this interoperability, this capacity to work to a common understanding on the basis of shared knowledge, is and will remain a sine qua non of any effect coalition.

But second and equally important, the Harriers must link into the wider U.K. system. They must be able to use the appropriate sensors and weapons. They must be able to integrate and use information from a variety of our own sources, and they must be able to rely on our expeditionary sustainment system and processes. All the multinational interoperability in the world would be of no avail if the Harriers could not fit into the U.K. military construct.

Unfortunately, of course, we cannot design all those characteristics into a system from the outset, because that would require us to have certain knowledge of the future. We do our best to estimate the challenges and threats that face us, but as we all know, the world is a complex and dynamic place. If there's one thing that we can be sure of, it's that something will always come along that will surprise us.

We have to be able to deal with what we did not or could not foresee. With this in mind, there are two key attributes that I consider vital to our future effectiveness: agility and adaptability. Agility in this context is our ability to create rapid effect across the spectrum of operations in a range of environments and circumstances.

By adaptability, I mean our ability to respond in an acceptable time scale to new challenges and to seize new opportunities. The one allows us to create precise effects, at the right place and time. The other keeps us relevant and effective in a changing world. So, we must put these attributes at the heart of our carrier strike capability, and of the JSF around which it is built. If we do not, we will fail to achieve our goal. We will put at risk our ability to sustain an expeditionary capability that allows us to apply military and diplomatic pressure at an early stage of a crisis, that allows

us to deliver strategic effect quickly and economically, and that allows us to minimize the constraints of basing and overflight issues.

So procuring the right air system to match these requirements has long been uppermost in our minds. It's the reason for our longstanding involvement in the JSF program, and I'm delighted that we've been level one partners in this program since 2001. From the outset, we have invested substantially in the system design and development phase and we have, I believe, helped to influence and inform much of the critical work that has been completed to date. We've clearly demonstrated both our commitment to the program and our ability to make a significant and long-lasting contribution in many critical areas.

The lift fan expertise underpinning the vertical lift capability of the STOVL variant of JSF is one such example. But as the committee will be aware, propulsion for STOVL aircraft is a continual challenge. We both encountered problems with AV–8B and Harrier GR–7 engine performance in demanding environments. So we need to be sure that we have an affordable and technically feasible growth path for the JSF engine.

I know that all of those U.K. personnel embedded within the program from both the military and industry will continue to give their best in helping to solve the many complex challenges that remain as we move towards the production, sustainment, and follow-on development MOU signature later this year. But like the Harrier, our JSF will have to face two ways. Procuring a common system will obviously give us many interoperability benefits and I warmly welcome that.

But JSF will also have to fit into the wider U.K. military network. It will have to work with and integrate a range of U.K. systems. We shall need to be able to sustain it effectively in a range of expeditionary environments, not least onboard ship. We shall need the agility and adaptability that we look for from our other systems. That's a requirement that, in my view, the program is not yet delivering.

From a military perspective, this is something we need to address urgently. If we are unable to adapt and modify JSF to meet the unforeseen demands of an uncertain future, if we cannot integrate JSF into our wider systems and processes, if we cannot bring together sensors, weapons, and information in a true network approach to operations, then we will seriously diminish our offensive operational capability for years to come. We will put at unnecessary risk the lives of our young men and women, both British and American.

I hope, Mr. Chairman, that you will agree that this is something that deserves serious attention. Thank you very much.

Mr. DRAYSON. Mr. Chairman, I hope you and your committee now understand our position with regard to the F136 engine and more widely, on the JSF program. I look for your support in achieving three things: one, achieving the level of operational sovereignty that we expect; two, involvement in the decision making process as the only level one partner; and three, two-way sharing of information.

I have been direct. But I must emphasize, we are determined to make a success of JSF. We were clear on the operational reasons

for joining this program. They have not changed. We still want and need this aircraft.

Thank you, Chairman.

Chairman WARNER. We thank you. I had certain expectations when I made the decision in consultation with my distinguished ranking member to have these hearings. But I must say, I'm greatly impressed with your statements and the breadth of participation of the witnesses that will follow. It shows the depth of sincerity of the partners in this program to make it work. This committee will take into careful consideration all of your views. I noted that you indicated, Lord Drayson, that you were going to remain in Washington for the purpose of consultation with our government, mainly the DOD. I welcome that.

I welcome it strongly and I'd like to offer at this time the option to you and to all other nations participating in this program to examine the scope of today's hearing with two panels, and tomorrow's hearing, and to supplement the record with such additional views, as you so desire. Because particularly, if you're going to do further consultation with our government, I'm certain—I'm hopeful that will be fruitful in such a way that you will be free to communicate to the committee your impressions and such assurances as you received, and the degree to which those assurances affect this specific decision of the one engine or two engine options.

Just a moment on history, I love history and spend a lot of time on it, and I'm old enough to have remembered World War II quite well. Although I was just a lad of 17–18 when I was in the tail end of it, and in a consequential way, getting trained. But the relationship between Roosevelt and Churchill will always stand as a monumental achievement between two nations in the face of adversity.

Today, I think the relationship between our President and your Prime Minister closely parallel that relationship in their commitments and resolve to deal firmly with this war on terrorism. So I think all of us that review this situation, should bear those historical precedents.

Are you in a position, Lord Drayson, to tell us the degree to which there was some consultation, or absent consultation, and what you expected by way of consultation when you went into this agreement? Perhaps, what did you expect when you went into this agreement? Great Britain joined as level one partners, with regard to the consultation process and thus far, has that measured up to your expectations when you went in?

Mr. DRAYSON. Chairman, as a level one partner on this program, we do expect to be consulted on major issues relating to the program. On the decision relating to the F136 engine, we were not consulted.

Chairman WARNER. That's clear. Are you at liberty to discuss with us the participation of your distinguished Prime Minister? My understanding is that he had communications with our President, and to what extent can that exchange of views between the two be a part of this record?

Mr. DRAYSON. The Prime Minister is in regular contact with the President on a range of issues and I don't think it's appropriate for me to comment on those. However I believe I have made absolutely

clear the position of Her Majesty's Government relating to this matter.

Chairman WARNER. I respect that. So there's complete unity between the views that you've expressed today, and that of Her Majesty's Government and the Prime Minister?

Mr. DRAYSON. Absolutely, Chairman.

Chairman WARNER. Now, I would put this question to the panel and you can answer it as best you can, bearing in mind that tomorrow we will have a second panel that will again, participation from your country and others, be in regard to the technical aspects of this engine. Both the manufacturers will be represented with their top engineers and other staff. But what is your understanding, either Sir Stirrup, the Chief of Staff of Air, or yourself, that there are potential differences anticipated in the thrust performance between the two engines? That is say, the Pratt and the General Electric Rolls, and that the likelihood that the second engine referred to as General Electric Rolls, understandably coming several years behind the initial development of the first, will have the benefit of incorporating new technology and therefore would have a thrust quotient different and advantageous to the future operations of this aircraft?

Mr. DRAYSON. Chairman, perhaps if I could just cover the key principles and then ask the Air Chief Marshal to elaborate. Really, we believe there are two aspects to this. One, is the advantage that is provided to the participants in the program by having two engines, in terms of being able to exert competitive pressure through that process. In the U.K., I think we have a smaller defence budget than the United States, and we have learned the real importance of recognizing the effect that a lack of competition can have on the future value for money of programs. One gives up that opportunity at one's peril, we believe. So maintaining two engines, we do believe, will deliver significant advantages in terms of value for money.

But we also believe there are certain aspects relating to technology advantage. Senator Lieberman, you mentioned our objective that we have to have the most powerful aircraft, as you said at the best possible price. We believe that the F136 engine, being a later generation of technology, provides the potential to generate a more powerful engine, which while not having necessarily an effect during the take-off and landing in STOVL mode, in level flight, it could well offer performance advantages, which may be important in combat.

Chairman WARNER. Might I add fuel savings, if you'd address that too, Air Marshal. I understood that there could be, given that the second engine would be somewhat more modern, a greater fuel efficiency.

Mr. STIRRUP. Mr. Chairman, thank you. My understanding certainly is that given the later development of the engine and the more modern technologies, there may be opportunities for greater thrust growth and indeed, the sorts of efficiencies that you mentioned. Of course as a pilot, my view is you can never have too much thrust. But a greater concern for me is the through-life cost of support of these engines, because that is the thing that tends to hamper us most. It's not just an issue of cost, it's also a question

of logistic footprint, the degree of airlift that is required to support expedition operations. So, this is a mammoth issue and that's the one that is of most importance to me.

The Minister has already outlined the importance of competitive pressure in driving towards that particular end. I think the only thing that I would say in addition, is that we have had, and have relationships with all the companies that are engaged in this particular debate, good relationships with all of them. They are great companies, but I would never bet my pension on promises from any of them. I would want to see performance actually demonstrated.

Chairman WARNER. I quite understand. Why don't you have a few questions, colleagues, and I'll come back.

Senator LIEBERMAN. Thanks very much, Mr. Chairman. Lord Drayson, Sir Stirrup, thanks for excellent opening statements. I want to say to you, Lord Drayson, that as I listen to you speaking about the problems with technology transfer, I'm very sympathetic. I've always been a strong supporter of a two-way street on these programs with our allies. I think the concerns you've stated about technology transfer are important, and are important for us to resolve, and I personally—and I know the committee under Senator Warner, looks forward to receiving positive reports on the negotiations that you are having of the production MOU.

I thought the three points that you made at the end of your statement were important, too. But I must say respectfully, I don't believe that the alternate engine issue is inextricably linked to the technology transfer issue. In other words, I think it is a separate question. On that, I continue to be unconvinced that it's in any of our interests to build these two engines.

I do want to say, that because I do think the two-way street is important, I want to stress what I mentioned at the outset, that Rolls-Royce will remain, assuming that the alternate engine program is terminated, a subcontractor to Pratt & Whitney on the vertical lift version of the JSF. That's by my understanding, a $1.2 billion contract and over $6 billion in estimated sales. BAE and Smiths Industries, two more great British companies, also involved as subcontractors to Lockheed Martin on other components of JSF development, these two companies, by my understanding, will receive approximately $4 billion for their work. So that it looks to me like the British companies at this point stand to gain $5.2 billion in contract money, and approximately $6 billion in future sales. So isn't it true, therefore, that just on the involvement of U.K. companies that there's a pretty good amount of sharing going on and involvement by the U.K. companies?

Mr. DRAYSON. Senator, I appreciate the comments you made relating to technology transfer and note the points you made in terms of the nature of the F136 decision, compared to these technology transfer issues. However, relating to the share of work, I would make a number of points.

First, that the workshare on this program is completed. On this basis the best athlete wins. The companies that get the work on the program are the companies who are best at doing it for all participants within the program.

Second, that our numbers are—and I will be happy, Mr. Chairman, to write to the committee and provide you with the detail of

our numbers. Our numbers show that effectively this is a situation at present where we are in balance. Where the amount of investment, which we are making in the program, is broadly speaking, equal to the return which British companies are getting at this stage. Not the numbers which you referred to, Senator Lieberman, but I will be very happy to write to the committee and provide our numbers.

[The information referred to follows:]

JOINT STRIKE FIGHTER
UK INDUSTRIAL PARTICIPATION

1. There has been considerable speculation regarding the amount of work awarded to UK companies on the Joint Strike Fighter (JSF) programme. Much of this speculation has come from ill informed sources that have either no, or limited, access to the source data. The data can be manipulated and grossly distorted if the underpinning assumptions are not fully articulated and understood.

2. The following key factors must be understood:

A) The only work actually on contract is that required to support the JSF Systems Design and Demonstration phase. Any subsequent contract awards are speculative and dependent upon additional future commitments to the project.

B) UK funding for the JSF programme is provided directly to the US Department of Defense (DoD) for disbursement and the UK Ministry of Defence (MoD) has no control over its allocation.

C) Lockheed Martin is the prime contractor for the JSF airframe and Pratt & Witney is the prime contractor for the F-135 engine.

D) All sub-contracts that flow from the prime contractors are awarded to the best 'athlete' to undertake the work and there are no prescribed workshare arrangements.

E) The UK MoD has not seen the business case for the termination of the F-136 engine, nor, to the best of our knowledge, has any other party outside the DoD.

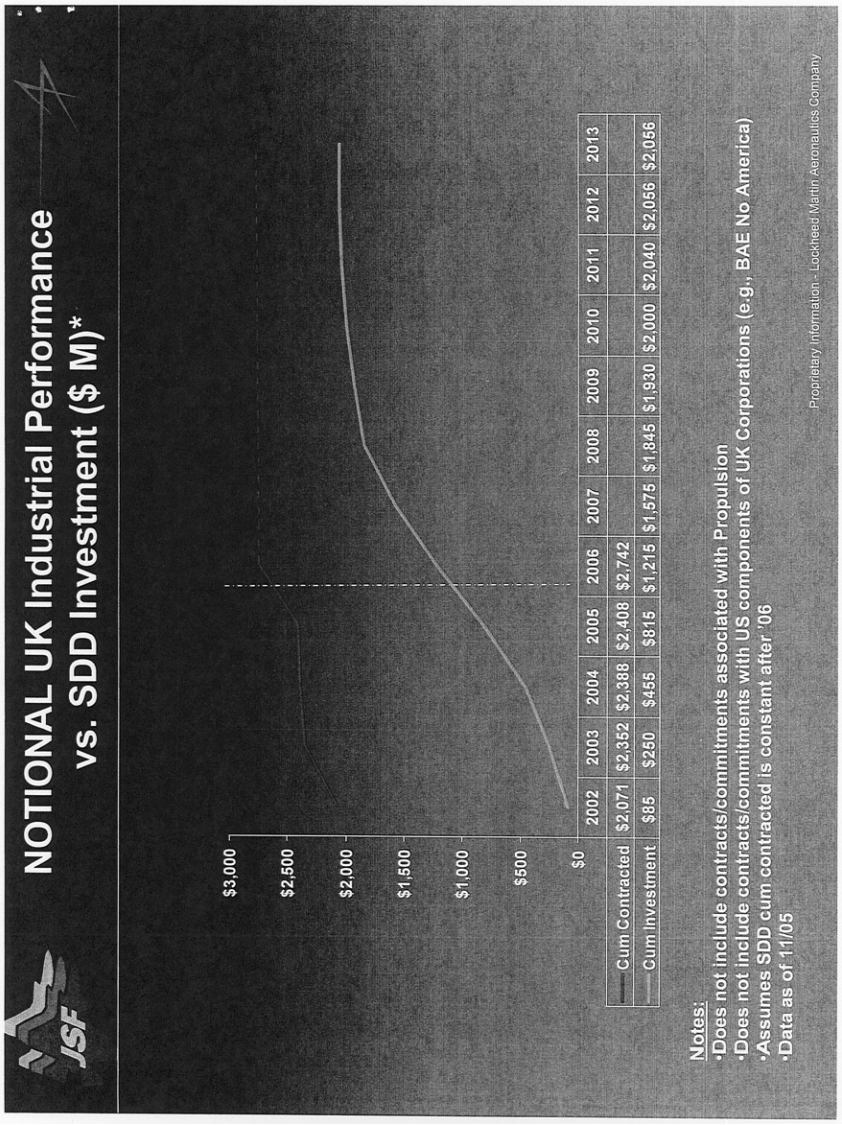
F) Although significant packages of work are being awarded to 'UK companies' it must be noted that some of this work is being undertaken by their subsidiaries in the US and not in the UK.

G) Whilst significant packages of work are being awarded to UK companies a proportion is further sub-contracted offshore – mostly back to companies in the US, and some elements also to sub-contractors in other JSF partner nations.

3. **For these reasons, the quoting of a single figure for UK Industrial returns on JSF can be misleading unless supported by further detailed explanation.** However, as an illustration of the complexity an overview of the situation in respect of the airframe is provided below. It is emphasised that this is only an illustration and that it relates solely to the current SDD phase of the project however, it is an informed view. It excludes activity related to the engine programme of work as the way forward on this aspect of the programme remains subject to review by the SASC.

4. The attached slide has been prepared by Lockheed Martin to describe the UK's industrial participation in the airframe SDD phase. It shows the airframe element of the SDD phase (not engine) only against the UK's SDD investment of around c$2 billion. However, as at end 05, c$650 million of the work awarded to UK has already been placed offshore by way of sub-contracts, such as: $60 million to Parkers (US supplier of the fuel system), $10 million to Moog (US supplier of the wing fold for the CV variant), $350 million to Applied Technologies (part of BAE SYSTEMS NA), $160 million to LM (for the Electro Optical targeting System, and the remainder in Europe with other JSF partner nations.

6. The UK acknowledges that the JSF Production, Sustainment and Follow-on Development Memorandum of Understanding, due to be signed in December 2006 has the following statement as one of it's fundamental principles . . . *subject to the submission of best value offers, industries that are in the nations of Participants procuring JSF Air Systems under this MOU and that were awarded SDD subcontracts will normally also be awarded subcontracts for LRIP and full rate production work, as well as for related sustainment and follow-on development work*".



Senator LIEBERMAN. I would welcome that and are we on the same page with regard to the British government and the government's investment in the JSF program, which I understand to be $2 billion?

Mr. DRAYSON. That is correct.

Senator LIEBERMAN. So that you would say that in the $5.2 billion, that I am overstating——

Mr. DRAYSON. Yes. Our understanding is that we would be receiving approximately $2 billion.

Senator LIEBERMAN. I agree with what you said, these are not gifts. In other words, the selection of the Rolls-Royce to do some of

the work on the vertical lift version, subcontracting it to Pratt & Whitney is made on a basis of merits seems to be—and Smiths Industries, but my broader point here, is that is exactly what's happened, though I know it's an unpleasant result from the U.K. side with regard to the engine decision, that Pratt & Whitney has won the competitions thus far, and that we are facing an economic problem here on this side which affects, as I mentioned in my opening statement, our general ability to afford to acquire the military systems we need.

Let me ask this question. At this point, I would say it's uncertain whether the U.S. Government will recover the money invested in the JSF alternate engine. If the recommendation of the administration, the Pentagon, to terminate the alternate engine program is overturned, would the U.K. be willing to help fund the budget shortfall to develop the F136 alternate engine?

Mr. DRAYSON. Senator, there is no specific element relating to the engine in the British commitment to this program. Our commitment of $2 billion to the SDD phase of the program was on the basis of there being a two engine approach to it. There isn't, therefore, an element specifically related to the engine within it. I would stress that our interest in the two engine approach is our belief that having a two engine approach will drive improved value for money for all parties and it will provide a competitive element through this process, which will drive down the acquisition costs and the through-life costs.

I think the experience that both of our countries have had relating to aircraft engines over the years highlights the very important issues which we need to learn from. Therefore, we believe it really is a key pillar of the JSF program, which emphasizes the affordability. The fact that this is a program, which as you say Senator Lieberman, expects to be producing more than 3,000 aircraft only strengthens the point.

Senator LIEBERMAN. Right.

Mr. DRAYSON. One would imagine that this is a program which would be able to sustain a two engine approach.

Senator LIEBERMAN. Let me mention in that regard, that this is not a unique decision that the Pentagon has made. General Electric is the prime contractor in the alternate engine partnering with Rolls-Royce.

I do want to say, in terms of defense industrial base, that the fact is that General Electric is today the world's largest aircraft engine manufacturer. By the last look I had, enjoying about one half of the world's aircraft engine market. But there's an interesting decision that we've made, which affects General Electric and not Rolls-Royce, which is General Electric will produce 4,000 fighter engines for the FA–18 without any competition. So, this decision to have a single engine contract for the JSF has some precedent, and if I'm not mistaken and you may correct me, that some of the great British air programs like the Harrier, or the Tornados, Euro Fighters are in fact single engine programs?

Mr. DRAYSON. Yes Senator, that is correct. There are precedents, as you've mentioned, of single engine programs both for British fighters and for the American one that you mentioned. However, last summer a decision was taken to go for it on a two engine ap-

proach. My point really, is that given that we have the option to go forward on a two engine approach, we really need to understand the business case. Whereby, it makes sense to change that strategy and go for a single engine approach, because of the lessons which we have learned. In the past, many programs in our experience in the U.K., having a smaller budget, we have been faced with making hard decisions where we haven't been able to have the choice, which we would have otherwise like to have had. We've had to manage that, and we have learned how to do it successfully in partnership. I am not saying that a single approach cannot be managed well.

I am saying, in a situation where we are talking about more than 3,000 aircraft, is this not an approach where the two engine supply strategy is not just feasible, but is actually in all of our interests.

Senator LIEBERMAN. What I believe—and we'll hear tomorrow morning what the Pentagon is saying to us, notwithstanding the number of planes that will be purchased under this JSF program, but considering the other considerable pressures on the acquisition budget at the Pentagon, that this is one where they don't believe it's the sensible choice to go for the second engine. If there were limitless resources, obviously it would always be a good thing to do. But I think that the savings that they've identified are considerable.

The Pratt engine has done very well in all of the evaluations that have been done, and even with regard to the thrust factor that we talked about. I appreciated, Lord Drayson, what you said, because of the particular construction and unique characteristics the ability for that extra thrust factor to be used in the vertical lift is going to be questionable, and the potential to use it to have it once in the air is potential. Again, I would say is it worth the extra money, that we have a lot of very urgent uses for—to put it in there just for the potential of a possible extra thrust factor in the air.

I suppose in the fairness of exploring all possibilities, Lord Drayson, I would ask you this, if in light of your support for competition here, would you consider on behalf of the U.K., buying a Pratt & Whitney engine for the JSF aircraft that you purchase?

Mr. DRAYSON. We have set out in our defence industrial strategy, Senator, that we put the defence needs of our armed forces first. So, we would look at that decision in the context of what our forces need and we would make a decision on that basis.

Senator LIEBERMAN. Thank you. Thank you, both. Thanks, Mr. Chairman. My time is beyond up.

Chairman WARNER. Thank you. For the benefit of the committee and our witnesses, Senator McCain has another engagement, therefore he will submit questions for the record and we will send them to you promptly. Senator Kennedy, likewise, had hoped to be here. But he's engaged before another committee, and he will submit his statement and questions. My understanding is he's highly in support of—for the General Electric Rolls concept of the two engines. We hope to close out this record by March 17, so that gives you some time within which to answer.

[The prepared statement of Senator Kennedy follows:]

PREPARED STATEMENT BY SENATOR EDWARD M. KENNEDY

Mr. Chairman, I commend you for holding this hearing to review the DOD's decision to cancel completion for the JSF. The DOD says the decisions will achieve savings of $1.8 billion over the next 5 years, but estimates suggest that the savings from competition could be as much as ten times that amount. So the economics of the decision are far from clear.

Annual costs are important, but we also need to assess the overall value of the engine program and the policy implications of its cancellation. The life cycle costs to support these engines are well in excess of $50 billion, and some estimates run upwards of $100 billion. It's hard to imagine we would support a $50 or $100 billion program without competition.

I take issue with a number of points in the Pentagon's analysis in support of the cancellation decision. Our experience from the "Great Engine War" for F–15 and F–16 engines shows that competition brings real value to military in terms of reliability and improved performance, and to the Nation in terms of overall savings.

This decision also raises other questions about the viability of the industrial base. The JSF will be the largest acquisition of fighter aircraft for the future. It is designed with the needs of all four Services in mind. No other program will result in such a sizable demand for large military aircraft engines over such a long period of time.

If we cancel the competition, we are essentially creating a winner-take-all monopoly, not just for the JSF, but for any future fighter aircraft engine. Over time, we'll be reducing our industrial base to a single supplier. We need to consider the long-term effects on the industry and our national security, not just the $1.8 billion that will be saved over the next 5 years. We need to reverse this shortsighted decision—the sooner the better.

Chairman WARNER. A question to the Air Marshal: I mentioned in my opening statement reference to standdowns. For those that are following the hearing that might not have a total familiarity, it's when there is a malperformance of an engine and in the interest of safety, not only to the aviators, but all in the proximity of the operation of an aircraft, those planes are ordered to be stood down until the engineers and others determine what the fault may be, and how best to correct it.

Would you address that issue? Not only from the standpoint of the engineering, but also, if there's but one engine in the entire worldwide fleet, certainly among the eight partners, does that pose a problem, Air Marshal?

Mr. STIRRUP. Mr. Chairman, it certainly does, and we have experienced exactly that situation in the Royal Air Force, where there have been technical issues with certain engines and for a period of time those engines have been unavailable and therefore, since our approach——

Chairman WARNER. Excuse me, the engines on them—you mean, the aircraft was unavailable?

Mr. STIRRUP. The engines were unavailable and therefore, of course——

Chairman WARNER. Oh, they didn't work in the aircraft?

Mr. STIRRUP. In the aircraft, yes. That has caused us some serious difficulties in the past. There is no doubt about it. Of course, the larger the size of the fleet, the larger the proportion of your total capability that is tied up in one particular resource, then the more the impact is likely to be.

Chairman WARNER. That's true. One of my colleagues asked a very basic question, he's quite interested in these hearings. He said, if you put the Pratt & Whitney engine in an aircraft, and you're somewhere in the world where there's not a spare Pratt & Whitney engine, and the second engine, i.e. the General Electric

Rolls, is available, could you pull the Pratt out and replace it with the General Electric Rolls engine? Is it one-size-fits-all? The other one tucked right in, and away she goes. What's the interchangeability between the two engines? In terms of one being substituted for the other in the same airframe?

Mr. STIRRUP. Mr. Chairman, I don't have the technical data to be able to answer that question. But what I would say, if I may, is that that, for me, isn't the issue. The issue is, if we have Pratt engines, they better be supportable wherever we are, and there better be spare Pratt engines wherever we are. Otherwise, we cannot operate effectively on an expeditionary basis. So, whichever company supplies our engines, they need to be able to support them wherever and whenever we need them.

Chairman WARNER. I think that is a—as you used a phrase and I understood it, sine qua non. That is the sine qua non of any aircraft and its ability to be fully maintained wherever it operates.

At this point in time, I must suspend this first panel because I want to accord the opportunity to the second panel and we're about to start a considerable vote. Votarama, is what we call it.

This is a document submitted by Pratt & Whitney. Tomorrow I'm sure they will submit it for the record, but it reflects—it's called a U.K. Investment, U.K. Payback. Lord Drayson, would you have an opportunity to put in the record your interpretation of this, and would you reflect on what you believe is the accuracy, or inaccuracy, of this representation?

Mr. DRAYSON. I'd be very happy to do that, Mr. Chairman.

[Below is the Pratt & Whitney document. Please refer to the U.K.'s response to Senator Lieberman regarding Chairman Warner's request on previous pages.]

[The information referred to follows:]

There are three main issues to address with the Senator to counter his concerns about eliminating the alternate engine for the JSF:
1. Industrial Base Issues. 2. Partner Country Concerns 3. Operational Readiness

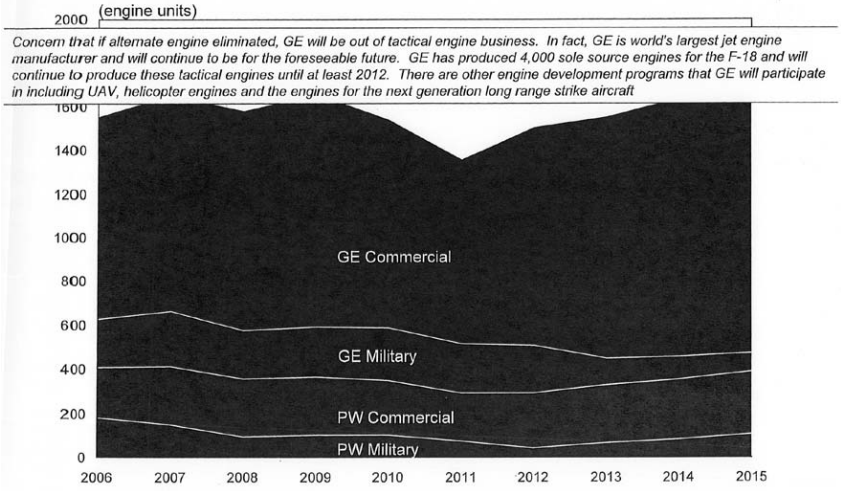
United Technologies

Senator John Warner
Chairman, Senate Armed Services Committee
March 10, 2006

George David

Industrial base concerns

GE AND P&W LARGE ENGINE PRODUCTION FORECAST



Concern that if alternate engine eliminated, GE will be out of tactical engine business. In fact, GE is world's largest jet engine manufacturer and will continue to be for the foreseeable future. GE has produced 4,000 sole source engines for the F-18 and will continue to produce these tactical engines until at least 2012. There are other engine development programs that GE will participate in including UAV, helicopter engines and the engines for the next generation long range strike aircraft

Source: Airline Monitor Aug 2005, Forecast Int'l

Partner country concerns

F135 INTERNATIONAL INDUSTRIAL STATUS

Teamed with over 40 companies from the JSF partner countries

Purchase Order/ Commitments
RFP / RFQ / Opportunities

U.K.
Callender
Dunlop
Firth Rixon
GKN
HS Marston
OMG
Rolls-Royce
Serck
Smiths
Ultra
HS Claverham

Turkey
ALP Aviation
KaleKalip
TEI

Norway
Volvo Aero
Umoe Mandal

Denmark
IFAD
GPV
Terma

Canada
Bristol Aerospace
FAG
Gastops
Haley
MDS
Magellan
MindReady
Montreal Carbide
PWC
Univ. Quebec - AMIL
Xantrex

Netherlands
Axxiflex
DAP
Eldim
Elmo
NCLR
Stork
Dutch Aero

Australia
Production Parts
WASA
Ferra
Lovitt

Italy
CIRA
Microtecnica
Piaggio
Aerea
Avio
ASE

The UK is only partner expressing serious concern with termination of alternate engine. All other partner countries stress schedule, price, and capability more important than 2nd engine source. UK claims that investment in engine for RR is required to justify their $2B investment in program. While termination of F136 will reduce UK's return from program, RR still has significant role in the F135. PW paid them $1.4B to develop lift fan for STOVL variant & they will receive at least $6B in sales over life of program. Also, PW has contracts with other British suppliers for F135 and BAE has significant share of air frame work. Partner industry value is 20% for CTOL and 65% for STOVL.

U.K. gov't joined JSF program in '97 during the Concept Demonstration Aircraft phase before RR became partner on F136.
U.K. is investing $2B in System Development & Demonstration (SDD) phase of program.
U.K. & partner countries haven't added funds to offset cost growth. Part of growth was F136 program going from $1.6 to $2.4B.

U.K. INVESTMENT

3000 aircraft

U.K. Investment	
System Development and Demonstration (SDD):	$2.0B
Total	*$2.0B*

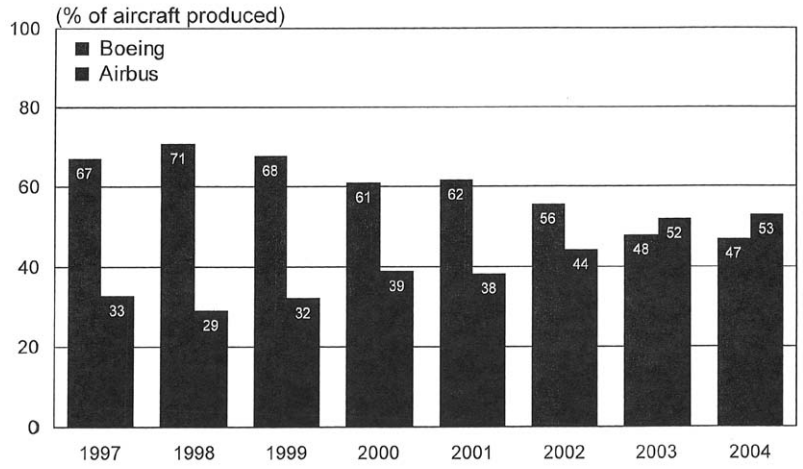
UK investment of $2B made to the US Gov't Current assumption for A/C is 3,000, with possible reduction to 2,500.

U.K. Payback		
SDD:		
BAE Systems (From LM)	$2.0B	
Rolls Royce (From P&W)	$1.4B	
Other U.K.-Based Companies (From LM and P&W)	$0.5B	
Production and fleet support		
Aircraft	$20B	
Propulsion System*	$10B	
Total		*$33.9B*

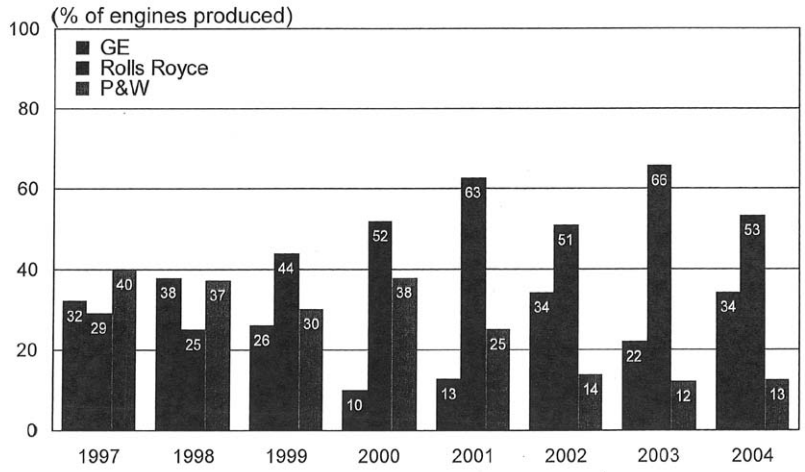
R-R – 40% share of the F136 engine. This represents approximately $1.0B.
The UK hopes to buy approximately 138 JSF STOVL aircraft. These will cost approximately $7 to $10B.
P&W is committed to expanding F135 industrial opportunities in the U.K. and other JSF partner countries.

* P&W and Rolls Royce have signed an MOU that designates Rolls Royce as the exclusive provider of STOVL components for production ($7 million per propulsion system) and fleet support

AIRCRAFT PRODUCTION



ENGINE PRODUCTION
777, A330, A340-5/600



Source: Airline Monitor, Boeing, Airbus

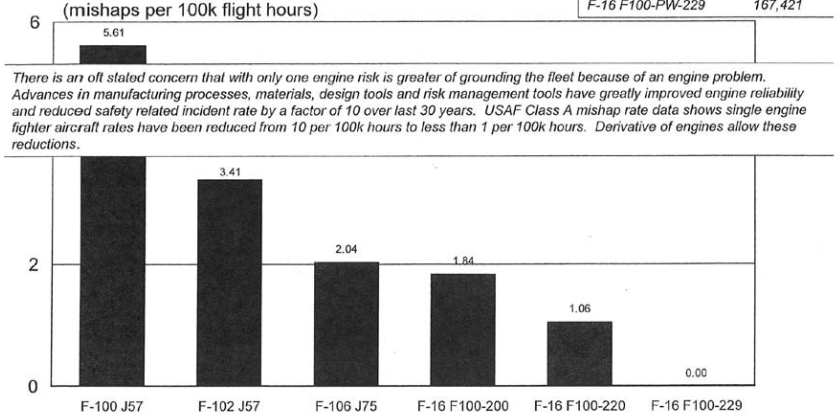
Operational readiness concerns

2005 Class A events goal =<3 worldwide
Actual = 0

SAFETY AND RELIABILITY
Single engine aircraft

Cumulative flight hours on active MDS:

F-16 F110-GE-100	*2,597,738*
F-16 F100-PW-220	*1,703,168*
F-16 F110-GE-129	*644,882*
F-16 F100-PW-229	*167,421*

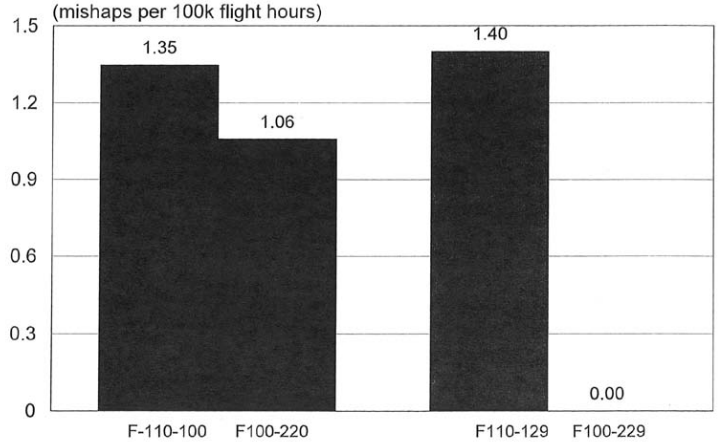


There is an oft stated concern that with only one engine risk is greater of grounding the fleet because of an engine problem. Advances in manufacturing processes, materials, design tools and risk management tools have greatly improved engine reliability and reduced safety related incident rate by a factor of 10 over last 30 years. USAF Class A mishap rate data shows single engine fighter aircraft rates have been reduced from 10 per 100k hours to less than 1 per 100k hours. Derivative of engines allow these reductions.

Class A mishaps / engine related / program totals
Source: USAF

387 F-16 F100-229 engines delivered

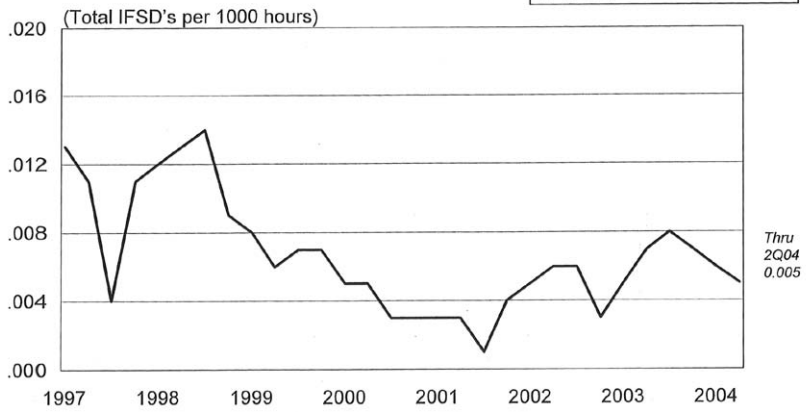
F-16 PROPULSION SYSTEMS
Safety and reliability



Class A mishaps / engine related / program totals
Source: USAF

FLEET RELIABILITY – 777
IFSD

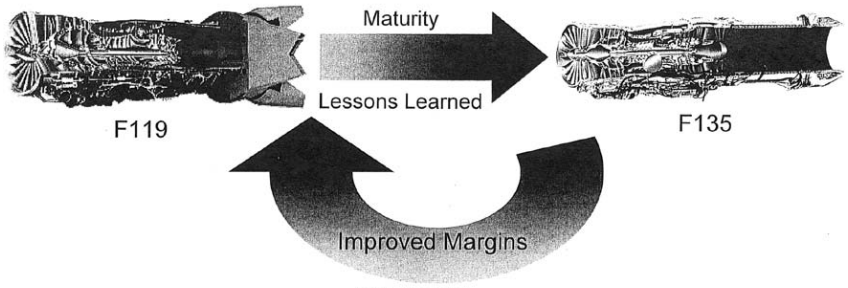
777 IFSD rate Goal is .005
2004 Top Causes:
2 Oil Pressure (under investigation)
1 Maintenance Related
1 Metal in Oil
1 Oil leakage
1 Fuel Pump



Source: Boeing quarterly report

F135 BENEFITS FROM F119 MATURITY

Confidence for single engine operation

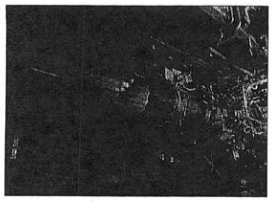


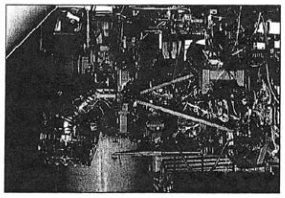
- Affordability
- Performance
- Growth (Mission Flexibility)
- Life Cycle Cost

F135 core will have over 800K flight hours by the time F135 enters service

F135 PROGRAM STATU

Program Cost and Schedule
Program spend thru 12/05 in-line with baseline plan.
Expenditures to date $3.2B (55% of the $5.8B replan contract)
EVMS metrics "green" with a Cost Performance Index (CPI) of .96 and a Schedule Performance Index (SPI) of .99.





Nine engines in ground test

CTOL Durability Sea Level Accelerated Mission Testing (AMT), required for flight clearance is complete.
1200+ AMT cycles completed.

Flight Clearance Release
On path to support first flight in Fall 2006
Engine operability testing to be completed in April

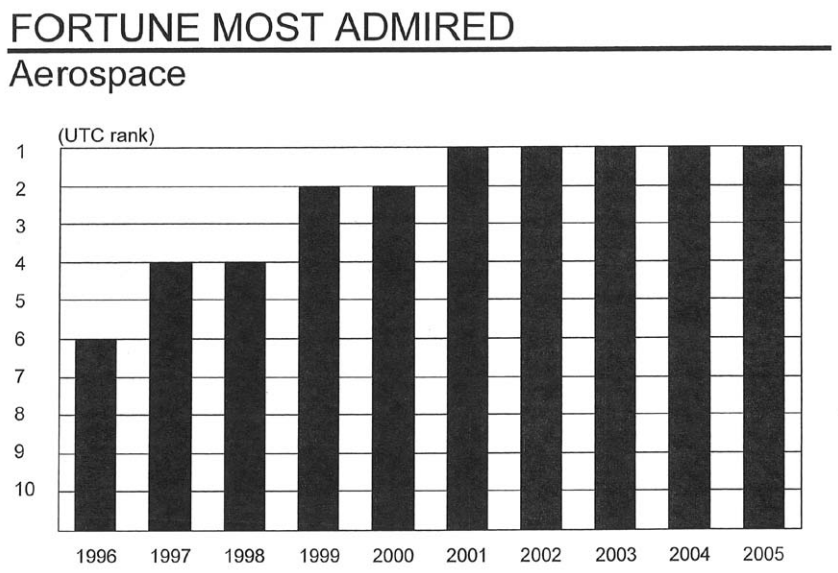
Demonstrated CTOL & STOVL thrust levels
Below weight requirements for both CTOL & STOVL

F119 Flight Time
Achieved 15,000+ engine flight hours in the F-22
F119/F22A reached initial operational capability (IOC).
"Mission Ready"



Engine Test Program
5 CTOL Engines at Test
4 STOVL Engines in maintenance / rebuild.
4700+ Hours Total.
2,100+ Hours STOVL
3,600 Accelerated Mission Test Cycles
Flight Test Engine #1 delivered to LM and installed in aircraft
Flight Test Engine #2 completing initial build. Planned ship 3/24/06.

Flight test engine No. 1 delivered and installed



Chairman WARNER. Fine, and I assume this entire document will be made available tomorrow, such that you can have an opportunity to address other parts of it.

Thank you very much. I was greatly impressed by your statements. You've served your nation well.

Mr. DRAYSON. Thank you, sir.

Senator LIEBERMAN. Thank you, both. You didn't convince me on the engine question, but I have great admiration for both of you, and great devotion to our alliance. Thank you.

Chairman WARNER. You have an open mind.

Senator LIEBERMAN. Always open mind. Unconvinced at this moment.

Chairman WARNER. Thank you. If the second panel would kindly proceed towards the dais.

On the second panel of this hearing, representing Australia, will be Air Commodore John Harvey, Director General, New Air Combat Capability, Royal Australian Air Force; and Rear Admiral Raydon W. Gates, Head of the Australian Defence Staff in Washington. Representing Italy, will be Lieutenant General Giuseppe Bernardis, Chief of the Department of Armament Programs, General Secretary for Defence and National Armaments; and Major General Pasquale Preziosa, Defense and Defense Cooperation Attache, Italy.

Gentleman, how should we proceed? I expect Italy has a little seniority by virtue of its several 1,000 year history. [Laughter]

Mr. GATES. We are but a young nation.

Chairman WARNER. You're proud of it, too. So, may we have our distinguished witnesses from Italy lead off?

STATEMENT OF LIEUTENANT GENERAL GIUSEPPE BERNARDIS, CHIEF OF DEPARTMENT FOR ARMAMENT PROGRAMS, SECRETARIATE FOR DEFENCE AND NATIONAL ARMAMENTS, ITALY

Mr. BERNARDIS. Thank you, Mr. Chairman.

Chairman WARNER. Your full statements will be admitted into the record.

Mr. BERNARDIS. Thank you, sir. Honorable Mr. Chairman and Senator Lieberman, let me take the opportunity to thank you and the committee for giving Italy a chance to speak about this important matter, and for taking the time to hear an opinion from a staunch ally and a determined JSF partner, that invested more than $1 billion in the phase.

Italy believes that the second engine issue has two different dimensions, the operational, programmatic and the industrial one. For the first one, Italy believes that having a second engine may be an important addressing technical factor. But it is also a programmatic addressing factor, if there are enough resources, or if the development of the second engine can be completed without delays and cost increases to the overall program.

As far as the industrial dimension is concerned, Italy thinks that this should be a U.S. decision only, and the Italian Ministry of Defence will adhere to it. Presently, Italy doesn't have an official propulsion system acquisition strategy determined yet for the JSF, since we are still evaluating different alternatives and we are engaged to a dual fleet acquisition program, both for STOVL and conventional take-off engines for the Navy and the Air Force. But we can affirm, that if the second engine can in any way jeopardize the overall integrity of the program, and can add threats to its costs and schedule, and threaten the overall program affordability, then we have a strong concern.

As far as the overall JSF program is concerned, Italy considers our participation to the program so far, a success. We believe the JSF has a very solid technical foundation. Even if we recognized that some issues still can arise in the future, we have the utmost confidence in the JSF program leadership, and in Lockheed Martin's managing, and will manage the execution of the program.

We hope affordability will remain one of the most important pillars of the program, because that's where we see possible future threats to the program itself. The stability of the program, in our opinion, relies on consistent budget allocation and a consistent number of assets to be produced, operated, and sustained worldwide.

Industrially speaking, provided that the agreement is in place now will come into effect, we are content with the overall involvement of the Italian industries in the program, even if there is still room for the improvement and more could be done, especially in terms of technology transfer, and we have to obtain involvement of our niche industry in strategically important areas.

The negotiation for the production sustainment and follow-on development that Italy is facing now is a very important commitment for the next 14 plus years, and we are confident that Italy will be able to join the next phase of the program, and the affordability as I said before, is a key parameter for the decision.

This concludes my segment and I am ready for follow-up questions.

Chairman WARNER. Thank you, General. Would you have further comments?

Mr. PREZIOSA. No thanks, Mr. Chairman.

Chairman WARNER. Thank you, very much. Australia.

STATEMENT OF REAR ADMIRAL RAYDON W. GATES AO, CSM, HEAD OF THE AUSTRALIAN DEFENCE STAFF (WASHINGTON), AUSTRALIA

Mr. GATES. Thank you, Mr. Chairman. Senator Warner and Senator Lieberman. It is a great honor to represent my government and accept your invitation to attend and present to your committee today. I am Rear Admiral Raydon Gates, I'm Head of the Australian Defence Staff here in Washington, and with me is Air Commodore John Harvey, Director General of the New Air Combat Capability Project, and he's based in Canberra Australia.

Australia and the United States have a long and close relationship based on our shared values and belief. We have stood shoulder-to-shoulder in every major conflict in this and the previous century. As I speak, as you're aware, both our countries' men and women are fighting side-by-side in both Iraq and Afghanistan today.

With this strength of this relationship, Australia has made a number of important strategic decisions designed to enhance our capacity to be an effective coalition partner with the United States. The most significant of these is our decision to join as a partner in the JSF program.

The JSF program is of immense importance to Australia. It will be our largest ever defence acquisition and will represent a major element of our defence capability for a period of 30 years or more. As such, the JSF will be a major part of our ability to defend Australia and to contribute to further coalition operations.

I would like to congratulate the United States DOD and the JSF project office on progress on the project to date, and to the extent to which they have integrated the eight international partners into the program.

You have asked for a response to the following three issues in relationship to the program: our assessment of the desirability of developing an alternate engine; whether and how the Australian Government was consulted regarding the United States DOD proposal; and any other matter relating to international cooperation on the JSF.

In terms of developing an alternate engine for the JSF, Australia sees potential benefits in terms of cost competition, technological development, and operational flexibility. That said, our highest priority for the JSF program is to achieve its cost schedule and capability targets.

We would not want to see funding for the alternate engine threaten those targets, and we would not propose making a contribution to retain the development of the alternate engine.

Affordability is a key project goal, and essential for us to acquire the number of aircraft we need. Schedule is critical, because we need to replace our aging F–111 and F/A–18 aircraft. Should the

United States Services decide that withdrawing funding support for the F136 engine is the only way to preserve current JSF schedule capability and cost, then we understand that decision.

If there is to be a single engine, however, it will be essential for the United States Government to maintain pressure on Pratt & Whitney to ensure their single source supplier position resulting does not lead to cost increase, both in terms of production and sustainment. In fact, we would look to see real cost savings as a result of increased production numbers and simplified support arrangements. We would also look to the United States Government to ensure Pratt & Whitney make the program schedule requirements, and not just work to optimize their own outcomes.

Before I outline the consultation of the alternate engine in particular, I thought it might be helpful to outline our view on the principles for consultation in the JSF program generally. As a partnered nation, we take a close interest in decisions that would affect program costs, schedule, and capability, as they would have a direct impact on the capability that Australia wants from the program.

We also pay close attention to the issues that have a significant impact on Australian industry involvement, as we aim to become an integral part of the global supply chain and support base for the aircraft.

Were an aspect of the program that has significant Australian industry participation to be considered for change, we would wish to have visibility of and participation in the decisionmaking. To achieve our aims as a partner we need, and to date have received, ongoing visibility of major program issues. Moving from these general principles to the specific issue of the proposed cancellation of the F136 engine, in 2003, the JSF program executive officer requested our input as to the desirability of a second JSF engine in the context of the United States JSF budget deliberations. We advised the project officer of our view that, as outlined earlier, we saw benefits in developing an alternate engine, but not at the expense of the overall program cost, schedule, and capability targets.

Chairman WARNER. What was the date, time, group of that exchange?

Mr. GATES. That was in 2003.

Mr. HARVEY. Mr. Chairman, I could check the exact timing and get back to you.

[The information referred to follows:]

General John 'Jack' Hudson, JSF program executive officer, requested partner input relating to the necessity for developing two engines at the JSF Executive Committee No 2 meeting held in London 01 Oct 2002. Australia had not yet joined the program at this stage and was attending the meeting as an 'observer', recognising that Australia was likely to join the JSF program later that month. Australian records show that an action item was recorded at the meeting that requested National Deputies provide national input on the perceived value of a second source engine to the project.

In 2003, Australia attended the 7–8 Apr 03 JSF Chief Executive Officer Conference as a Level 3 Partner in the JSF Program. Australian records show that, at this conference, General John 'Jack' Hudson, discussed his intention to slip the General Electric engine program by 2 years in response to U.S. budget changes. He indicated that he thought this decision would have least impact on the ability of the program to meet Strategic Operations Division commitments. He indicated that the JSF Project Office would be studying a number of options to recover the 2-year slip

and restore delivery of the General Electric engine to 2011. Funding was later restored and the General Electric engine program continued on the planned schedule.

Chairman WARNER. Would you once again, I think it's an important part of your testimony, repeat it so I can get it clearly in mind?

Mr. GATES. In 2003, the JSF program executive officer requested our input as to the desirability of a second JSF engine in the context of the United States JSF budget deliberations of that time. We advised the project officer of our view, as outlined earlier, we saw benefits in developing an alternate engine, but not at the expense of overall program cost, schedule, and capability targets.

Aside from this input, we were not specifically consulted regarding the recent United States Air Force and United States Navy proposals to remove funding from the alternate engine. We do, however, acknowledge the need for the JSF program executive officer to make decisions necessary to achieve the program targets.

Chairman WARNER. Thank you, very much.

Mr. GATES. I just have a little more.

Chairman WARNER. Air Commodore, we thank you. You've traveled all the way from Australia for this purpose.

Mr. GATES. Thank you very much, Mr. Chairman.

Chairman WARNER. Thank you. That adds to us a very significant signal of the intensity of your feeling about this decision that's before us, so please proceed.

Mr. GATES. Well, I'll just go a little bit further.

Chairman WARNER. Oh, I beg your pardon. I interrupted before you had completed.

Mr. GATES. I was pausing for effect there.

Chairman WARNER. I beg your pardon? [Laughter.]

Mr. GATES. I was pausing for effect.

Senator LIEBERMAN. A dramatic pause. [Laughter.]

Mr. GATES. A dramatic pause.

Senator LIEBERMAN. It was.

Chairman WARNER. Pull that microphone up a little closer to you, so the folks in the back can hear.

Mr. GATES. I'm not sure they'll want to. [Laughter.] That said, I'll continue. I appreciate the opportunity to now address some other matters that you asked about relating to the cooperation of the JSF program.

Australia joined the JSF program in late 2002, with the expectation that the JSF would mature to replace Australia's fleet of F–111s and F–18 aircraft. Australia's primary reasons for entering into the system development and demonstration phase of the JSF program were to obtain information, to assist JSF capability, to prepare for in-country JSF sustainment as part of the JSF global sustainment system, and to provide opportunities for the Australian aerospace industry and research organizations.

Given its importance to Australia prior to joining the program, the Australian Minister for Defence and the United States Secretary of Defense exchanged letters that outlined Australia's expectations over the life of the program. The letters confirmed that cooperation would provide mutual benefits to the United States and Australia through improved interoperability for aircraft coalition operations for provisions of a highly-capable aircraft, enhanced in-

dustry capacity and capability, particularly in support of the JSF air system, and increased collaboration in science and technology.

It is acknowledged that to achieve these mutual benefits, both the Australian Defence Organization and Australian industry would require timely access to relevant JSF technology and data. Timely access to technology and data is also essential for successful coalition operations, including our ongoing cooperation in Afghanistan and Iraq.

Australia understands and accepts the United States' need to prevent the transfer of its technology, where such a transfer could threaten its capability edge. We appreciate that disclosure policies and the International Traffic in Arms Regulations (ITAR) are two key mechanisms used by the United States to achieve this objective.

In protecting technology, Australia, like the United States, strongly supports and participates in international regulatory regimes designed to counter weapon proliferation. Australia, like the United States, applies strict export controls to defense and dual-use technologies.

In the JSF program, for example, Australia and the United States are like-minded in seeking these same outcomes focused on enhanced interoperability through technology sharing with a rigorous regulatory environment. In all these activities, Australia relies on sufficient and timely access to United States technology and data is to meet our operational and sustainment needs. Technology flow is not just from the United States. Australia aerospace industry is small, but we have capabilities that can and are continuing to contribute to the program.

Experience has shown, however, that the United States' disclosure policies and ITAR regime can restrict needed sharing of technology and data, even though Australia has an excellent record in protecting United States technology. Overly restrictive access to United States technology could have numerous negative consequences for both of us, including: forcing Australia to acquire systems elsewhere; threatening interoperability; limiting the operational capability of Australian forces alongside the United States forces; and reducing the level of cooperative technology development between our governments and industries.

Currently, United States——

Chairman WARNER. Let me interrupt. You were referring to a letter, will you make that whole letter available to the committee?

Mr. GATES. We can. That's the letters between the Minister for Defence and Secretary of Defense.

Chairman WARNER. Yes, and that can become a public document?

Mr. HARVEY. I believe we can do that, Mr. Chairman.

Mr. GATES. We'll certainly attempt to do that.

Chairman WARNER. Thank you. I think it would be helpful. Did that letter contain elsewhere, in any of the provisions, a reference to the possibility of not going forward with the two engine program?

Mr. GATES. This letter was written in 2002.

Mr. HARVEY. So, it was late 2002. Mr. Chairman, I believe it didn't get down to that level of specificity in the letter.

Chairman WARNER. All right, thank you.
[The information referred to follows:]

October 29, 2002

Exchange of Letters between the Minister for Defence of Australia and the Secretary of Defense of the United States of America concerning Australia's Participation in the Joint Strike Fighter (JSF) Program

I have the honour to refer to the discussions that have taken place between the Department of Defence of Australia (AS DOD) and the Department of Defense of the United States of America (U.S. DoD) concerning Australia's participation in the joint development and potential cooperative production, operation and support of an effective and affordable JSF Air System.

In these discussions it was the acknowledged expectation of both U.S. DoD and AS DOD that participation in the JSF Program would foster the close involvement of U.S. and Australian industries and research and development organisations in the JSF Program. Moreover it is intended that U.S. DoD and AS DOD co-operation in future phases of the JSF Program will serve as a prominent example of the successful co-operation envisaged in the *Memorandum of Agreement between the Government of Australia and the Government of the United States concerning Reciprocal Defense Procurement* dated 19 April 1995.

As a result of the discussions, AS DOD has the following understandings.

It is recognised that throughout the life of JSF, there will be advantages afforded by the JSF global support system vision for interoperability and cost effectiveness and by minimising divergence in JSF Air System configuration and support arrangements.

It is recognised that AS DOD has a fundamental requirement for its armed forces to operate at maximum capability for its self-reliant defence capability and to interoperate with U.S. and Allied Forces. It is also recognised that there is a fundamental requirement for Australian industry to have sufficient national capability to support AS DOD through an Australian-based logistics infrastructure, including by undertaking deeper maintenance of the JSF Air System in Australia. Consequently, the AS DOD and U.S. DoD affirm that appropriate sharing of technical information and the appropriate provision of use rights for that information throughout the life of the JSF Program is a fundamental principle underpinning AS DOD's continued involvement in the JSF Program. Accordingly, to the extent appropriate and practicable, AS DOD expects to obtain information and use rights that are necessary, useful and relevant to meet AS DOD's operation and support requirements set out above, including the requirement for:

(a) rapid evaluation by AS DOD of air system effectiveness in Australian-specific scenarios;

(b) rapid integration or modification of AS DOD specific weapons and sensors;

(c) inclusion of Australian variations in elements of the mission system;

(d) satisfaction of AS DOD-specific safety requirements.

AS DOD envisages an appropriate role for Australian industry on merit within the JSF global support system should this emerge as the most cost-effective option.

The AS DOD understands that, in the interest of interoperability, the AS DOD will be given an opportunity in the future, upon request, to obtain a version of the JSF Air System which will be as common to the U.S. JSF Air System as is possible within the U.S. national disclosure policies.

The AS DOD and the U.S. DoD recognise that AS DOD's national ability to achieve the stated Australian desires regarding the JSF Program is dependent on several factors, for example:

(a) U.S. laws, regulations and policies on exports and disclosure of technical information;

(b) cooperative or AS DOD decisions regarding what technical information to acquire;

(c) U.S. DoD consent, on a case by case basis, for AS DOD use of JSF Project Information for purposes other than those set forth in the U.S. DoD-AS DOD JSF System Development and Demonstration (SDD) Supplement. To the extent practicable, consent will be consistent with the principles enunciated in this letter; and

(d) the availability of funds, where appropriate, to support the stated AS DOD expectations and desires.

Decisions on these matters may have an impact on the AS DOD throughout its participation in the JSF Program.

The AS DOD and U.S. DoD affirm the importance of having no predetermined work share and also a level playing field for industrial participation for the life of the JSF Program. The AS DOD will have visibility into industrial participation in the JSF Program to monitor outcomes for Australian industry in order to assure itself that subcontracting competitions are conducted fairly and provide best value.

An important objective of AS DOD participation is to promote an on-going role for its industry and research and development organisations throughout the JSF Program. The AS DOD and U.S. DoD further recognise that the JSF Program may benefit from cooperative efforts involving capabilities and technologies developed in Australia. Such capabilities and technologies may

be offered as non-financial contributions. The AS DOD understands that all AS JSF SDD non-financial contribution proposals that could provide best value opportunities for the JSF Program will be promptly considered.

Consistent with the *Memorandum of Agreement between the Government of Australia and the Government of the United States concerning reciprocal Defense Procurement* dated April 1995 and the *Statement of Principles for Enhanced Cooperation in Matters of Defence Equipment and Industry* dated July 17, 2000, the AS DOD and US DoD reaffirm their desire to enhance and strengthen each country's industrial base.

In accordance with the Statement of Principles cited above and Section III of the JSF SDD Framework MOU, the AS DOD and U.S. DoD desire to see an improvement in the efficiency of the procedures for export licensing approvals. The AS DOD understands the U.S. DoD will use its best efforts to have established appropriate licensing arrangements for the JSF Program. AS DOD desires that export licenses will be expeditiously approved to enable Australian companies to bid for, and undertake, work in the JSF Program.

The understandings above express the expectations as noted of AS DOD for the life of the JSF Program from the commencement of Australia's involvement in the SDD Phase. For the SDD Phase cooperation between the AS DOD and U.S. DoD will be governed by the multi-national JSF SDD Framework MOU and the U.S.-Australia Supplement thereto. Future phases will be governed by separate arrangements. AS DOD and U.S. DoD negotiations for such future separate written arrangements as well as for amendments to the U.S. DoD-AS DOD JSF SDD Supplement will take into account these expectations for the JSF Program.

If the understandings set out above, which are not legally binding, are acceptable to the U.S. DoD, I suggest that this letter and your reply to that effect will place on record the understandings between the AS DOD and U.S. DoD regarding the JSF Program.

Robert Hill.

Minister for Defence
of Australia

October 29, 2002

Exchange of Letters between the Secretary of Defense of the United States of America and the Minister for Defence of Australia concerning Australia's Participation in the Joint Strike Fighter (JSF) Program

I have the honor to acknowledge receipt of your letter of October 29, 2002 concerning Australia's participation in the JSF Program, and confirm that the understandings set out in your letter are acceptable to the U.S. Department of Defense; and that your letter and this reply will place on record the understandings between the U.S. Department of Defense and the Australian Department of Defence regarding the JSF Program.



Secretary of Defense
United States of America

Mr. GATES. Current United States export controls often have the unintended consequence of preventing Australian companies from being able to discuss technology or related matters with United States companies in sufficient depth, or to obtain export licenses in sufficient time to meet United States prime contractors schedules. This limits the ability of the program to deliver best value.

Best value for the program as a whole can only be achieved if there is a genuine level playing field, one that gives partner nations' bidders the same time and data resources to complete bids. Guaranteed access to necessary JSF data and technology to allow Australia to operate and support the JSF will be required before we join the next phase of the project.

There's been much good work done in the context of the cooperative JSF program to streamline access to necessary technology and data. But more work needs to be done. We need to work together to further improve these mechanisms to make the program a success, while continuing to protect the United States' capability edge.

Mr. Chairman, in conclusion I would like to stress that Australia is a very strong supporter of the JSF program. We are relying on the JSF as a key element of our future defense capability, both for the defense of Australia and to contribute to future coalition operations. We would not want to see any lessening of support for the project in the United States that would threaten its cost, schedule, or capability targets. We also seek ongoing visibility of any major proposed changes that would effect those targets.

We again congratulate the United States DOD on the success that has been achieved in the JSF program to date, both in terms of technical achievement and the way in which international cooperation has been advanced. Let me stress our ongoing success in

terms of operations and cooperative projects, such as the JSF, are subject to timely access to necessary technology and data.

We look forward to working with the United States to continue to improve access to these critical areas to make the JSF program a great success. Thank you.

Chairman WARNER. Commodore?

Mr. HARVEY. I have nothing to add. Mr. Chairman, we look forward to your questions, if you have any.

Chairman WARNER. Well, you've traveled a long way to participate. I would be quite interested, and I'll lead off, as to your views as to the person who will be ultimately responsible and your successors for the operation of these aircraft once they become available. Do you feel that your country had a choice to decide between the Pratt and the Rolls General Electric engine originally?

Mr. HARVEY. I don't believe we had a choice as such, as I said, we were consulted in 2003, and we made the point at the time, we saw a lot of benefits in an alternate engine. We saw the cost, schedule, and capability targets of the project as key, and we respect the right for the project manager to make the decisions required for that.

Chairman WARNER. But as a nation, as you learn more about the second engine, and assuming it comes online and in production, then you'd have the opportunity to make a choice between the two, is that correct?

Mr. HARVEY. Correct. If we saw that there were two engines, there would be benefits for Australia, although with a fairly small fleet, we wouldn't necessarily go for two engines, however, there are benefits in a choice.

Chairman WARNER. In other words, you would equip your fleet entirely with one model, but you'd at least have the option to select the model you wish.

Mr. HARVEY. That's true. We would welcome the option to choose. However, we may or may not go with two. It depends on basically, the business case at the time and the design of the JSF is such that they are meant to be fully interchangeable. Roll one out, roll the other in.

Chairman WARNER. That was my understanding. I posed that question earlier. We have a trite phrase, "one-size-fits-all." In other words, you can roll one in and roll the other one out quite easily. So, that gives a major benefit wherever the aircraft is operating in the world, depending on maintenance problems.

But the standdown, again, as an operator, do you feel it's advantageous that the aircraft, assuming that 4,000 to 5,000 of these aircraft exist in various parts of the world, and some are involved in contingency operations requiring immediate use of the aircraft, that if you had a standdown, you could fall back on other aircraft that have a different engine than the one that was stood down. Could this have some operational benefits to fighting whatever contingency you are engaged in?

Mr. HARVEY. Yes, Mr. Chairman, we do see benefits in that. But as I say, overall our priority is to get the aircraft up and flying, so we can replace our aging aircraft now.

Chairman WARNER. Surely. Competition, do you have any views, either of you, as to whether competition results in cost savings? For

instance, here's a rather interesting book, "The Air Force and the Great Engine War," it's a history, a chapter in our country where we experienced much the same problem. In that period, we experienced cost savings from having competition for the engines that were available for different types of aircraft at that time.

As we view it from this perspective, and tomorrow witnesses will answer the question I'll ask of them, "if General Electric and Rolls do not remain in this program and win a second engine, what's the likelihood that they would remain with an industrial base? Such that if a follow-on aircraft with some other military engine were needed, would they be capable of developing one, or would they just as soon get out of the military business and go into just the civilian side?" Do you have any views on that?

Mr. HARVEY. Mr. Chairman, I think from the Australian point of view, that's largely a decision for the U.S. and their strategic base. We're not a large aerospace industry, we certainly haven't produced our own engines, so we rely on largely what the U.S. does.

Mr. GATES. We've already stressed, if I may, Mr. Chairman?

Chairman WARNER. Yes, go ahead.

Mr. GATES. Of course, that—as I said in my statement, we're expecting that if it does come down to just the one engine, that the cost saving that is advertised is realized and the sole source is not allowed to expand as being the sole source.

Chairman WARNER. No, I think that the motivation of the Secretary of Defense and others was to invoke a cost saving by going to the one engine, and this committee is simply trying to examine what are the ramifications.

Number one, is our ability as a partner to continue with other nations of the world when I think testimony thus far has shown there wasn't quite the degree of consultation that you envisioned at the time eight nations signed up.

Second, it's a question of this enormous fleet of aircraft, up to 5,000, is it to be dependent only on one engine and one engine manufacturer for parts and all other types of things. Given the life of aircraft today, the information has been brought to my attention is that a single airframe if it continues to be as successful as we hoped we'll have at least two, a second engine, replacing the first, and possibly as the chart has shown me, a half an engine. In other words, some aircraft will require a third, others won't depending on the extent of the use. So, we're looking at one of the biggest, single contracts, if not the biggest, in contemporary history of military procurement. I suppose it comes down to the lessons of the past. Isn't it wise to have competition which has been proven to have been effective in the two engine program? I'll yield to you for a question or two.

Senator LIEBERMAN. Thanks, Mr. Chairman. I know that time is running, the vote has been called. Really, the question I think before us, in one sense could be this: competition is generally good, but the question is, can we afford it here? Will the second engine program affect what you gentlemen from Italy and Australia have made clear, is of paramount importance to you, which is the affordability and schedule of delivery of this program?

Chairman Warner has raised a couple of important questions. His question of the standdown and both panels of witnesses have

raised a question about the capacity of Pratt & Whitney, if in fact the single engine decision holds to basically service a global fleet. I'm going to leave that to the representatives of Pratt & Whitney who are coming tomorrow, but I think it's an important question to have asked.

I want to say that as I've listened to the two panels here—first, let me thank you both as representatives of your nation's militaries for the extraordinary cooperation and really, partnership that you have had with the United States military. I want you to know particularly in the case of Iraq and Afghanistan, where I know it's not—shall I say with senatorial understatement—universally popular in either of your countries, or any of your countries in fact, the three. Really, the American people appreciate your steadfastness, and I think we will look back on this and feel—we have difficult days right ahead, but they will look back and feel that we did something critically important to the security of the world and certainly of the nations involved here today, in the future. So, I thank you for that.

So I am—very interestingly in both panels, the representatives of the U.K., Italy, and Australia, I hear a strong unified voice of concern, complaint, even grievance about the question of technology transfer. I think you're right, and I think we ought to do everything we can to get over that, because you're such good allies, and it's in our interests. We're in a global world, and it's just a policy that has to mature with the world and with the importance of our alliance.

But I don't hear the same uniformity of attitude toward this question of a single engine, or two engines. I was actually going to ask this panel this question, and in some sense, you've answered it, which is, if you had to choose between preserving the alternate engine program and maintaining program cost and schedule, what would be your preference? I believe I've heard you both say that if you had that choice, you'd go with the single engine and the program cost and schedule as it's been pledged to you. Am I right, General Bernardis?

Mr. BERNARDIS. Yes, Senator Lieberman. The paramount for us now is to have a program running. We are in a crucial phase of the program right now.

Senator LIEBERMAN. Right.

Mr. BERNARDIS. We have to face the new MOU for production and sustainment and this has to be decided by our Parliament this year, and we have to give evidence that the program is still what it was meant in the beginning.

This program was born to counteract the famous Augustine Law, which was made for the U.S. market and that law said that continuing at the pace where they were at the time, the U.S. budget, which is quite different from our budget, could have afforded for the U.S. just one fighter per year. Obviously this is a paradox but we don't want to get into a position where we are facing a program which is not sustainable.

The reason why we are inside the JSF program is first of all, because we are, as I've said, a staunch ally of the U.S. and we want to be interoperable with the U.S., as we are right now in the Bal-

kans, in Afghanistan, and in Iraq. But in the same level, we put the possibility to have an affordable program.

The affordable program is coming out of a program which is on time, on schedule, within the assigned budget. Right now, all the programs are effected by runaway costs of budgets. We don't want this with this program.

If the two engine solution would provide the affordable program, that's extremely fine with us. We would like to have that, because we recognize the opportunities that two engine solutions are given. But if that solution is against this situation, we cannot support that if we have to put more money in front of that, because we will never be able to get approval for that.

Senator LIEBERMAN. I fear that's exactly what the consequence would be. I know we're really running out of time. Admiral, if you would just give me a second.

Mr. GATES. Very short then, Senator Lieberman, is that I echo the thoughts of our Italian friends.

Chairman WARNER. We're not hearing you very clearly.

Mr. GATES. Is that for us as well, it is exactly the same. This is going to be a major buy for us, it's going to be a major part of our capability across the Australian Defence Force, and we are at risk at the moment with any delay on the project for our aging F–111s and F/A–18s. So for us, the second engine, if it comes along, would be of benefit as we've already discussed here. But more important for us, is really hitting that cost schedule and present targets.

Senator LIEBERMAN. I thank you both. Look, my concern is if we go with the second engine and the DOD is right about the $1.8 billion, knowing the pressure they're under, it's going to be taken out of some other part of the JSF program, and that's going to cause delay.

Thank you both, very much.

Chairman WARNER. I don't know that we can leap to that conclusion, it's certainly an option.

Senator LIEBERMAN. I'm prepared to. [Laughter.]

Chairman WARNER. Yes, I know you are. [Laughter.]

But anyway, the point is, tomorrow's testimony hopefully can establish with some clarity that if we go to the two engine program, and based on history in this country and I think in your countries also, competition controls cost. There's a strong case to be made that that savings through competition can more than pay for going forward with the second engine, as was contracted this summer by our country to go forward. We signed a contract. Within 3 or 4 months, we've seen a complete turnaround, 180 reversal.

Thank you very much for your participation, and your understanding of the interoperability of the U.S. Senate, or lack of thereof. But I think we've had adequate time for all.

Senator LIEBERMAN. Thank you, Senator.

Chairman WARNER. I look forward to tomorrow's hearing, 9:30 a.m. this room, tomorrow, and I look forward to seeing you, my friend.

We are adjourned.

[Additional information follows:]

THE AMBASSADOR

File
13.D.4-1.WAS
Enclosure

Date
13 March, 2006

Dear Senator Warner and Senator Levin,

Thank you for your kind invitation to participate in the hearings concerning the Joint Strike Fighter (JSF). Unfortunately, I will be unable to attend, but I submit the following for your consideration.

Whereas Denmark remains neutral as to the question of developing one or two engines for the JSF program, we have from the beginning contributed funds to the development only of the F-135 engine. Denmark will not oppose the parallel development of the F-136 engine, but neither will we contribute to the funding of any extra costs this development might incur.

As is evident for the above, I cannot comment on whether Denmark was consulted with regarding or informed of the proposed cancellation of the F-136 engine. Since we had never expressed an interest in this part of the project, we would not expect to be consulted with on related issues. In general, however, I can state that Denmark is satisfied with the cooperation within the JSF project and look forward to continuing our participation.

Sincerely yours,

Friis Arne Petersen

Friis Arne Petersen
Ambassador of Denmark

United States Senate
Committee on Armed Services
Washington, DC 20510-6050

The Honorable John Warner
The Honorable Carl Levin

ROYAL NORWEGIAN EMBASSY
The Ambassador

March 13, 2006

The Honorable John W. Warner
Chairman
Committee on Armed Services
United States Senate
Washington, DC 20510-6050

Dear Senator Warner,

Thank you for the invitation to testify at the hearing of the Senate Arms Services Committee on Tuesday, March 14, 2006 regarding second sourcing of engines for the Joint Strike Fighter Program.

The Embassy has been in dialogue with the Ministry of Defence in Oslo on this issue, and it has been decided that we will not use this opportunity to testify.

The Ministry of Defence is also of the opinion that the views of the US Department of Defense, as the largest contributor, customer and overall responsible for this large program, should weigh heavily in this matter.

Yours sincerely,

Knut Vollebaek

c.c. The Honorable Carl Levin
Ranking Member
Committee on Armed Services
United States Senate
Washington, DC 20510-6015

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REPUBLIC OF TURKEY
MINISTRY OF NATIONAL DEFENCE
Undersecretariat for Defence Industries

Distinguished Senators,

I would like to thank you for providing us with the opportunity to express our general opinions in regard to the Joint Strike Fighter Program and to share our assessment on the development of an alternative propulsion system for the F-35 aircraft thereunder.

Turkey, having been involved in the Joint Strike Fighter Program since year 1999, is supporting all cooperative efforts in the Program by allocating a significant amount of resources and we strongly believe that JSF Program will be a good model for the collaborative acquisition programs should the critical requirements and expectations of the partner nations be taken into account.

As we are so rapidly approaching the most critical milestone by which the JSF Program Production, Sustainment and Follow-on Development (PSFD) Phase is planned to be launched, Turkey, like several other participants, is preparing for a top-level national decision-making process to determine whether to take part in the upcoming phase of the JSF Program or not.

Since JSF Program is to be the most expensive military program that Turkey will be budgeting for, notwithstanding the advantages thereof, Turkish national decision making process will definitely be based on the achieved level of satisfaction of Turkey's expectations on key points. Those points include an active involvement of the Turkish Industry in the SDD and PSFD Phases, participants' use and disclosure of technical information to be generated throughout the Program and a risk-free sustainment solution that enables the effective operation of the future F-35 fleets with a secured level of national and regional autonomy. Worth mentioning, we have been experiencing significant problems in overcoming our concerns in the said areas and we foresee that there are still few steps to be taken in near future to reach for a more promising partnership of equitable benefits.

Meanwhile, we were informed that the U.S. Department of Defense has proposed the termination of F136 engine program in the Fiscal Year 2007 budget request and the U.S. is seeking to receive the opinion of the international partners on the issue.

As to emphasize Turkey's general view on the issue, please first of all be informed that we have neither selected our engine, nor demonstrated a positive tendency to either of the engines in the competition yet. We are absolutely at the same distance from both competitors at the time being and our ultimate decision on selecting the engine will be made via a comprehensive evaluation of both candidates as a part of the Turkish national decision-making process.

Nevertheless, we strongly concur with the fact that affordability ought to be a key tenet in the JSF Program and that all source selection efforts should be performed in a competitive environment to contribute to the affordability of the Program. In this manner, we assess that the ongoing competition between the Pratt & Whitney and the Fighter Engine Team may be positively affecting the affordability of the Program and we support keeping both F135 and F136 engines alive at this point.

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MINISTRY OF NATIONAL DEFENCE
Undersecretariat for Defence Industries

However, as the original action of developing an alternative engine in the JSF Program has in fact been a decision made by the United States Government previously, we acknowledge that, termination of the alternative engine shall also be on United States' own decision. And for your high information, although we are supporting the existence of both engine contractors in the PSFD Phase, should there be a need for a contribution by the international partner nations, Turkey will be unable to provide any additional financial contributions to the realization of an alternative engine development activity.

Again, I take this opportunity to thank you for your kind attention and patience.

Yours Respectfully,

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The Ambassador

Ambassade van het
Koninkrijk der Nederlanden

Washington, March 9, 2006

Dear Mr. Chairman,

Thank you very much for your invitation to send a representative of the Netherlands to testify at the Senate Armed Services Committee hearing on the JSF program next Tuesday, March 14, 2006.

As you know this program is very important for the Netherlands Armed Forces and industry and another example of the long lasting and warm relationship between our countries.

It has been decided that The Netherlands will provide their position in writing. This on the record statement, signed by the Deputy Secretary of Defense, is attached to my letter.

Respectfully,

Boudewijn J. van Eenennaam

The Honorable John Warner
Chairman
Committee on Armed Services
U.S. Senate
228 Russell Senate Office Building
Washington, DC 20510

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To Mr. John Warner
Chairman US Senate Committee on Armed Services
225 Russell Senate Office Building,
Washington, DC 20510

Date 8 March 2006
Ref M/2006008266
Subject 'Hearing' SASC concerning the JSF-program

Dear Mr. Warner

As a partner in the JSF-program, the Netherlands has been following the discussions related to the Quadrennial Defense Review (QDR) process and the presidential FY 2007 budget with great interest. Since the JSF program is an international project and the FY 2007 budget is primarily an American affair, I appreciate the fact that the Senate Armed Services Committee (SASC) has decided to conduct a hearing to get a thorough understanding of the interests of all JSF partner countries. Unfortunately I am not able to attend the hearing in person, but th is letter reflects the position of the Netherlands. I will address the FY 2007 subject, but I also take the opportunity to address additional issues of vita l importance for the Dutch support of the JSF program.

All partners entered the JSF program with the assumption that two engine programs were an integral part of it. We never anticipated this element of the program to be changed. The Netherlands has always been in favour of two engines in order to keep a competitive edge within the JSF-program.

Developing two engines has been a way of achieving that goal. However, current developments in the budgetary arena force the SDD-partners to take a hard look at the expenses of the program. From the Dutch point of view, it is crucial that the JSF program meets product, time and budget constraints. If maintaining two engines in the program implies deleting aircraft capabilities, or a serious slip in the program, or a substantial increase of Partner contribution, or any combination of those events, th is will pose a huge problem for the Netherlands. The Netherlands is weil aware of the current dilemma and trusts the US government to make the right decisions in this matter.

Datum 8 March 2006
Ons kenmerk M/2006008266

As you may have noticed, I used the expression 'partner' several times. The partnership is paramount to the Netherlands. To me, real partnership is proven and achieved by crucial elements, like a common baseline JSF for all partners. Furthermore, by providing a best value program with a level playing field for all partner industries and technology access for all of them in order to enable them to produce world class and best value products. Additionally, equally important is the creation of a European footprint within the logistic support solution to find the right balance between best value and sovereign requirements of all partner nations, supported by the American government and industry. Finally, a concern to the Dutch government is adequate involvement of Dutch pilots in Developmental Test and Operational Test and Evaluation on equal footing with US warriors.

To conclude, I appreciate the initiative of the SASC. I hope the issues I addressed will contribute to the realisation of the program, because that is still the purpose of the Dutch government in order to create and maintain an effective partnership!

Yours sincerely,

Cees van der Knaap
Deputy Secretary of Defense

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

1. Senator MCCAIN. Lord Drayson, the Joint Strike Fighter (JSF) program is a multilateral, multinational program. There appears to have been a unilateral decision made on the part of the U.S. Department of Defense concerning the JSF alternate engine. What is also a concern is whether or not a business case analysis supports such a decision. Competition over the life of the JSF program and the cost savings it would provide should be considered as well as the innovation that is a by-product of competition. If unforeseen problems should arise in the future it should be determined if an alternative would limit the risk of grounding the worldwide JSF fleet. Has the business case analysis that supports the cancellation of the JSF alternate engine been made available to you?
Lord DRAYSON. No.

2. Senator MCCAIN. Lord Drayson, does the business case analysis support the decision to cancel the alternate engine?
Lord DRAYSON. I have not seen the business case.

3. Senator MCCAIN. Lord Drayson and Sir Stirrup, have either of you been provided this information?
Lord DRAYSON. No.
Sir STIRRUP. No.

4. Senator MCCAIN. Lord Drayson, the JSF program has been experiencing friction for some time with its international partners over workshare and technology

transfer. Please provide your concerns on the matter of technology transfer as well as the access you have been granted versus what you require as our leading partner in the JSF program.

Lord DRAYSON. Through our Level 1 status in the JSF programme, we have embedded our firm national requirements into the System Design and Development phase of the programme. We are now negotiating the through life aspects of the programme and we will need to be assured that we will have the operational sovereignty that we require.

[Whereupon at 3:25 p.m. the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2007

WEDNESDAY, MARCH 15, 2006

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

TO CONTINUE TO RECEIVE TESTIMONY ON THE JOINT STRIKE FIGHTER F136 ALTERNATE ENGINE PROGRAM

The committee met, pursuant to notice, at 9:42 a.m. in room SH–216, Hart Senate Office Building, Senator John Warner (chairman) presiding.

Committee members present: Senators Warner, Inhofe, Collins, Talent, Thune, Kennedy, Lieberman, Bayh, and Clinton.

Committee staff members present: Charles S. Abell, staff director; and Leah C. Brewer, nominations and hearings clerk.

Majority staff member present: Stanley R. O'Connor Jr., professional staff member.

Minority staff members: Jonathan D. Clark, minority counsel; Gabriella Eisen, research assistant; Creighton Greene, professional staff member; and Bridget W. Higgins, research assistant.

Staff assistants present: Michah H. Harris, Jessica L. Kingston, and Jill Simodejka.

Committee members' assistants present: John Bonsell, assistant to Senator Inhofe; Arch Galloway II, assistant to Senator Sessions; Mackenzie M. Eaglen, assistant to Senator Collins; Mieke Y. Eoyang, assistant to Senator Kennedy; Frederick M. Downey, assistant to Senator Lieberman; Robert J. Ehrich, assistant to Senator Bayh; and Andrew Shapiro, assistant to Senator Clinton.

OPENING STATEMENT OF SENATOR JOHN WARNER, CHAIRMAN

Chairman WARNER. Good morning. I apologize for getting off to a somewhat late start. Senator Lieberman and I had another meeting this morning that we had to attend to, but now we are underway. I'll just make a few short remarks here.

The committee meets this morning to have a second session on what we here in the Senate deem to be a very important issue. We'll receive testimony from the Deputy Secretary of Defense, Vice Chief of Naval Operations, the Vice Chief of Staff of the Air Force, the Assistant Commandant of the Marine Corps, and from our Joint Strike Fighter (JSF) engine industry teams on the proposed

termination of the F136 alternate engine program. We welcome you Secretary England and your team that has joined you.

On the second panel of this hearing will be Scott Donnelly, President and Chief Executive Officer (CEO) of General Electric (GE) Aviation; James Guyette, President and CEO of Rolls-Royce North America; Louis Chênevert, President and Chief Operating Officer of United Technologies Corporation, the parent company of Pratt & Whitney; and Lloyd Newton, Executive Vice President, Military Engines, Pratt & Whitney.

At yesterday's hearing, we heard from our international partners that if the actions taken by the Department of Defense (DOD) to terminate the F136 alternate engine were to be reversed by congressional action, that action may pose a risk to JSF schedule and cost. Delays in schedule and increased costs are clearly unacceptable for the eight nations that have pledged $4.6 billion toward the development of the JSF. Some of these countries expect the contractor to lower the unit cost based on increased volume of sales if a decision to sole-source production is made. They also expect the United States Government to control costs as well. The United States Government has somewhat of a checkered record on controlling costs in a noncompetitive environment. That fact is well understood by this committee. Competition really is the driving issue as to why Congress (on the Senate side) feels we should have a very full and extensive record to take to, first, the Committee on Armed Services and then to the Senate floor as it relates to this program.

This program potentially is the largest, I repeat, the largest acquisition program in terms of funding dollars in the history of the DOD. It will produce a plane that will be used by our three Services and our allies for at least 30 years with an expected delivery of approximately 2,600 aircraft to the United States and the United Kingdom (U.K.) and upwards of 2,000 aircraft for our international allies and our friends.

Historically, the U.S. and our allies have operated a wide variety of fighter and attack aircraft. If one particular aircraft were to be grounded for an unforeseen problem, there were other aircraft with similar capabilities to fill that void. That could change under JSF. The JSF is planned to replace several aircraft types as part of a tactical aviation neck-down strategy. By 2030, the JSF and the F–22 will represent 85 percent of U.S. and allied tactical air power. You need to keep in mind during the course of today's hearing that relying on a single engine design in this scenario presents an unprecedented vulnerability. A single technical engine flaw, either early in the life of the engine or its later stages, could preclude the capability to conduct combat operations due to what would likely be a standdown. Controlling cost is also a significant concern without clear competition when a single engine manufacturer will have the total responsibility.

In considering the total number of JSF aircraft to be built, the total propulsion procurement cost alone may exceed $100 billion. Failure to control cost over the life cycle of the aircraft would prove devastating to our national security. This is a case that was clearly made yesterday by international partners from the U.K.; a competitive environment is essential, in the judgment of many of us, to the

Government's ability to control cost, especially in a program of the magnitude of the JSF.

So the essence of this is trying to determine with the absence of a second manufacturer, can we control costs, can we have the time-honored, historical, Great Engine War; can we get competition and containment of cost? Some of us believe that if we do have this competition it will result in a savings that would more than overcome the projected cost of continuing both engine manufacturers. So with that I turn it over to my colleague.

[The prepared statement of Senator Warner follows:]

PREPARED STATEMENT BY SENATOR JOHN WARNER

The committee meets today to receive the testimony of the Deputy Secretary of Defense, the Vice Chief of Naval Operations, the Vice Chief of Staff of the Air Force, the Assistant Commandant of the Marine Corps, and from our Joint Strike Fighter (JSF) Program engine industry teams on the proposed termination of the F136 Alternate Engine Program.

We welcome Secretary England, Admiral Willard, General Corley, and General Magnus to the first panel of today's hearing.

On the second panel of this hearing will be Scott Donnelly, President and Chief Executive Officer (CEO) of General Electric Aviation; James Guyette, President and CEO of Rolls-Royce North America, Inc.; Louis Chênevert, President and Chief Operating Officer of United Technologies Corporation, the parent company of Pratt & Whitney; and Lloyd Newton, Executive Vice President Military Engines, Pratt & Whitney.

We welcome all of our witnesses today.

In yesterday's JSF hearing, we heard from our international partners that if the actions taken by the Department of Defense to terminate the F136 alternate engine were to be reversed by congressional action, that action may pose a risk to JSF schedule and cost. Delays in schedule and increased cost are clearly unacceptable for the eight nations that have pledged $4.6 billion toward the development of the JSF. Some of these countries expect the contractor to lower the unit cost based on the increased volume of sales if a decision to sole-source production is made. They also expect the United States Government to control costs as well. But the United States Government, I'm sorry to say, has a very poor record of controlling cost in a non-competitive environment. A fact that is well understood by this committee.

The JSF program is the largest acquisition program, in terms of funding, in Department of Defense history. It will produce a strike fighter that will be used by our three Services and allies for at least the next 30 years, with an expected delivery of approximately 2,600 aircraft to the United States and the United Kingdom, and upwards of another 2,000 aircraft for our international allies and friends.

Historically, the United States and our allies have operated a wide variety of fighter and attack aircraft. If one particular aircraft were to be grounded for an unforeseen problem, there were other aircraft with similar capabilities to fill the void. That will change with the JSF. The JSF is planned to replace several aircraft types as part of a tactical aviation neck-down strategy. By 2030, the JSF and F–22 will represent 85 percent of U.S. and allied tactical air power.

We need to keep that in mind during the course of today's hearing. Relying on a single engine design in this scenario presents an unprecedented vulnerability. A single technical engine flaw either early on in the life of an engine, or in its latter stages, could preclude the capability to conduct combat operations on a broad scale. Controlling cost is also a significant concern when relying on a single engine manufacturer. When considering the total number of JSF aircraft to be built, the total propulsion procurement cost alone may well exceed $100 billion.

Failure to control cost over the life cycle of the aircraft would prove devastating to our national security—a case that was clearly made yesterday by our international partners from the United Kingdom. A competitive environment is essential to the Government's ability to control costs, especially in a program of the magnitude of the JSF. In fact, the Department of Defense has acquisition guidance that mandates competition on major programs. Competition promotes the rapid development of ideas, fosters innovation, and ensures technological advancement.

Remarkably, there has not been a JSF engine competition—not in system development and demonstration or production. That is why Congress has mandated an engine competition for the past 10 years with an investment to date of $1.3 billion. Congress made this decision based on the well documented benefits attained from

the Great Engine War of the late 1970s and early 1980s, a competition between Pratt & Whitney and General Electric to provide engines for the F–15 and F–16 that resulted in lower acquisition costs for engines, better responsiveness from the contractors, but most importantly, better readiness for the warfighter.

I was around during the Great Engine War and recall vividly the benefits which it brought to F–15s, F–16s, and particularly F–14s. That is why I feel our discussions here today bear such importance. The U.S. Air Force has documented acquisition savings from the Great Engine War at 21 percent and life-cycle cost savings, which includes acquisition, operations, and support costs, at 16 percent. In today's Great Engine War, savings in excess $10 billion over the life cycle of the JSF are entirely possible.

The Department's decision to terminate the F136 engine has the appearance of seeking near-term savings at the expense of budgetary control through competitive processes over the long term, and fails to take into account the risk associated with a sole-source provider of engines over the 30 plus year life-cycle of the JSF program, a potential cost increase to the taxpayer and our allies that may far exceed the $2.0 billion saved over the system development and demonstration phase of the program.

I thank you for your presence here today before the committee and we look forward to your testimony.

Chairman WARNER. Senator Lieberman.

Senator LIEBERMAN. Thanks very much, Mr. Chairman. Thanks to you and I would say to Senator Levin for affording me the opportunity to sit as the ranking member on these very important hearings and thanks for the characteristically thoughtful way in which you've conducted these hearings. We've reached out to people, not only from the U.S., but yesterday from around the world.

I view these hearings on the Pentagon's and administration's recommendation to have a single engine source for the JSF program in the larger context of the growing concern about the cost of military acquisitions. I know that this is felt in the Pentagon and I think you all know that this is felt increasingly here on this committee. We are worried not just by the overall size of the military budget, but really more to the point that increasingly military decisions are being made for largely budgetary reasons. One of the driving impulses that causes that to happen is the enormous skyrocketing cost of some of our major acquisition systems, and we're working hard.

I've been working with Senator McCain as his ranking member on the Airland Subcommittee which he chairs to focus in on ways we can reform the acquisitions process. It's been a focus of Chairman Warner and Senator Levin here on the full committee and we just have to find ways to save money so we can frankly build more systems. We're not building enough for any of the Services as far as I'm concerned.

In that sense, you've come before us with a tough decision. You've said let's have a single engine instead of a double engine for the JSF. You see an immediate almost $2 billion savings. That's $2 billion that can go a long way to some good use within the DOD. I think the argument that you've made to us makes sense. Incidentally, this is not a unique decision. The JSF airframe has been single-sourced to Lockheed. By example, the F/A–18 engine contract has been given to GE to produce—what, 4,000—a very large number of engines and I think a judgment is being made here that competition can sometimes be good but in a resource-constrained environment it may well be that the best we could do in terms of affordability is have a single source on a multi-year contract and ob-

viously for the Pentagon to be real tough in keeping that single source contractor's cost down.

I want to share with you, just very briefly, my reaction to the testimony yesterday. We had leaders of the military from the U.K., Italy, and Australia—three great allies. I was struck by what they clearly all agreed on, gentlemen.

Secretary England, they're not happy with technology transfer. This may not surprise you, on this program or a host of other programs. They were united in that and I really think these are three great allies. We ought to try to stretch a little bit to see if we can come to a meeting of the minds. Their reactions on this single engine for the JSF in which each of those three nations has invested money was more diverse. The U.K. clearly is upset about it and would like to see GE/Rolls-Royce be the second engine source. Our friends from Italy and Australia had a much more ambivalent attitude, in my opinion, and they said about as clearly as they could have if the choice is between two engine sources, and affordability and timeliness, that is keeping the JSF program on schedule, they go for the single engine and affordability and timeliness. I think that's a very important message to have heard and more diverse, frankly, than I thought we might hear from those three allies.

We were left within my mind with two big questions that they and others (and the chairman has just said them) and to the extent that you're able and the representatives of Pratt & Whitney, the single source selectee right now, I think have to answer today. One is, is Pratt prepared to respond in the case of the kind of stand down that Chairman Warner has talked about, being just a single source of the engines as opposed to having two. The second is price stability. What's the Pentagon prepared to do? What terms is Pratt willing to accept? Not that we're going to negotiate it here this morning, but understanding that one of the reasons to go to the single engine is to keep the price stable and save money overall. So this is an important hearing. I thank you all for being here and, again, Mr. Chairman, I thank you for your very fair leadership.

Chairman WARNER. Thank you, Senator. I'd ask the indulgence of the panel, we have two colleagues on the committee, both of them are heavily engaged in other matters elsewhere today and I'd like to depart from our normal procedure and allow Senator Kennedy to make an opening statement and ask a question or two to be followed by Senator Collins who will make a brief opening statement then ask a question and then we'll proceed.

Senator Kennedy.

Senator KENNEDY. Mr. Chairman, thank you very much. As the chairman has said, as we're finding out here, we have the markups on immigration legislation in the Judiciary Committee, and a very important health bill in our health committee and our Nation's priorities over there on the budget consideration and we're meeting this evening in terms of pension and pension reform. So there's a lot going on. But this is enormously important and I'm very grateful to Chairman Warner, Senator Lieberman, and Senator Collins for letting me just make a brief comment, and maybe ask a question. I want to welcome you, Secretary England. I have enjoyed working with you over a period of years. I thank all of our panel for being here this morning.

In the comments that have been made by both Chairman Warner and Senator Lieberman, a number of points have been raised and I would just hope that we would be able to give consideration to these points both in this committee and also from the panel, and that is with the issue of cost savings—the $1.8 billion in savings. I think we're looking at what is going to be the nature of the savings with real competition as we move on down the line. We have seen historically when we had the competition with the Great Engine War between the F–15 and the F–16, we had very important results in terms of military value, reliability, improved performance, and also overall savings. So I think there is a case that has to be made that these savings, the $1.8 billion, are really going to be more significant than you would have if there was real competition. Some have estimated that the savings with real competition could be 8 to 10 times that amount. We will try and find out about that.

We also are looking at obviously the life cycle of the whole system. When you look at the life cycle of the whole system in terms of these engines, we're talking in excess of $50 billion, some have estimated up to $100 billion. So it's difficult to imagine a program that is potentially as costly in terms of life cycle, $50 to $100 billion, which doesn't have any competition. Competition, in terms of the engine, competition in terms of life cycle, competition looking at the history of competitions in fighter engines which have resulted both in savings, greater reliability, and greater performance in terms of the military. I think the industrial base is something that we're constantly dealing with in a range of different kinds of issues whether looking at submarines or whether we're looking at aircraft engines or whether we're looking at building ships, this is something that we have to do to be concerned about. I don't think I know of any other program that the military is involved in that will result in such a sizable demand for large military engines over a longer period of time. It's really unique in that respect. So you have the largest multi-Service program life cycle cost on this, competitive cost, which we have to give consideration to as well.

Now, if we cancel the competition, essentially creating the winner take all, not just for the JSF but for any future aircraft engine, we have to look at this, I think, in relationship to any future aircraft engine. Because over time we'll be reducing the ultimate industrial base really to one supplier and we need to consider the long-term effects on the industry and our national security for the $1.8 billion to be saved over the next 5 years. I think when you add up all of these kinds of concerns, I reach the decision that really questions the value for that pathway.

Mr. Chairman, I really have just one question, if I could ask the Secretary? Last week the Secretary of the Navy was here testifying on the DD(X) acquisition strategy and how it was based on maintaining the competitive pressure. Now you're telling us that competitive pressures will not bring us the savings on the JSF engine. So I'm just wondering if you could reconcile these for me?

Secretary ENGLAND. Senator, I can. First, early on when there were three competitors for the JSF, there were three different companies, McDonald Aircraft, Lockheed Martin, and Boeing. At that time in that competition all three companies had selected the Pratt

& Whitney engine. So there was an opportunity early on in the competition. We do generally have competition but at some point when we no longer get the benefits of competition, that is when it costs us rather than providing benefits, and I would say that it's not beneficial for the Federal Government to pursue competition if indeed it's going to increase costs and we will discuss this in more detail in the hearing.

But the fact of the matter is all of our analysis shows that we never recover the cost of this program. The savings are $1.8 billion. The cost is $2.4 billion over the Future Years Defense Program (FYDP). If you project that forward we conclude that in the most optimistic case we would not save any money until 2025 and in a realistic case we never recover that cost much less the cost of a separate supply chain and all the issues associated with having the second engine. So I think as Senator Lieberman said, we have a single airplane with lots of parts provided by a single manufacturer.

My judgment is that it is much better to apply that money to make sure that we have the most reliable and best engine we can, rather than spending money on two different engines. My conclusion is that we would not have nearly as good a product if we did that as opposed to concentrating on one engine. Again, as we've been pointed out, we have single engines on a number of our airplanes today so we will have a opportunity I know to discuss this in more length but from strictly a cost point of view, our data indicates that it is not cost advantageous to the Government to have a second engine.

Senator KENNEDY. Just finally on this, when was this, how many years ago was that competition?

Secretary ENGLAND. That started in 1995, I believe, Senator.

Senator KENNEDY. So we're looking at the competition from 10 years ago?

Secretary ENGLAND. That's correct.

Senator KENNEDY. That's some period ago and a lot has transpired since that time.

Mr. Chairman, thanks very much. If I could submit some questions for the record?

Chairman WARNER. Yes, the record will remain open.

Senator KENNEDY. I appreciate your courtesy as always and also Senator Lieberman's.

Chairman WARNER. The record will remain open until March 17 because these two hearings will develop a lot of interest in this issue and we want to make certain that Congress can profit from all those who have a knowledge about how best to go forward.

Our distinguished Senator is here, Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman. I do very much appreciate the opportunity to make some opening comments. I'll withhold my questions until the panel has a chance to present its testimony.

To me the key issue here is the impact on the industrial base. In the case last year when the Navy proposed a one shipyard strategy for the DD(X), the result would have been the permanent closure of one of the shipyards so we would have seen the industrial base shrink in a way that would have been very detrimental to fu-

ture competition and to our national security. I'm pleased that we were able to prevail in blocking that proposal.

So the question for me here is, what is the impact on the two suppliers if we go forward with the multi-year single source? My initial review indicates that the supplier that would not be chosen still has ample business and will be able to keep producing jet engines, first, for the military under contracts and for a vibrant commercial market so that we're not looking at a reduction in the industrial base or the loss of a key company that is a potential future supplier to the military. So I think it's a very different situation than the one that we looked at last year but I think the question of what is the impact on the industrial base is the same. That is the question that I look forward to exploring with both panels today. Thank you, Mr. Chairman.

Chairman WARNER. Thank you, Senator. We'll hear from the witnesses on this issue but I likewise have that concern and I think that the GE/Rolls-Royce team will tell you that there is quite a bit of difference between the civilian engine and the military engine and to keep their teams together for what may never occur in the future as another opportunity is problematic but I'll let them address the issue.

Senator Lieberman, you raised an important issue which was covered yesterday, that is technology transfer. Mr. Secretary, we will look at it in the context of this hearing but it's an issue on which I would like to bring the components together for this committee. I have to say that it is an issue that's constantly brought to the attention of Congress by various nations who are working to help us establish for our own arsenal of weaponry all of the best equipment we can find and we, as my colleague from Maine just said, are faced with a shrinking industrial base and more and more we have to rely on our foreign partners for their expertise and their participation. So one of the issues that I hope you'll address this morning is the procedure by which this decision was made and presumably consultation with our partners. That issue was raised yesterday. So I think we'll proceed now to receive your direct testimony, Mr. Secretary.

STATEMENT OF HON. GORDON R. ENGLAND, DEPUTY SECRETARY OF DEFENSE

Secretary ENGLAND. Chairman Warner, Senator Lieberman, Senator Kennedy, Senator Collins, it is always a delight to be with you and I thank you for the opportunity. This is an important subject to be discussed. It is a judgment call frankly. I mean, it's based on data. We do not know the future but it is based on data and analysis and the best judgment of the team at the Pentagon including all of our military Service people, and I'm pleased to have the Vice Chiefs with me today. Each is a distinguished combat pilot so they bring a lot of credentials to this discussion today. Also with us is Admiral Enewold who runs the entire JSF program and is here to provide any particular data we may need as part of this discussion.

I would like to put this in context just a little bit. First of all, last year we did——

Chairman WARNER. Excuse me, Mr. Secretary. We'll be happy to bring the Admiral up and get a seat right at the table for him. We don't want him to be reticent.

Secretary ENGLAND. That would be fine. He'd like to do that.

Chairman WARNER. All right. Just pull up a chair there and join us at the table.

Secretary ENGLAND. Thank you. Last year as part of JSF we looked at all three variants, that is, did we need all three variants because this is a cost constrained environment, frankly. We looked at every single product in the DOD as part of the Quadrennial Defense Review (QDR) and will continue to do so as we go forward. As part of that review we concluded that we would keep all three variants and, in a large respect, the short take-off vertical landing (STOVL) version which is required by the British government, recognizing the interest and the desire of our great friends, the U.K., for that airplane and that was a factor in our decision.

That said, it's a lot of commitment of money for that particular version but we are now committed to that. When we come down to the competition, when we look at the estimated cost of the program across the FYDP is $2.4 billion. There are no savings by our analysis until 2025 and that is based on a minimum of at least a 15 percent savings through competition and I don't believe we've ever achieved that in any competition in the past, particularly with engines. So we do not see realistically that we save any money on this program through competition. Most importantly, frankly there's only so much money available in the program and this money is not in the budget and if we now need to fund this program, the money will come right out of the JSF program.

The end result that if we are required to fund another engine program, it will impact the basic program and will end up delaying and putting the basic program at risk. So this is not just free money for the program. We have to make judgment decisions in terms of the risk to the program and the benefit to the program and we judge that it was more beneficial in this regard to fully fund the JSF program itself and in addition as part of the QDR we are frankly trying to shift emphasis across the DOD. That requires that we make some hard choices in the budgeting process and that means as part of those hard choices that includes either terminating or modifying less effective or lower priority programs. So this was a hard choice but nonetheless, as part of the QDR we are increasing funding for our Special Operation Forces, we're doing more in biomedical countermeasures, for example. We also have demands in terms that we do need a submarine force of a specific size, we do need surface ships, we do need helicopters, we need other capability, and our objective is to balance across the entire DOD and get the right balance in terms of cost, risk, and benefit. So we've had extensive discussions in this regard.

Now, regarding the Great Engine Wars. The Great Engine War between Pratt & Whitney and GE, the book that you pointed out, in the early 1980s frankly served a very valuable purpose by generating competition and it was one of the catalysts I would say for many of the magnificent achievements we've had by the engine industry.

But at this point if you look at where we are with our engine programs, the F–16, the single engine mishap rate has dropped from 10 per 100,000 hours to 1 per 100,000 hours. The F119 engine from the F–22, which is the forerunner of this engine, (there is a high degree of commonality between those engines) in 12 years has had 42,000 hours of ground and flight testing and 16,000 hours of operational time with no engine related losses and no groundings due to engine related problems. So, based on the testing also of the primary Pratt & Whitney engine, we would conclude that we have a very reliable engine—a technology we can count on.

As Senator Kennedy said, 10 years have passed since the original competition between the three companies but also many technological advances have been made in that period of time. Southwest Airlines has had one engine shutdown in 177,000 flight hours. That's like once every 50 years or so (and that happens to be a GE engine, by the way) so while it is commercial, nonetheless it does point out the continuing reliability improvements that we have today with our engine fleet.

So these are hard decisions that we are making as part of the QDR but again our fiduciary responsibility to this Congress and the American people is to make the hard choices to get the best balance of risk, cost, and benefit for the taxpayers dollars and for the United States military.

Our conclusion of this analysis is that it is not money well-spent to have a second engine on the JSF.

It is a judgment call, Mr. Chairman, but I will tell you my great concern here is that if we need to fund this, if Congress decides we need to fund this program, it will directly impact the JSF program and I do not believe that is beneficial for any of the countries involved. No country will benefit, including the United States military, if we end up impacting the fundamental JSF program to have a second engine. In my judgment, that would be a very bad decision for America.

[The prepared statement of Secretary England follows:]

PREPARED STATEMENT BY HON. GORDON ENGLAND

"HARD CHOICES"

Chairman Warner, Senator Levin, and members of the committee, thank you for the opportunity to discuss the Department of Defense's decision to cancel the Joint Strike Fighter (JSF) F136 engine, as part of the President's fiscal year 2007 budget submission.

With me today are the Vice Chiefs of the Air Force, Navy, and Marines. Each of these Services will be operating the JSF. Each of these individuals is a distinguished combat aviator—General Corley, Admiral Willard, and General Magnus. We are prepared to answer any questions you may have.

The F–35 JSF—our next-generation strike fighter—is an important program. It is designed to be lethal, supportable, survivable, and hopefully affordable. All three versions were supported by the 2006 Quadrennial Defense Review (QDR) as necessary to meet the security challenges of the 21st century, by being adaptable to different operating environments and threats. Adaptability and flexibility, in the face of greater strategic uncertainty than ever before, are critical parts of the Department's strategic approach.

The JSF also supports the Department's strategic vision to bolster international partnerships. Victory in the long war and against other threats to our Nation requires international unity of purpose, and the ability to integrate our efforts with those of our international partners. JSF gives us a good opportunity to share interoperable capabilities with key partners around the globe.

As part of the QDR process, and based on analysis and in-depth discussion among senior civilian and military leaders, the Department decided to continue to produce all three JSF variants—conventional take-off and landing (CTOL), short take-off, vertical landing (STOVL), and carrier variant (CV). We did this to maintain as wide a range of options as possible, and to address the interests of our international partners. In particular, we recognized the interest of our British allies in the STOVL variant and its importance to their future defense program.

The pros and cons of a competitive engine strategy were analyzed. The Department concluded that having a second JSF engine would not yield net cost savings through competition. Development costs of the second engine program are estimated to be, at a minimum, $2.4 billion through the future years' defense program (FYDP). In the most optimistic projection, savings in production would not begin to accrue until 2025. In the most realistic scenario, savings are never achieved, regardless of program time.

It can certainly be argued that a second engine reduces the program's engine failure risk, but the Department has found that to be an acceptable risk.

Here, it is useful to consider the history of the alternate engine debate. In the 1970s, engine reliability was much lower than it is today. As late as December 1990, the Air Force's B–1 fleet stood down for 3 months due to an engine defect. However, reliability and safety factors have increased 10-fold in last 30 years. Today, for the Air Force's F–16, the single engine mishap rate has dropped from 10 per 100,000 hours to 1 per 100,000 hours. This same reliability increase is found in the civilian airline industry where Southwest Airlines now experiences only 1 engine shutdown per 177,000 flight hours. Put another way, one of their aircraft must fly for 53 years before experiencing one in-flight shutdown.

The "Great Engine War" between Pratt & Whitney and General Electric, in the early 1980s, served its purpose at the time by generating competition, and it was one of the catalysts for the incredible achievements of the engine industry's unprecedented accomplishments. While there were benefits to engine competition in the past, recent experience with engine development for the F–22A and F/A–18 E/F indicates that sole-source risks are modest and acceptable. In over 12 years, the F119 engine found in the F–22A has amassed more than 42,000 hours in ground and flight-testing, and another 16,000 hours of operational time. With zero F–22A engine-related losses and no groundings due to engine-related problems, the F119 engine marks a significant improvement over legacy fighter engine programs like those that prompted the "Great Engine War."

The F135 engine will benefit from a 70-percent commonality with the superb F119 engine. Moreover, the F119 is projected to have accrued 800,000 hours by F135 initial operational capability (IOC). The data from that program will be used to improve the F135 in terms of design, repair, and supportability. Indeed, for the F135 propulsion system, a 30- to 50-percent improvement in reliability and safety is predicted, compared to the F119, which is already the most successful jet fighter engine in the Department's history.

The Department has concluded that while it would be nice to have a second engine, it is not necessary and not affordable. As a general matter, applying resources to a specific problem is usually more timely and effective than diverting funding to a redundant solution.

In the 2006 QDR, the Department laid out a future strategic vision to meet the new and broader array of threats to the Nation. This vision calls for a shift of emphasis, and making that shift forces hard decisions in the budgeting process. It requires the Department to carefully consider capabilities versus cost and, if necessary, to terminate or modify less effective and lower priority programs in order to be able to afford the new capabilities required.

The Department began this process in the President's fiscal year 2007 budget submission. The Department's senior civilian and military leadership determined, for example, that to defeat terrorist networks, it is necessary to fund the largest increase to Special Operations Forces since Vietnam. Another example is that the Department determined that in order to strengthen homeland defense and hedge against technological surprises, a substantial investment in broad-spectrum medical countermeasures against advanced bio-terror agents is necessary.

Making these investments required some hard choices. The fiscal year 2007 President's budget submittal contains some "leading edge" hard choices from the QDR. Most of the hard work, to align the defense program with the strategic direction of the QDR, will continue into fiscal year 2008, fiscal year 2009, and forward.

I would also remind the committee that each contractor team that bid on the JSF selected the current Pratt & Whitney engine design. The alternate engine was directed by Congress, and the Department has been fully compliant with that direction until it became evident that the cost risk benefit was no longer advantageous.

Continuing with that second engine would lead the Department down the classical procurement path of delays and spreading out the costs over time. Without the ability to adjust procurement to meet defense needs, the Department will be mired in the status quo at a time when it needs to be flexible and dynamic.

Today, I am asking you to join the Department of Defense in making the hard choices we have to make, to implement the strategic vision of the QDR. A few days ago, the chairman of the Senate Budget Committee, Senator Judd Gregg, summarized our situation quite clearly: "We must also recognize that there is no such thing as an unlimited budget—difficult choices must be made."

To meet the security challenges of the 21st century, maintaining the status quo is not an option. The QDR is a great start, but its vision can only be achieved with the support of Congress to adjust programs and funding. Writing about the challenges the founders of our Nation faced, David Hackett Fischer said that "the history of a free people is the history of hard choices". It was true then, and it's true today.

Thank you again for your interest in our programs, and your unwavering, strong support of our men and women in uniform—they are remarkable. I look forward to your questions.

Chairman WARNER. Thank you, Mr. Secretary. We're going to ask the indulgence of the panel again. Another one of our valued colleagues has arrived with other commitments elsewhere. Senator Clinton, if you would like to proceed with your opening comments and a question or so, we're happy to accommodate you.

Senator CLINTON. Thank you very much, Mr. Chairman. I appreciate your courtesies. It's a very busy day, obviously, here in the Senate. Thank you, gentlemen. Thank you all for being here.

Secretary England, I'm as interested in the process as the outcome because one of the things we've tried to do in the committee is begin what is a very arduous task of trying to figure out ways we can streamline some of the procurement and acquisition processes. There has been testimony about the decision but let me ask you, what examples can you point to as to where sole sourcing has been the optimal solution for a comparably large project?

Secretary ENGLAND. I would think in just about every case we end up with sole sourcing on most of our products. For example, we have one source on submarines. We have one source on aircraft carriers. We have one source on the F–18. We actually have one source on the JSF. There's only one source. We have one source in a lot of our products. Typically there is a competition depending on the circumstance early on. In this case that decision was made in 1995 when all three of the competitors went forward with the Pratt & Whitney engine. So the Pratt & Whitney engine is a carrier literally from 1995 but I would say of the basic program itself, we competed the JSF program, and at that time, three companies competed. Ultimately, one was selected, all three competed with the Pratt & Whitney engine, and the selection made Lockheed Martin the winner of the JSF program with the Pratt & Whitney engine, and it was then frankly directed by Congress that we enter into another engine program.

So we have been through that process, in my judgment, we've made those decisions, and now it's a question of, do we bring in another engine manufacturer? Our judgment is that is not a wise decision in terms of cost, reliability, or benefit to the program.

Senator CLINTON. One of the things that I'm concerned about is the impact on the industrial base of these sole sourcing contracts because as you look over the horizon about the threats to our Nation, to our military, maintaining redundant capability and capac-

ity is an issue. At least it is an issue for me trying to figure how we can maintain production and manufacturing capacity, and I worry that you just put this particular issue aside that we are hollowing out our industrial base and I think that's something that at least should give us pause.

I also realized looking at what was said yesterday that this was a joint project with GE and Rolls-Royce, and the U.K. Minister of Defense for Procurement said there had not been any consultation with the U.K. until after the fact when they were informed. That also concerns me because I think that we want to encourage defense cooperation between the United States and our closest allies.

In fact, the JSF has been held out as an example of that cooperation. But apparently there wasn't any confirmation. Or can you confirm what the committee heard yesterday that there was no consultation with our partners on this decision?

Secretary ENGLAND. That's correct, Senator, and frankly I believe that's the right decision. This is an engine literally being paid for by the United States Government. I will tell you, given the choice, I think anybody if they can get something for nothing they'll take it. I understand that exactly so I would think that certainly there's interest in having the second engine because people benefit. There's industrial benefit from countries and companies, I understand that. So, no, we did not consult with the countries specifically although they were part of the QDR, so they were an integral part as a member of the team but we did not have separate discussions in this regard because frankly this is an issue about a defense budget. This was not a question of their defense, it was a question on money we spend and it is a question of tradeoffs in terms of how we spend that money. So within our defense budget if we decide to spend this then we don't buy something else. We don't buy a ship or we don't buy a helicopter, we don't buy something else and we also have many requirements as part of the QDR still to be addressed. We have not yet fully addressed the QDR so there are a lot of actual items and issues still to be addressed that will need to be funded and we will prioritize and try to balance that portfolio.

I believe frankly that a decision needs to be made in the DOD and while our friends and allies are very close and we share a lot with them, at the end of the day, this is our cost decision.

Chairman WARNER. Would the Senator yield, not to take away any of your time, because I was going to proceed on this line of questioning myself. But I'm astounded at your comment. They were designated as level one partners. Now, the word partnership to me has a certain meaning which indicates participatory management of some degree and they also contributed a good deal towards the dollar cost of the research and development (R&D) for that engine—Great Britain did. Was it understood when you put the consortium together that we had unilateral authority to proceed to make judgment calls of this magnitude without any consultation with a entity, i.e., Great Britain, designated as a level one partner?

Secretary ENGLAND. Senator, this engine is in the program because Congress decided to have this engine in the program. This is not a fundamental, technical decision for the JSF program. I want to be as straightforward as I can on this. This is a program that's a redundant engine. It is a second engine. It's not the pri-

mary. The primary engine and the system being developed, the STOVL will meet all of its requirements and deliver to the British Government. This is an additional cost to the program, and in fact this cost in the FYDP is more than the complete amount of money that's being paid for by the U.K. So their contribution to the program is $2 billion. Just across the FYDP this is $2.4 billion for this program so, they are great friends and great allies and they're going to get a magnificent airplane if they decide to buy the basic STOVL airplane. But this is $2.4 billion that we will not spend on other equipment or delay this program and in my judgment that is our decision to make.

Chairman WARNER. I'll return to this line of questioning and I'll direct your attention to the August contract that you've let for this second engine, some $2 billion, to explain how this quick change of judgment was. Please continue with your full line of questions, Senator.

Senator CLINTON. Mr. Chairman, I just wanted to conclude by again asking the Secretary just to explain for me on his response to the argument made yesterday by GE along with some documents that were submitted for the record by GE and Rolls-Royce that an engine competition would not only lead to greater flexibility but would actually be more cost effective and they attached a matrix that suggested an engine competition would reduce the cost of the engine by 10 percent over the life of the program. I would just be curious, Mr. Secretary, if you've reviewed this analysis and what your response to the arguments made in it would be?

Secretary ENGLAND. I haven't looked at that analysis; however, Senator, in our analysis if you save 10 percent of the cost across the program then it still costs us more money. In other words, that does not save money. You never recover the savings; that is, you never recover the cost at a 10 percent recurring cost savings. So I haven't looked at their particular analysis but if the analysis is 10 percent my conclusion would be it will not end up with net savings for the program.

Senator CLINTON. Mr. Chairman, just for the record, if we could get a specific response from the Department to the arguments made in this analysis, I think that would be helpful. Because, again, I'm interested in streamlining our process, being smart, being competitive where it appears that competition is in our best interest, having a manufacturing capacity that actually operates here in our country on our soil which I think is important. So I would appreciate, Mr. Chairman, if we could get a response to this particular analysis.

[The information referred to follows:]

As Deputy Secretary England testified before the Senate Armed Services Committee on March 15, 2006, the Defense Department examined the case for a second engine supplier for the Joint Strike Fighter (JSF) and judged that at this point in development the cost of competition outweighs the benefits. This conclusion turned on two key factors: we do not expect net savings from competition and we have strong confidence in the performance and reliability of the Pratt & Whitney F135 engine. Scott Donnelly, President and CEO of General Electric-Aviation, devoted most of his remarks to the topic of cost savings, so the discussion below will focus on cost.

The National Defense Authorization Act for Fiscal Year 2008 called for the development of a second engine for the JSF. The original JSF program did not make provision for a second engine supplier, consistent with the F–22A and F–18E/F pro-

grams, but congressional interest was strong in creating two suppliers. Prior to that time there was opportunity for competition when McDonnell Aircraft, Lockheed Martin, and the Boeing Corporation competed for the JSF award, but all three companies made an early selection of the Pratt & Whitney engine for use in their prototypes.

Mr. Donnelly's testimony discussed a range of cost savings based on assumptions associated with the number of JSF engines and engine "equivalents" produced, the cost of those engines/equivalents, and the reduction in production cost (10 percent and 20 percent) due to competition. Based on his assumptions, Mr. Donnelly indicated savings from competition could be $5 billion to $16 billion for worldwide JSF procurement.

Based on our past experience and basic economic principles of production we do not expect net savings from JSF engine competition. The 10 and 20 percent cost reduction figures cited in the testimony arc difficult to support empirically. While competition can have a dampening effect on production costs, there are other factors that tend to increase production costs when you split a given production quantity between two contractors. This is due to a reduced advantage from "learning curve" effects (whereby costs decrease as a company produces more units) and from "rate effects" (whereby fixed costs are spread over production units). Our experience with the F404 engine in early-model F/A–18s illustrates the point: the average unit costs of this engine did not decrease after competition was introduced.

Any discussion on the number of JSF engines and engine "equivalents" should make clear the distinction between the engines that would be bought in a competitive environment and the engine "equivalents" (based on spare parts) that would not be procured competitively, since GE spare parts would not be used in Pratt & Whitney engines and vice versa. Applying production cost reductions only to engines procured in a competitive environment would markedly change the cost savings figures cited in the testimony.

Finally, another clarification to the testimony is the need to consider not only production costs but also the investment cost of developing a second engine source. With the second supplier for JSF engines this investment cost is high—at least $2.4 billion in the case of the F136. This initial investment cost (which must be paid upfront) must be recouped by production cost reductions over a long period of time in order to eventually achieve net savings in the program.

Furthermore, in addition to acquisition cost considerations, a second supplier introduces a second supply chain for maintenance and repair, which increases lifetime support costs. In some cases, maintaining two engine types complicates scheduling, particularly when all aircraft in a unit must be equipped with the same engine because carrying two sets of spare parts is problematic or not feasible.

The Department reviewed the rationale for a second engine supplier in 1998 and again in 2002. While both reviews noted some benefits to maintaining two engines, neither review concluded that adding a second engine supplier would yield substantial cost savings. A 2002 RAND study, Military Jet Engine Acquisition, reached a similar conclusion. The RAND analysis found little evidence that engine competition during the Great Engine War of the 1980s and 1990s had generated significant net R&D or procurement savings.

In summary, the question of whether to fund a second supplier for JSF engines is a difficult decision, but the Department believes the facts and the logic of the case weigh towards a single supplier—especially given the range of risks we must mitigate across the entire Department of Defense program. Investing substantial amounts of money to create JSF engine competition that is unlikely to result in net cost savings is not an effective use of taxpayer dollars.

Chairman WARNER. Without objection that'll be done. I thank the distinguished colleague from New York for finding an opportunity——

Secretary ENGLAND. Thank you, Senator, we will provide the date. We appreciate your comments here. We do have a common objective and thank you.

Chairman WARNER. Now, Mr. Secretary, you have completed your direct testimony. Do you desire to have the other witnesses at the table provide direct testimony?

Secretary ENGLAND. They are available either for comment or to answer any specific questions.

Chairman WARNER. I'll leave that to your discretion. We're perfectly willing to proceed as you so desire. Do you wish to have the admiral say a few words?

Secretary ENGLAND. No, I would say everyone with me today is prepared to answer any question you may have, Senator, anyone at the table rather than just a statement, but they are available. By the way, I do want to say that as part of the QDR process there is unanimous agreement on this decision. That is the military fully concurs in this, all the Services, the Vice Chiefs who are distinguished pilots who will fly or have flown in the past and also the Chairman of the Joint Chiefs agrees with this decision.

So this is a decision that is unanimous across the DOD, both civilian and military leadership, and they're here to provide any clarity they can for the committee.

Chairman WARNER. Could you go back and address the contract that was let in August 2005 and the series of steps that led to the decision to go forward with that contract and then what was the swift reversal of 180 degrees to go away from that decision to the budget problem?

Admiral ENEWOLD. Senator, I'd be glad to answer that. Thanks for the question.

I'm the program director for the JSF. Last year, not as part of this 2007 submission, the discussion of the need and utility of the F136 was contested, not contested but discussed in the Department. Frankly we went to several reviews and the decision was made that we would go forward.

Chairman WARNER. Let's get a few date/time groups of this decision process.

Admiral ENEWOLD. Sure.

Chairman WARNER. As best you can reconstruct it and you can go back in the record and change dates if you can't give me a precise date.

Admiral ENEWOLD. I can give you within a month or so and I'll provide those as we go. In the October 2004 timeframe we were discussing what we would do with the alternate engine in advance of the contract award within the Department. At the time, Secretary Wynne, who was the Acting Secretary for Acquisition, Technology, and Logistics (AT&L), said that he believed that it was the right action to continue on with the F136 to provide Congress time to discuss the alternatives and so the decision at that time was to proceed with a transition contract which we were in at the time on the F136 and ultimately award the F136 SDD contract in August 2005 because we wanted to make sure that we didn't preempt Congress' ability to fully and openly discuss the program. After that, and as part of the QDR which was frankly outside the program, the decision this last year was reviewed as part of the QDR and I think the Vice Chiefs and the Secretary could address that more. The discussion was really one of, what is the priority of the F136 in the overall defense budget? In December, we were notified that they wanted to take the fiscal year 2007 and outfunding for the program in order to pay for other priorities.

Chairman WARNER. Had you been asked for any analysis to be submitted as a part of the QDR process or you just woke up some

morning and there's a buck slip on your desk that says goodbye program?

Admiral ENEWOLD. Yes, sir. There actually have been two program management advisory groups that have occurred in the last 6 years and they both concluded there were both benefits militarily and operationally for the second engine. Both of those reviews concluded, however, that it's a great idea if you can afford it.

Chairman WARNER. Can you show me and provide for the record some written documentation, "it's a great idea if you can afford it"?

Admiral ENEWOLD. I believe so, sir.

Chairman WARNER. I hope so.

Admiral ENEWOLD. Yes, sir.

Secretary ENGLAND. Senator, we have the data. We're happy to provide all the studies and analysis, everything that's happened in the past on this particular issue.

[The information referred to follows:]

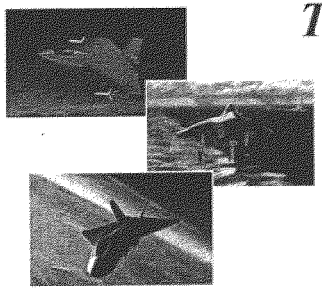
In December 1997, the Assistant Secretary of the Navy directed the establishment of the Program Manager's Advisory Group (PMAG). The PMAG was directed to "thoroughly review the technical and programmatic issues of the alternate engine program, determine its costs and benefits, and report the findings." They reviewed the rationale for a second engine supplier and reported the initial findings in 1998. The PMAG conducted a follow-up study in 2002 that was primarily focused on the break-even cost analysis.

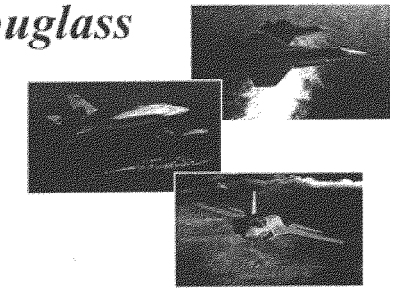
The PMAGs concluded that the primary value of an engine competition was foreign partner participation, reduced risk of single point failure, and maintaining the engine manufacturing industrial base. While both reviews noted some benefits to maintaining two engines, neither review concluded that adding a second engine supplier would significantly reduce development risk or yield substantial cost savings.

The PMAG analysis is provided in two attachments. The first one titled "Admiral Dyer Presentation 1–12–98" is the original PMAG analysis done in 1998. The second one titled "PMAG Cost v4 2" is the updated version with the cost analysis.

PMAG Review of JSF Alternate Engine

Presented to:
The Honorable John Douglass
ASN-RDA



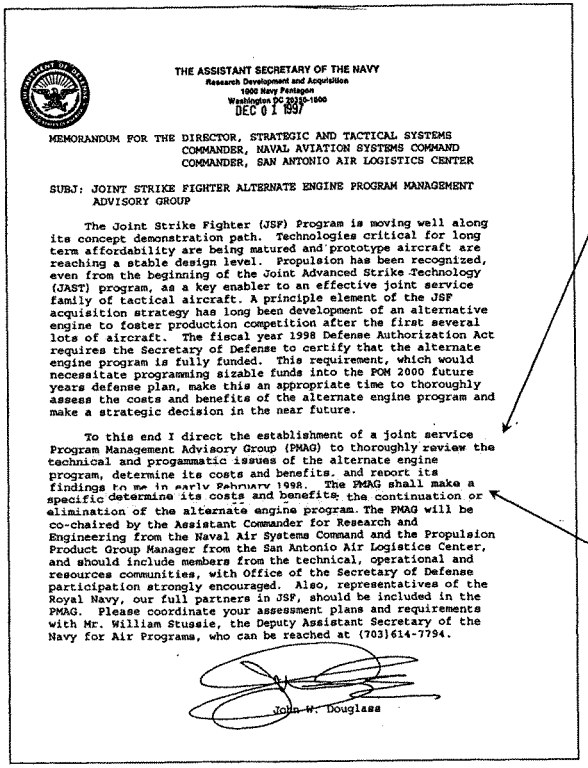


12 January 1998

Presented by:
RADM Joe Dyer
Assistant Commander for Research and Engineering, NAVAIR
&
Mr. Bob May
Propulsion Product Group Manager, San Antonio ALC

2/12/2007

Tasking



THE ASSISTANT SECRETARY OF THE NAVY
Research Development and Acquisition
1000 Navy Pentagon
Washington DC 20350-1000
DEC 01 1997

MEMORANDUM FOR THE DIRECTOR, STRATEGIC AND TACTICAL SYSTEMS
COMMANDER, NAVAL AVIATION SYSTEMS COMMAND
COMMANDER, SAN ANTONIO AIR LOGISTICS CENTER

SUBJ: JOINT STRIKE FIGHTER ALTERNATE ENGINE PROGRAM MANAGEMENT ADVISORY GROUP

The Joint Strike Fighter (JSF) Program is moving well along its concept demonstration path. Technologies critical for long term affordability are being matured and prototype aircraft are reaching a stable design level. Propulsion has been recognized, even from the beginning of the Joint Advanced Strike Technology (JAST) program, as a key enabler to an effective joint service family of tactical aircraft. A principle element of the JSF acquisition strategy has long been development of an alternative engine to foster production competition after the first several lots of aircraft. The fiscal year 1998 Defense Authorization Act requires the Secretary of Defense to certify that the alternate engine program is fully funded. This requirement, which would necessitate programming sizable funds into the POM 2000 future years defense plan, make this an appropriate time to thoroughly assess the costs and benefits of the alternate engine program and make a strategic decision in the near future.

To this end I direct the establishment of a joint service Program Management Advisory Group (PMAG) to thoroughly review the technical and progammatic issues of the alternate engine program, determine its costs and benefits, and report its findings to me in early February 1998. The PMAG shall make a specific determine its costs and benefits the continuation or elimination of the alternate engine program. The PMAG will be co-chaired by the Assistant Commander for Research and Engineering from the Naval Air Systems Command and the Propulsion Product Group Manager from the San Antonio Air Logistics Center, and should include members from the technical, operational and resources communities, with Office of the Secretary of Defense participation strongly encouraged. Also, representatives of the Royal Navy, our full partners in JSF, should be included in the PMAG. Please coordinate your assessment plans and requirements with Mr. William Stussie, the Deputy Assistant Secretary of the Navy for Air Programs, who can be reached at (703)614-7794.

John W. Douglass

ASN(RDA) Letter of 01 Dec 97

...review the technical and progammatic issues...determine its costs and benefits

...make a specific recommendation supporting either the continuation or elimination of the alternate engine program

Conclusion

The JSF Alternate Engine Program Offers:

- ***Significant Benefits***
  - **Contractor Responsiveness**
  - **Industrial Base**
  - **Readiness**
  - **International Participation**
- ***But Does Not Provide Significant***
  - **E&MD Risk Reduction**
  - **Cost Savings**
  - **Additional Growth Capabilities**

Recommendation

Proceed with the JSF Alternate Engine Program as currently planned. This recommendation is made independent of the services' affordability issues which were beyond the scope of the analysis.

Summary
Alternate Engine Program Assessment

Industrial Base	G
Readiness	G
Other Considerations	G
International Implications	G
Cost	Y
Growth Potential	Y
E&MD Risk Reduction	R

Overall G

G Beneficial
Y Marginal
R No Value

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JSF Alternate Engine PMAG Team Members

Executive Lead

RADM Joe Dyer - NAVAIR 4.0Mr. Bob May - SAALC/LR

Industrial Base Team

Lead -	*Dean Gissendanner*	OUSD(A&T)/S&TS/AW
	Gerry Freisthler	ASC/YF
	CDR Steve George	DE/ARP-MODUK
	Tom Harruff	UTC
	Diane Wright	OUSD(A&T)/S&TS/AW

Readiness Team

Lead -	*Otha Davenport*	ASC/LP
	BrigGen Bruce Byrum	ADC/S(Air) HQMC
	CDR Ken Ginader	N-88/JSF RO
	Paul Kovalsky	NAVAIR 3.1.1
	Bob Lawson	ASC/SYA
	Maj Kevin Leek	SAF/AQPF
	LtCol Rich Richardson	MAD, NAS Pax River
	Maj Tom Davidson	AF/XORFA

Growth Team

Lead -	*Dave Pauling*	NAVAIR 4.4
	Col Bob Nasby	HQMC/APW
	Mike Philpot	MODUK/DERA
	Joe Wood	UTC

Life Cycle Cost Team

Lead -	*David Steffee*	NAVAIR 4.2.1
	Shirley Ark	ASC/LPF
	John Dorsett	AFCAA/TD
	Pat McLaughlin	NAVAIR 2.2
	Chris Stewart	PE-MODUK
	Capt Kevin Head	ASC/LPF
	Capt Kevin Gould	ASC/LPF
	Dan Milano	NAVAIR 4.2.1
	Vicki Gutierrez	NAVAIR 4.2.4
	Al Pressman	NAVAIR 4.2.4

E&MD Risk Reduction/Programmatics Team

Lead -	*Donald Dix(Technical)*	ODDR&E(AT)
Lead -	*Jim Nehman(Program)*	DPEO(T)
	Pat McLaughlin	NAVAIR 2.2
	Norm Pfeifer	ASC/SMK
	Rick Rhodeback	ASC/PKC
	Ed Wallace	ASC/SM
	Trevor Wilcock	MODUK

Study Questions

What specific recommendations support either continuation or elimination of the alternate engine program?

- What are the **Industrial Base** implications, to include both prime and subvendors? What are the international and other implications of not having an alternate engine? (Lead: Dean Gissendanner)
- What are the Life Cycle **Cost and Benefit** Impacts (by Phase)? To include considering learning curve, competition, and support costs. (Lead: Dave Steffee)
- How will having two different engines affect **Readiness**? (Lead: Otha Davenport)
- Are there any **Risk Reduction** benefits during E&MD? What alternatives could be considered? (Leads: Don Dix - Technical, and Jim Nehman - Acquisition)
- What are the benefits from a **Growth** perspective? (Lead: Dave Pauling)

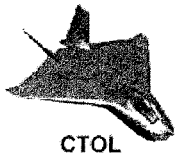
857

Data Sources

- History of F404 Dual Source Competition
- The Great Engine Wars (F110/F100)
- History of F-14 TF30/F110
- C-17 Engine History
- JSF Program Office
- Pratt & Whitney, GE, Boeing, and Lockheed

858

Variants and Inventory

Boeing	Lockheed	Mission	Qty	%
 CTOL	 CTOL	• **USAF** **Multirole aircraft (primary air-to-ground) to replace the F-16 and A-10 and to complement the F-22**	**1763**	**60%**
 CV	 CV	• **USN** **First day of war, survivable strike fighter aircraft to complement the F/A-18E/F**	**480**	**17%**
 STOVL	 STOVL	• **USMC/UKRN** **STOVL aircraft to replace the AV-8B and F/A-18 and UK Sea Harrier**	**609/60**	**23%**

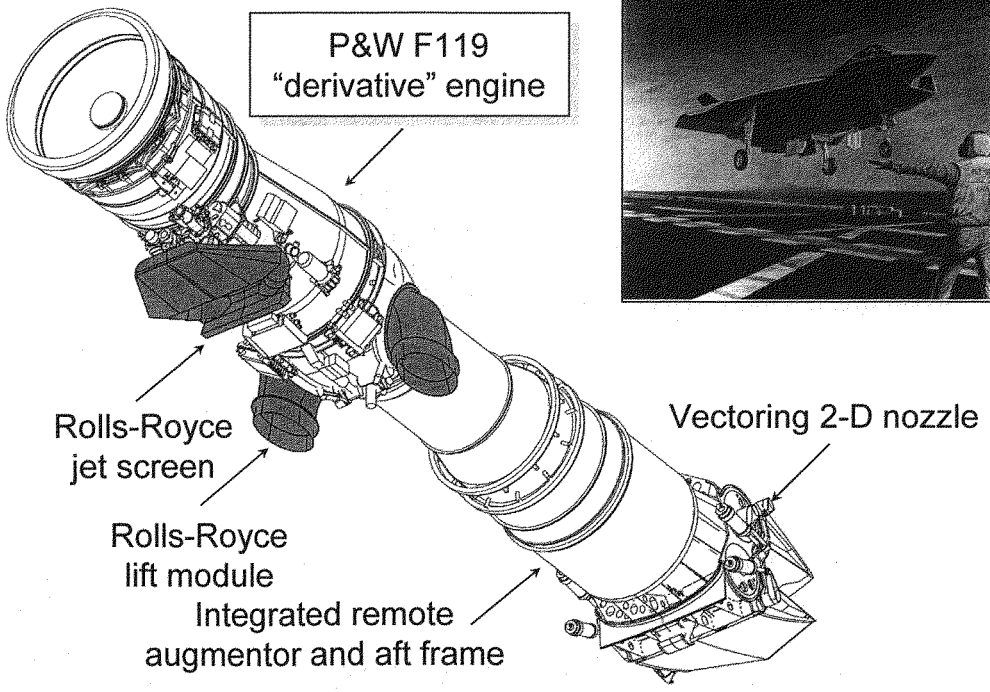
FISCAL YEAR	05	06	07	08	09	10	11	12
USAF	4	12	18	24	34	48	72	110
USN	4	8	12	24	36	48	48	48
USMC	4	8	12	24	36	36	36	36
UKR						3	6	10
Total	12	28	42	72	106	135	162	204

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Boeing Propulsion System

Direct lift concept for STOVL

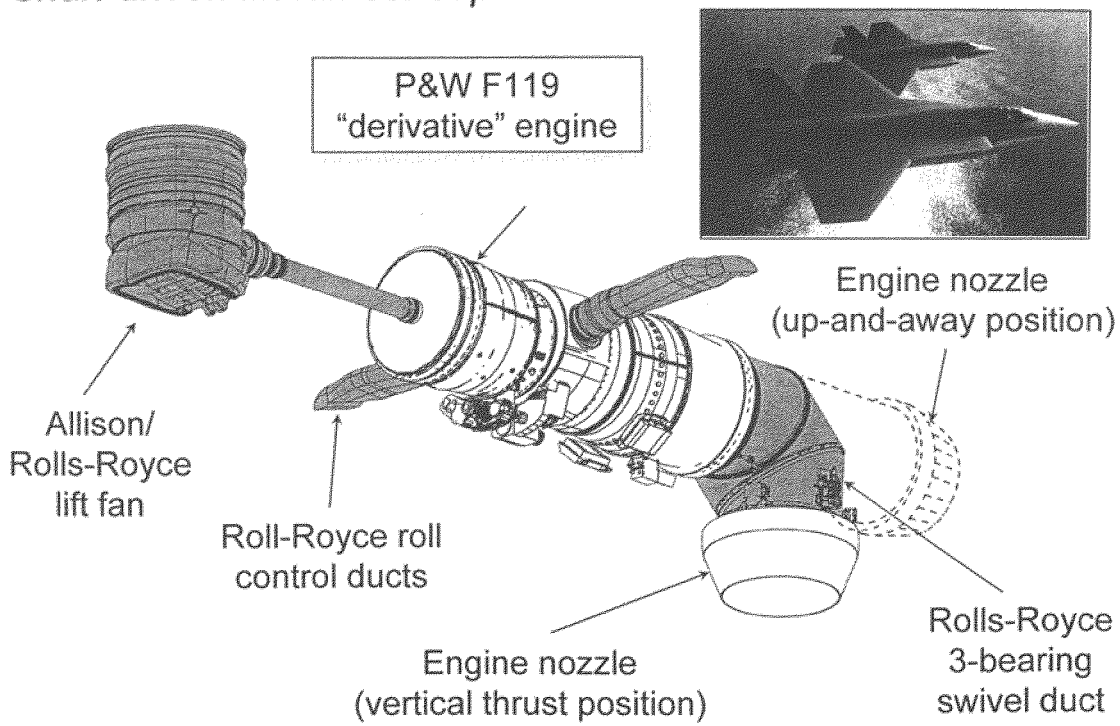




860

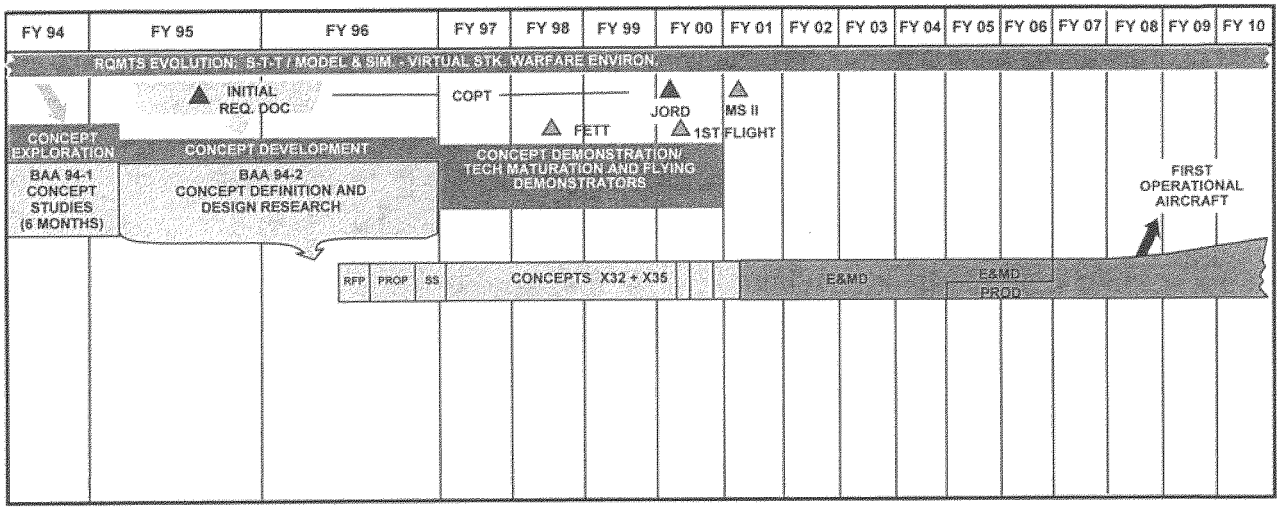
Lockheed Martin Propulsion System

Shaft-driven lift fan concept for STOVL



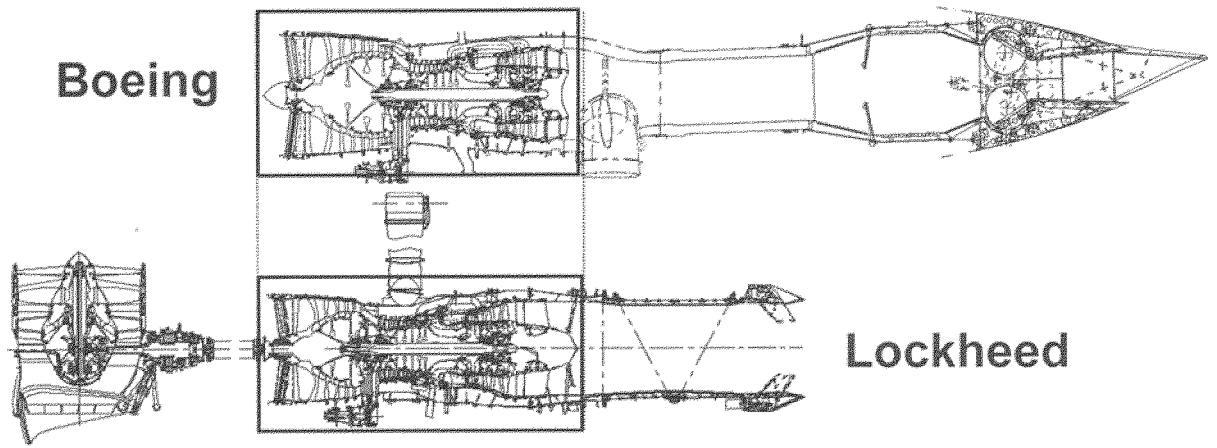
861

JSF Program Schedule



862

Alternate Engine Program

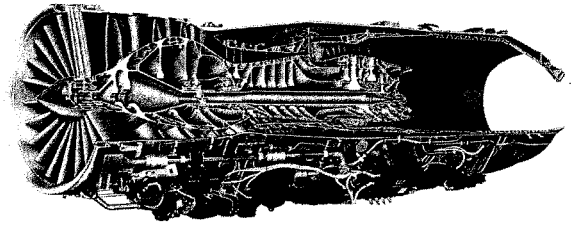


Turbomachinery Replacement

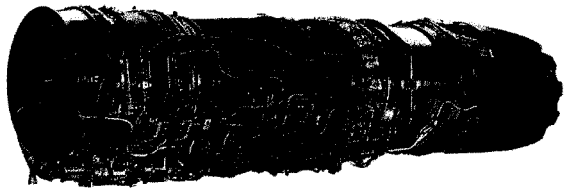
863

JSF Competing Engines

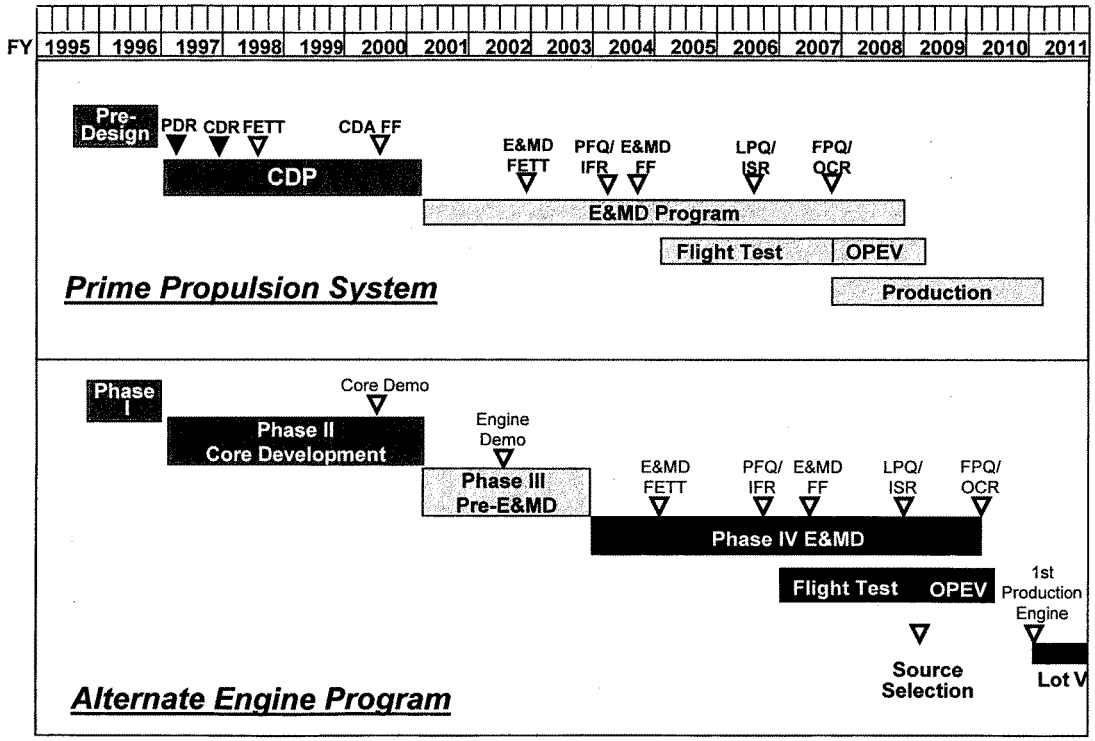
JSF Primary Engine
Pratt & Whitney
F119 "Derivative"



JSF Alternate Engine
GE / Allison / Rolls Royce
YF120 "Derivative"

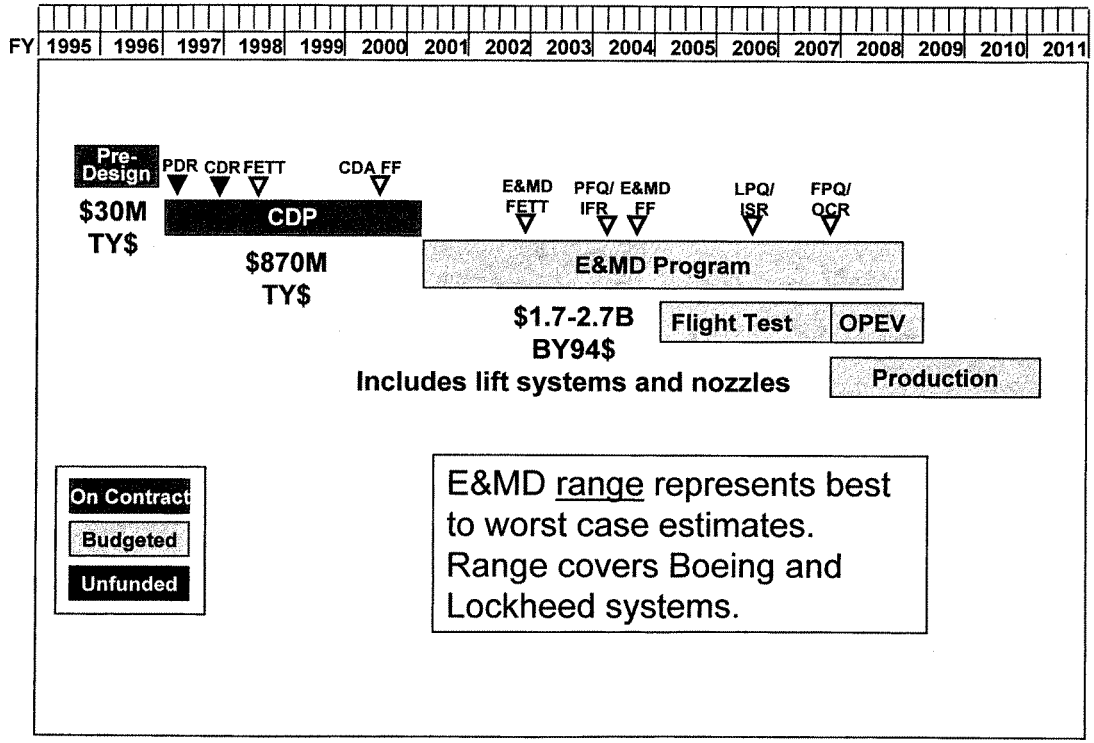


Overall JSF Propulsion Program Plan



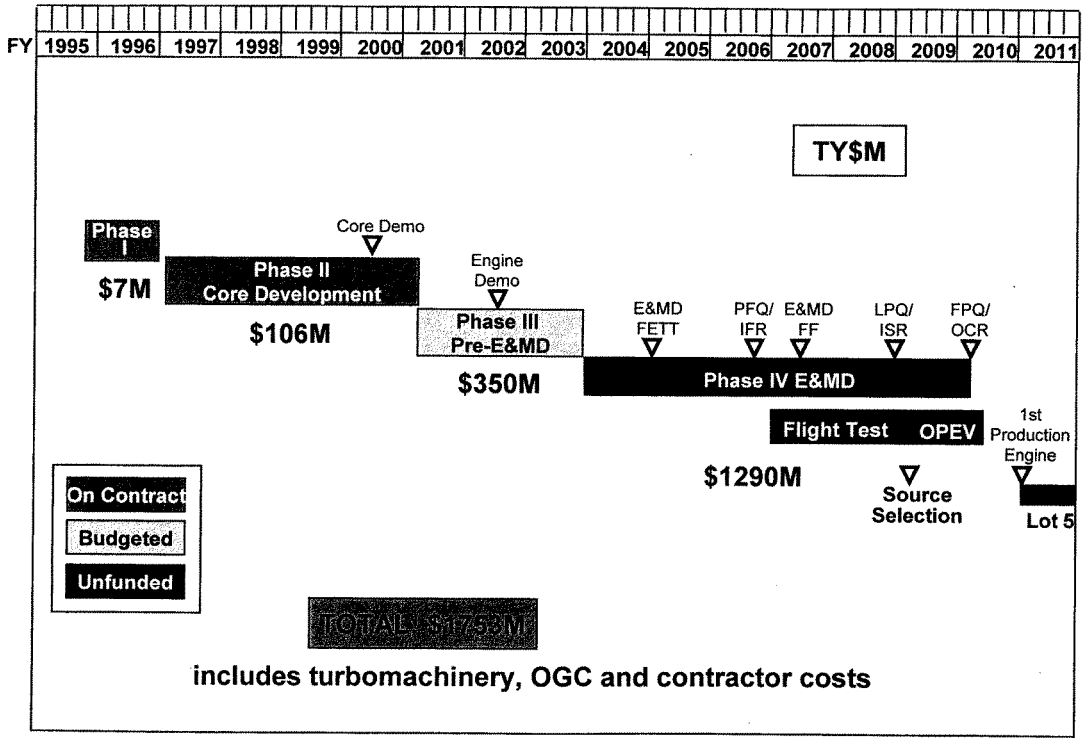
865

Primary Propulsion Program Plan



8968

JSF Alternate Engine Program Plan

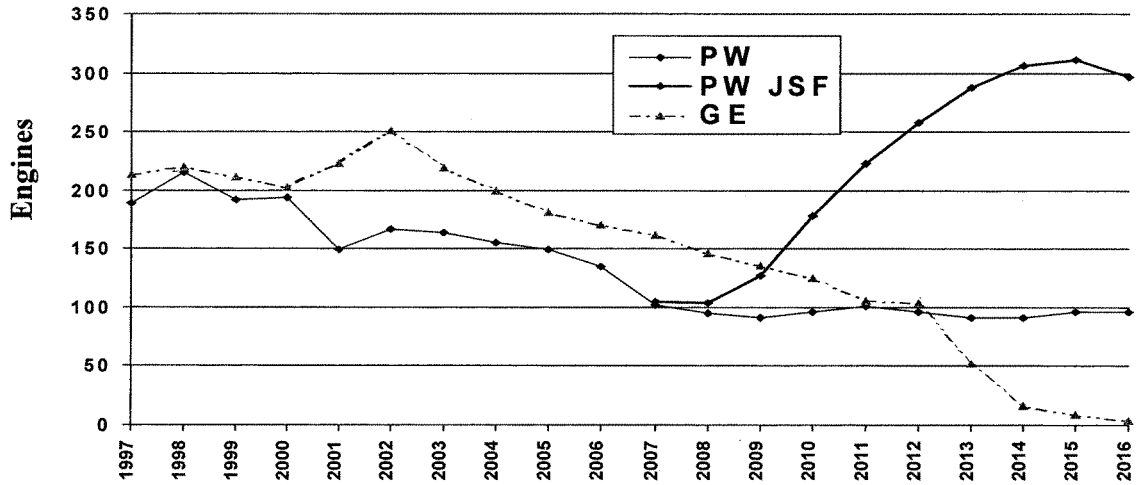


➡ *Industrial Base*



Unit Sales Forecast

Fighter/Attack Aircraft Engines (Domestic & International)

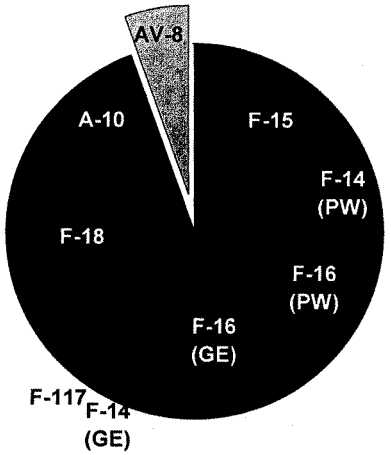


Note:

- Based on P&W data (Trends are common with GE data)
- Conservative assumptions - less than QDR quantities in most cases
- International sales of F-22 and JSF are included in projections

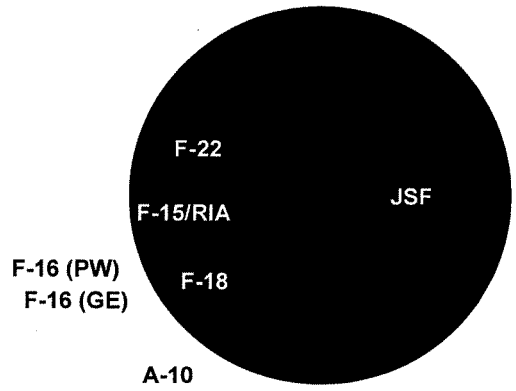
869

US Fighter/Attack Fleet by Engine Manufacturer



1997 US Forces

P&W	GE
42%	51%



2025 US Forces

P&W	GE
90.5%	9.5%

870

Industrial Base Assessment

- GE and possibly Rolls Royce cannot sustain competitive fighter/attack engine design/development teams without JSF Alternate Engine Program
- Potential domestic and international buy of JSF is adequate to support two engine sources
- Supplier base adequate to support two engine sources
  - stable supplier base
  - significant commercial market
  - no significant similarities between P&W/GE sources

Alternate Engine Program maintains/enhances industrial base

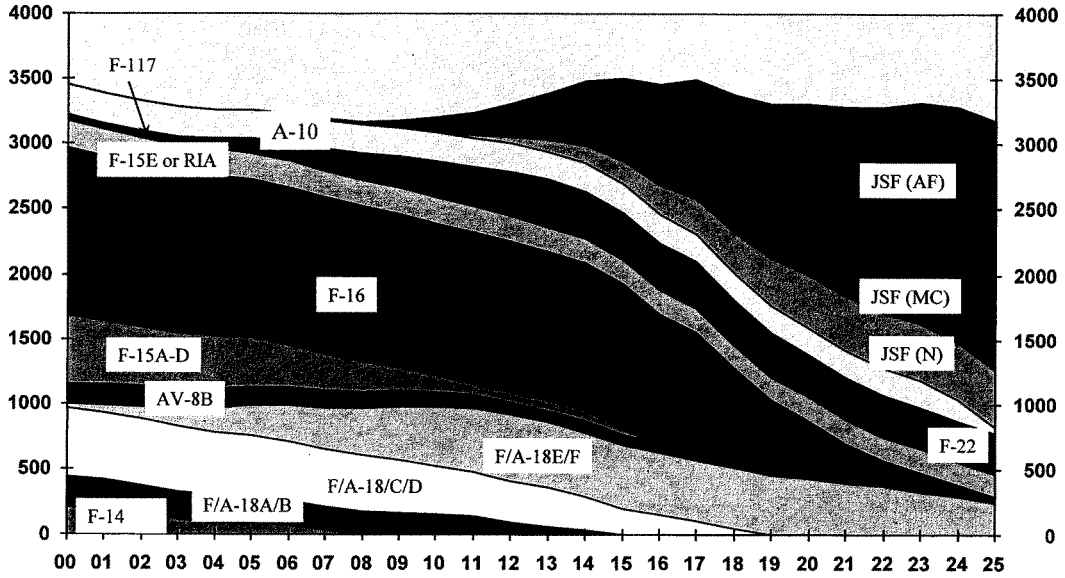
871

Readiness



872

Projected Force Structure



Data from DOD and contractor Sources

873

Readiness

- Alternate Engine Program assures single problem won't affect entire fleet
  - Flight safety related groundings
  - Aircraft holes/bare firewalls due to shortage of serviceable engines
  - Labor strikes and acts of God
- Competitive pressures improve reliability/availability
  - C-17's F117 commercial experience
  - F-16's F110/F100 competition
- Alternate Engine Program complicates logistics support - but doable
  - USAF F-16 (F100/F110)
  - USN F-14 (F110/TF30)

Alternate Engine Program enhances readiness

874

➡ *Other Considerations*



875

Other Considerations

- The Alternate Engine Program will provide
  - More responsive contractors
  - Better warranties
  - Incentive for contractor investment
  - Limits to cost growth and schedule slips

876

International Implications G

International Implications

- An alternate engine program would provide additional opportunities for international industry participation
- Alternate JSF engine would help export aircraft because
  - Provides opportunity for use of another network of commercial relationships
  - Engine competition should keep costs down, making JSF more competitive
  - Better fit with existing engine support structure/relationships
- Giving international customers a choice would exert competitive pressures on GE and P&W, benefiting US

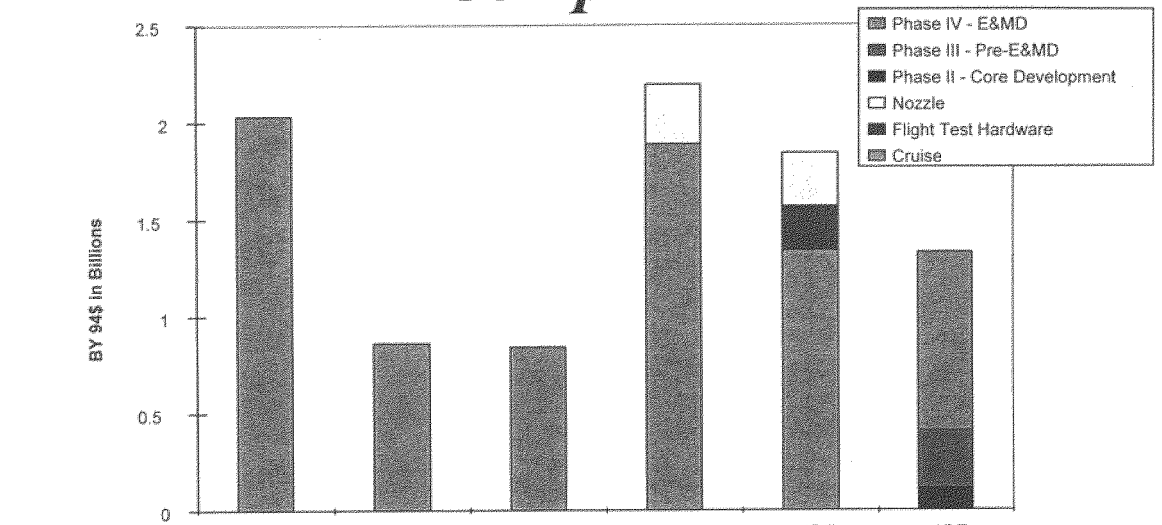
Alternate Engine Program enhances JSF in world market

878

Cost



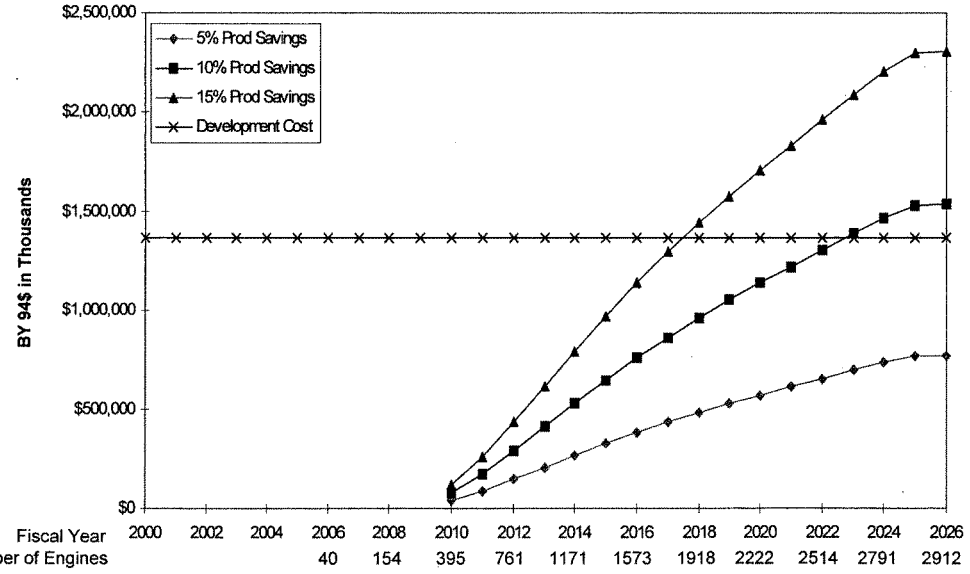
Engine E&MD Contract Cost Comparison



Engine	F100-100	F404-400	F414-400	F119-100	JSF	JSF
Contractor	PW	GE	GE	PW	PW	GE
Normalized Thrust	1.03	0.73	1.00	1.60	1.75	1.78
First Flight	1974	1979	1995	1997	2004	2007

E&MD costs for JSF PW and JSF Alternate Engine are consistent with historical precedents

Break-Even Sensitivity
Alternate Engine Baseline Program



Note: Analysis based on Sole Source estimate for PW engine of $5.9M, BY 94$
Turbo Machinery only -- No nozzle

O&S APPROACH

O & S Cost Category	% of O&S	Cost Impact	Comments
Mission Personnel	35 %	—	Not expected to change manning at squadron level
Unit level Consumption	44 %	↓	Savings potential - from improved reliability, lower SFC, & competitive environment for spares procurements
Intermediate Maintenance	2 %	—	No impact
Depot Maintenance	8 %	↓	Less depot maintenance - more reliable & maintainable engines
Support	11 %	↑	Duplicative support systems

Cost Conclusions

Alternate engine development costs likely to be recovered through production and O&S cost savings

Growth Potential



884

Benefits of Alternate Engine Program From Growth Perspective

Thrust Growth	JSF F119	JSF F120
4-6%	Y	G
8-12%	Y	Y
>15%	R	R

- Minor growth capability built into Alternate Engine Program design
- Moderate growth will necessitate significant technology transition and airframe modification
- Growth options sensitive to system complexity

Alternate Engine Program provides limited growth capability

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E&MD Risk Reduction (R)

886

Risk Assessment for JSF F119 Engine

- Limited E&MD risk reduction from F119 F-22 experience
  - Limited commonality between F-22/JSF F119 configurations
- E&MD risk reduction achieved by CDA difficult to assess
  - Depends on commonality between CDA/E&MD configuration
- Current E&MD risk is commensurate with a new fighter engine
  - High temperature/STOVL integration requirements of particular concern

Overall development risk of JSF F119 program to completion is low-to-moderate

887

Risk Assessment for JSF F120 Engine

- Limited E&MD risk reduction from YF120 experience
  - Limited commonality between configurations
- Current E&MD risk is commensurate with a new fighter engine
  - High temperature/STOVL integration requirements of particular concern
- Less concurrent development schedule reduces risk

Overall development risk of JSF F120 program to completion is low

888

E&MD Risk Reduction Potential of Alternate Engine

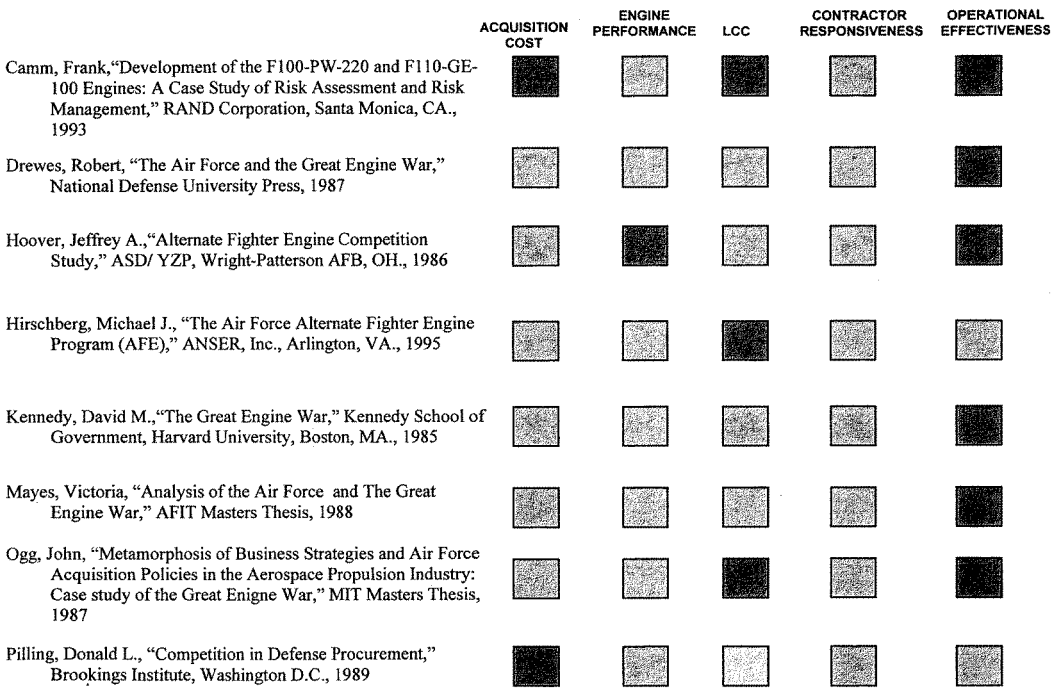
- No significant E&MD risk reduction from alternate engine program as currently phased
- Concurrent alternate engine program not practical
  - Additional complexity/risk
  - Possible facility limitations
  - Significant additional cost

Alternate Engine Program
does not mitigate JSF Program E&MD risk
but
current JSF F119 E&MD risk is assessed as acceptable

889

Engine Competition Studies

Gray: did not assess Green: positive effect Yellow: unclear effect Red: negative effect



	ACQUISITION COST	ENGINE PERFORMANCE	LCC	CONTRACTOR RESPONSIVENESS	OPERATIONAL EFFECTIVENESS
Camm, Frank,"Development of the F100-PW-220 and F110-GE-100 Engines: A Case Study of Risk Assessment and Risk Management," RAND Corporation, Santa Monica, CA., 1993					
Drewes, Robert, "The Air Force and the Great Engine War," National Defense University Press, 1987					
Hoover, Jeffrey A.,"Alternate Fighter Engine Competition Study," ASD/ YZP, Wright-Patterson AFB, OH., 1986					
Hirschberg, Michael J., "The Air Force Alternate Fighter Engine Program (AFE)," ANSER, Inc., Arlington, VA., 1995					
Kennedy, David M.,"The Great Engine War," Kennedy School of Government, Harvard University, Boston, MA., 1985					
Mayes, Victoria, "Analysis of the Air Force and The Great Engine War," AFIT Masters Thesis, 1988					
Ogg, John, "Metamorphosis of Business Strategies and Air Force Acquisition Policies in the Aerospace Propulsion Industry: Case study of the Great Enigne War," MIT Masters Thesis, 1987					
Pilling, Donald L., "Competition in Defense Procurement," Brookings Institute, Washington D.C., 1989					

890

Views of Others

- **F-22/JSF Engine Independent Review Team - 4 Nov 1997**
  - *"The overwhelming experience of the members of the EIRT is that the existence of an Alternate Engine in a program of such large proportions brings important reductions in LCC, especially through reduced acquisition costs and continuous improvements in reliability and supportability."*
- **HAC - 1996**
  - *"Citing engine performance difficulties experienced over the past two decades the committee stated it is unwise to have selected a single power plant design, i. e., a derivative of the F-22 engine which has yet to be proven."*
  - *"to cede the manufacture of all jet engines for three services future aircraft without additional competition is not likely to be cost effective."*
- **Lockheed**
  - *"Fully endorses Alternate Engine"*
- **Boeing**
  - *Supports Alternate Engine Program*

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Alternate Engine Programmatic Options

Option	*E&MD Cost**	*Advantages*	*Disadvantages*
I. Baseline	$1.4 B	• Maintains viable competition	• No Significant E&MD risk reduction
II. Concurrent Development	$2.4 B	• E&MD risk reduction • Earlier production competition	• Additional cost • Facility limitations
IIA. Earlier Development	$2.0 B	• Some E&MD risk reduction • Earlier production competition	• Some added cost • Facility limitation
III. Commercial Development	$200 M	• Maintains viable competition • Limited E&MD costs	• Requires statutory relief
IV. Redirect Budgeted Funding to JSF F119	0	• Reduces JSF F119 risk • Eliminates E&MD funding requirement	• No competitive alternative • Loss of approved funding

BY$94

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Summary
Alternate Engine Program Assessment

Industrial Base	G
Readiness	G
Other Considerations	G
International Implications	G
Cost	Y
Growth Potential	Y
E&MD Risk Reduction	R

Overall: G

G Beneficial
Y Marginal
R No Value

893

Conclusion

The JSF Alternate Engine Program Offers:

- ***Significant Benefits***
  - **Industrial Base**
  - **Readiness**
  - **Contractor Responsiveness**
  - **International Participation**
- ***But Does Not Provide***
  - **E&MD Risk Reduction**
  - **Substantial Cost Savings**
  - **Significant Growth Capabilities**

Recommendation

Proceed with the JSF Alternate Engine Program as currently planned. This recommendation is made independent of the services' affordability issues which were beyond the scope of the analysis.

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Back-Ups

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JSF Alternate Engine PMAG : INDUSTRIAL BASE

Dean Gissendanner	OUSD(A&T)/S&TS/AW
Gerry Freisthler	ASC/YF
CDR Steve George	DE/ARP-MODUK
Tom Harruff	UTC
Diane Wright	OUSD(A&T)/S&TS/AW

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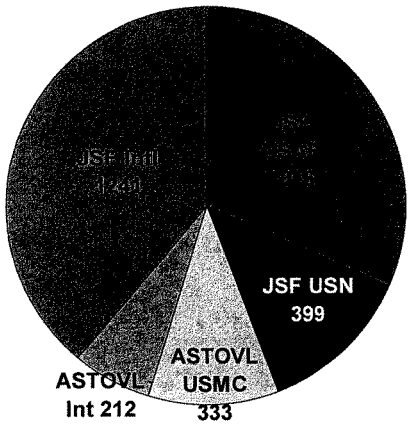
Industrial Base Team Issues

- What are the benefits to the industrial base of having the JSF Alternate Engine Program
  - Do we need to maintain the current industrial base for fighter/attack engines?
- How does the JSF Alternate Engine Program impact the industrial base - domestic and international?

897

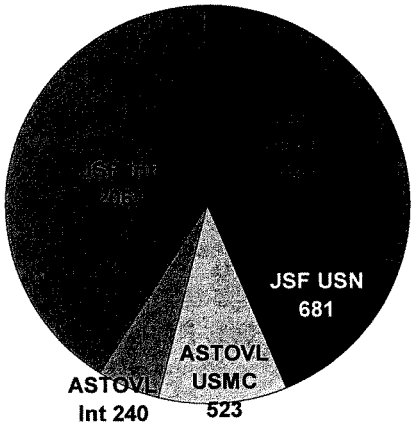
JSF Engine Quantity Forecast

2025



TOTAL: 3001

2035



TOTAL: 5000

Note: P&W Estimates

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Secondary Suppliers

- GE -1550 to 550 to 750
  - 60% out-house ($ value), 40% partners
- P&W - 848 to 632 to 500
  - 70% out-house ($ value), 30% in-house
- Some common suppliers, mostly third tier
  - Castings/forgings/bearings/IBRs/Blisks
- Alternate Engine Program enhances potential for additional international suppliers
- Supplier base adequate for competition

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Elements of a Viable Military Engine Design and Development Capability

- System integration capability
  - link all elements of propulsion/subsystems (e.g. nozzles, controls)
  - engine/airframe interface (e.g. inlet, controls, LO, nozzles)
- Technology development
  - staff and labs to advance State-of-Art
  - timely maturation of technologies
- Engineering and Management Staff
  - required skills, knowledge and expertise
- Facilities
  - test cells (sl/alt)
  - specialized research, test and manufacturing
    - operational simulation, survivability
- Financial Support
  - Government contracts for technology development and system design
  - corporate investment (profit $)
  - IRAD
- Institutional structures and management organizations
  - relations with government and industry

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JSF Engine Deliveries

CY	JSF USAF	JSF Intl	JSF USN	ASTOVL USMC	ASTOVL Intl	Total
2007	3					**3**
2008	6			3		**9**
2009	13	14	3	6		**36**
2010	21	35	6	13	7	**82**
2011	35	48	13	17	9	**122**
2012	48	62	17	21	14	**162**
2013	62	76	24	21	14	**197**
…	…	…	…	…	…	**…**
2027	69	83	28	21	14	**215**
2028	69	83	28	21		**201**
2029	69	83	28	21		**201**
2030	69	83	28	21		**201**
2031	69	83	28	21		**201**
2032	65	83	28	21		**197**
2033		83	28	21		**132**
2034		83	28	21		**132**
2035		83	28	21		**132**
2036		83	21	21		**125**
2037		83		11		**94**
2038		60				**60**
2039		13				**13**
	1495	**2300**	**700**	**575**	**240**	**5310**

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JSF Alternate Engine PMAG : READINESS

Otha Davenport	ASC/LP
BrigGen Bruce Byrum	ADC/S Air, HQMC
Maj Tom Davidson	AF/XORFA
CDR Kenneth Ginader	N-88
Paul Kovalsky	NAVAIR 3.1.1
Bob Lawson	ASC/SYA
Maj Kevin Leek	SAF/AQPF
LtCol Rich Richardson	XO, MAD, NAS Pax

902

JSF Readiness

"Will having two different engines affect Readiness?"



903

AVAILABILITY

Isolated incidents of force readiness shortfalls due to engines

Pro:

- assures single problem won't affect entire fleet
- improves reliability which increases availability
- improves responsiveness of contractor
- reduces effect of labor strikes and Acts Of God

Con:

- complicates logistics support

right part - right place - right time

Alternate Fighter Engines - AFE

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
F100-PW-220							Y				
F110-GE-100											

Increased Performance Engines - IPE

	1989	1990	1991	1992	1993	1994	1995	1996	1997
F100-PW-229			Y	Y	Y				
F110-GE-129					Y	Y	Y	Y	Y

Net Serv ≥ Req WRE

Y

Net Serv ≥ Neg WRE< Req WRE

Net Serv < Neg WRE

Availability = serviceable spare engine levels

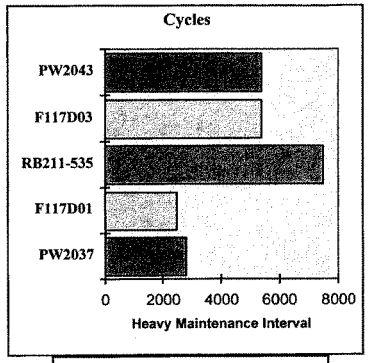
Reliability

Pros

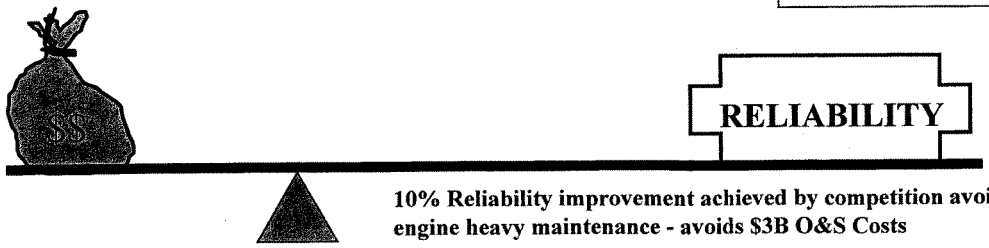
- improves reliability
- reduces O&S cost

Cons

- could encourage fielding of immature design
- available $ for CIP/ISE split- providing less for each engine



Commercial market competition has improved F117-PW-100 (C-17) reliability by 100%



10% Reliability improvement achieved by competition avoids one engine heavy maintenance - avoids $3B O&S Costs

906

Maintainability & Supportability

Pro

promotes innovation in support and maintenance

Con

drives a more complex logistics infrastructure

906

Readiness Team

Conclusions

- improves readiness
- potential to affect 80% of DoD TACAIR
- complicates logistics infrastructure

Recommendation

- Continue Alternate Engine Program as currently planned

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JSF JIRD II Missions

USN	USMC	USAF	RN
- Strike Warfare	- Close Air Support	- Strategic Attack	- Close Air Support
- Air Interdiction	- Air Interdiction	- Attack Ops/Air Interdict	- Air Interdiction
- Anti-Air Warfare	- SEAD	- Close Air Support	- SEAD
- Close Air Support	- Anti-Air Warfare	- SEAD	- Anti-Air Warfare
- SEAD	- Recce	- Counter Air	- Recce
- ASuW	- FAC[A]/TAC[A]	- CSAR	
- Mine Warfare		- FAC[A]	
- Recce		- Recce	
- Aerial Refueling			

908

Alternate Systems

F/A-18E/F	None	F-15E F-117 or replacement	None

JSF Alternate Engine PMAG : RISK REDUCTION

Donald Dix	ODDR&E(A&T)
Jim Nehman	PEO(T)
Pat McLaughlin	NAVAIR 2.2
Norm Pfeifer	ASC/LPK
Rick Rhodeback	ASC/PKC
Ed Wallace	ASC/SM
Trevor Wilcock	MODUK

606

Risk Reduction & Programmatic Alternatives During E&MD

Are there any risk reduction benefits during E&MD? What alternatives could be considered?

APPROACH:

RISK ASSESSMENTS
- **JSF F119 ENGINE**
- **JSF F120 ENGINE**

FORMULATION/EVALUATION OF PROGRAM ALTERNATIVES

910

Risk Assessment for JSF F119 Engine

- Commonality with F119 for F-22 is of limited benefit for E&MD risk reduction (and this is recognition within the E&MD program)
- Current development risks are commensurate with those of a new fighter engine; high temperature requirements and STOVL integration are of particular concern
- Development risk reduction achieved by CDA configurations difficult to assess; possible range is from minor risk reduction to major risk reduction
- Risk will remain in moderate-to-high range at least until end of CDP (1st qtr FY01) and may remain in moderate-to-high range until at least first E&MD engine to test (4th qtr FY02)
- Overall development risk to E&MD completion is low-to-moderate (FY07)

911

Risk Assessment for JSF F120 Engine

- Little relationship to YF120; YF120 experience of marginal value for E&MD risk reduction
- Current development risks are commensurate with those of a new fighter engine; high temperature requirements and STOVL integration are of particular concern
- Risk will remain in moderate-to-high range at least until after first engine to test (4th qtr FY02)
- Overall development risk to E&MD completion is low (FY09)

ALT 1: JSF Alternate Engine Baseline Program

DEVELOP THE JSF F120 ENGINE TO MITIGATE PROGRAM RISK AND PROVIDE A POTENTIAL PRODUCTION ENGINE ALTERNATIVE/COMPETITION BY LOT 5 (FY09).

Pros

Offers a production alternative

Maintains viable competition

Engine technical maturity specific to downselected acft

Cons

No significant risk reduction to e&md program

Significant development cost ($1.7B)

Significant engine risk reduction not until first engine to test (FY02)

913

ALT 2: Concurrent Development of Two Engines During E&MD

ACCELERATE THE BASELINE ALTERNATE ENGINE PROGRAM TO BE CONCURRENT WITH THE EXISTING JSF F119 PROGRAM (E&MD START 2ND QTR FY01).

Pros

Reduces weapon system E&MD program risk

Establishes earlier production competition

Cons

Further increase in funding (total $2.5B FY98 to completion)

Increases risk of alternate engine program

Engine altitude test facility capacity may be inadequate

Must share low production rates in early lots; complicates initial logistics support

914

ALT 2A: *Earlier Development of Alternate Engine*

ACCELERATE THE BASELINE ALTERNATE ENGINE PROGRAM FOLLOWING CDP DOWNSELECT (2ND QTR FY01).

Pros

Reduces weapon system e&md program risk

Establishes earlier production competition

Cons

Increase in funding ($TBD B FY01 to completion)

Increases risk to alternate engine program

Engine altitude test facility capacity may be inadequate

Must share low production rates in early lots; complicates initial logistics support

915

ALT 3: Pursue Commercial Development of Alternate Engine

PRIVATE FUNDING OF THE ALTERNATE ENGINE E&MD PROGRAM. GOVERNMENT E&MD INVESTMENT LIMITED TO UNIQUE REQUIREMENTS (ASSETS, TESTING, AND/OR FACILITIES).

Pros

- Maintains competitive strategy
- Limited government RDT&E funding required (< $TBD M)

Cons

- No significant risk reduction to E&MD program
- Payback requires statutory relief
- Reduced government insight into program status

916

ALT 4: Eliminate Alternate Engine in FY-98

REDIRECT FUNDING TO JSF F119 ENGINE DEVELOPMENT TO REDUCE PROGRAM RISK OF NOT HAVING AN ALTERNATE ENGINE

Pros

- Reduces risk of the JSF F119 program
- No alternate engine E&MD funding required

Cons

- No production alternative
- Potential loss of funding for additional risk reduction activities

917

Risk Reduction & Programmatic CONCLUSIONS

E&MD risk reduction offered by the alternate engine program does not justify the investment required

If the alternate engine is justified for other reasons, the program should be followed thru to production

918

JSF Alternate Engine PMAG : LIFE CYCLE COST

David Steffee	NAVAIR 4.2.1
Shirley Ark	ASC/LPF
Cpt Kevin Head	ASC/LPF
John Dorsett	AFCAA/TD
Pat McLaughlin	NAVAIR 2.2
Chris Stewart	PE-MODUK
Cpt Kevin Gould	ASC/LPF
Vickie Guttierrez	NAVAIR 4.2.4
Al Pressman	NAVAIR 4.2.4
Dave Kester	NAVAIR 4.2.6
Dan Milano	NAVAIR 4.2.1

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Comparative Development Costs

	BEST CASE	MOST PROBABLE	WORST CASE
F119 BOEING	$1.7B	$2.0B	$2.3B
NOZZLE ENGINEERING		($145M)	
LIFT SYSTEM ENGINEERING		($220M)	
FLIGHT TEST HARDWARE		($230M)	
NET	$1.1B	$1.4B	$1.7B
	BEST CASE	MOST PROBABLE	WORST CASE
F119 LOCKHEED	$2.1B	$2.4B	$2.7B
NOZZLE ENGINEERING		($215M)	
LIFT SYSTEM ENGINEERING		($600M)	
FLIGHT TEST HARDWARE		($150M)	
NET	$1.1B	$1.4B	$1.7B
	PHASE I/II	PHASE III	PHASE IV
F120 BOEING	$113M	$292M	$923M
TOTAL		$1.328B	

94$/M

- Contractor Development Costs Only
- 4 Vs 15 flight Test Engines
- No 2DCD Nozzle
- No Lift Systems
- More Closely Coupled Design Between Phase III and E&MD Vs. CDP and E&MD

Basis for Cost Estimate

- JSF119 = F22/F119 EAC May 96 + Bottoms-up Engineering Assessment
- JSF120 = F120 Proposal/F414 EAC Dec 96 + Bottoms-up Engineering Assessment

Contains Boeing/Lockheed/P&W/GE/AADC/Rolls Royce Proprietary/Competition Sensitive Information

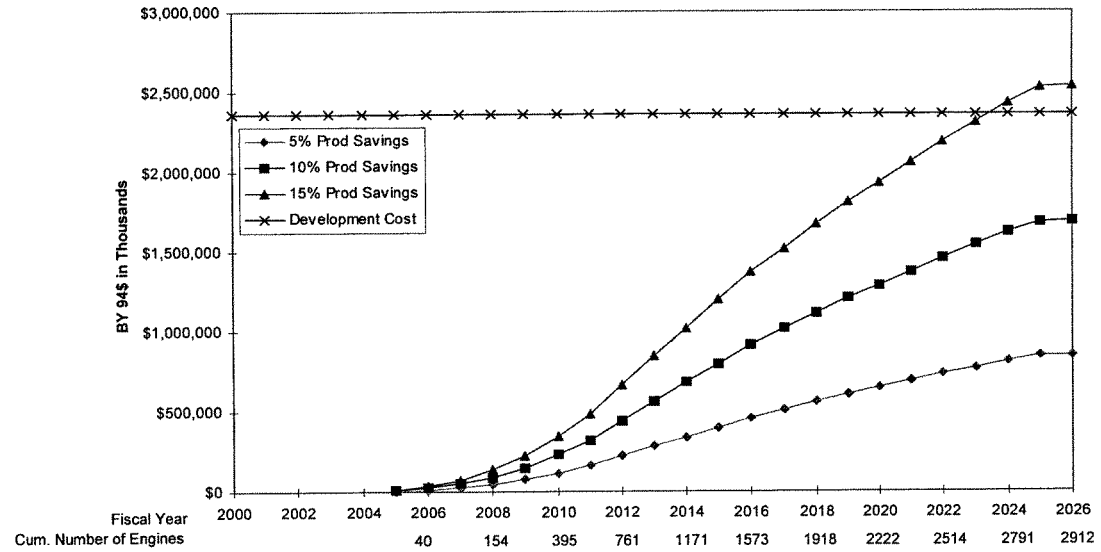
Engine Funding Summary
Alternative 1
(Baseline Program)

E&MD Phase (TY$)

	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	TOTAL
P&W	376	541	455	328	181					1881
GE				240	350	310	220	120	50	1290

Notes:
1. Notional Profiles from PMAG Analysis
2. Excludes nozzle, Lift Systems Engineering & Additional Flight Test Hardware
3. Includes Other Governement Costs

Break-even Sensitivity
Accelerated Alternate Engine Program



Note: Analysis based on Sole Source estimate for PW engine of $5.9M, BY 94$
Turbo Machinery only -- No nozzle

JSF Alternate Engine PMAG : GROWTH

Dave Pauling	NAVAIR 4.4
Col Bob Nasby	USMC/APW-1
Mike Philpot	MODUK/DERA
Joe Wood	UTC

923

What are the Benefits of AEP from a Growth Perspective?

- ***Assumptions***
  - Airframe contractors currently designing for both engines
  - Growth provides for performance and/or durability improvements
  - Aircraft weight will grow with time
- ***Approach***
  - Review engine technical capabilities for growth
  - Review airframe accommodation for engine growth
  - Review subjective programmatic benefits

924

What are the Benefits of AEP from a Growth Perspective?

Summary

	JSF/F119	JSF/AEP
Growth		
4-6% Thrust	Y ○	G ●
8-12% Thrust	Y ○	Y ○
>15% Thrust	R ●	R ●

925

Airframe/Engine Technical Considerations

(JSF/AEP System Relative to JSF/119 System)

Pros

- 4-6% Thrust growth step already built into design
- Larger Engine Core
  - 20-25%
- Lower Engine Turbine Temp
  - ~ 150F
- Better Engine Durability
  - Hot Section
- Sustains Combat Performance
  - Acceleration/Ps/Bringback
- Paper Engine
  - Flexibility

Cons

- Thrust Growth Beyond 4-6% Requires S&T Transitions Also
  - Cooling technology
  - Weight Reduction
- Paper engine
  - Uncertainty

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What are the Benefits of AEP from a Growth Perspective?

Program Considerations (AEP Relative to Baseline)

Pros

- Competition may motivate contrators to P3I investment
  - Performance, durability, LCC improvement
- Contractor responsiveness and resource support commitment improved
- Contractor may invest annually to improve the product for each follow-on production lot competition

Cons

- Support two growth programs vice one

927

What are the Benefits of AEP from a Growth Perspective?

Conclusions

- AEP will facilitate cruise engine growth
  - Competition improves contractors' responsiveness
  - Competition improves effective design problem resolution
  - Competition incentivizes contractor investment
- Minor AEP growth built into design
- Moderate AEP growth will necessitate significant S&T transition and airframe modification
- Growth options sensitive to system complexity

928

What are the Benefits of AEP from a Growth Perspective?

Recommendations

- Fund AEP E&MD in POM 00
- Include both engines in any growth initiative
- Consider growth capability in requirements process

929

Overall Conclusions

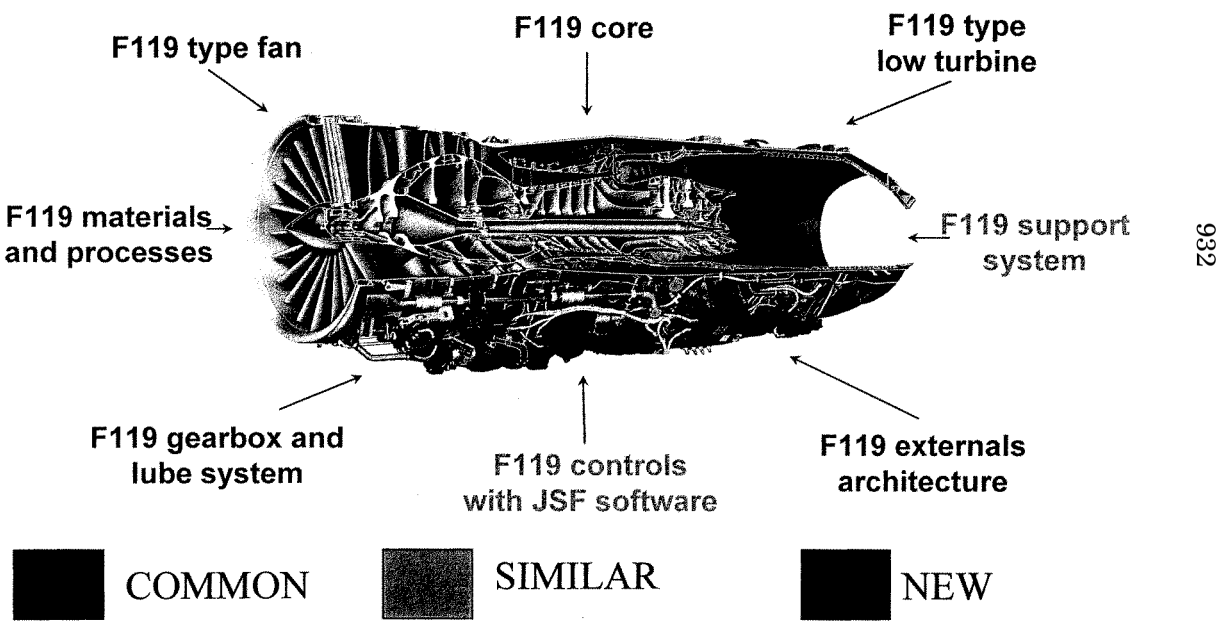
Schedule

ACTIVITIES	*DATE*
Initial Tasking	12/01
Team Formulation & Initial Planning	12/08-12/12
Meeting Mr.Stussie	12/15 (Pentagon 1E801)
Fact Finding	
Program Office Meetings	12/17 (1300-1600, JSF PEO - CS4 Suite 307)
GE (AM)/Pratt Whitney(PM)	12/18 (0900-1200, 1300-1600, JSF PEO)
Team Meeting	12/19 (NavAir Liaison - CG4 - 14th floor)
Team Discussions & Analyses	01/05 - 01/09 (NAWC-AD Liaison CG4, Rm 1400)
Executive Lead Flag Level Overview	01/05 (Mr. Douglass 1130-1200)
Pre-Brief to BGen Kenne and Mr. Stussie	01/12 (via fax/e-mail)
Present Final Results to Mr. Douglass	01/12 (1300-1400)

931

F119 Commonality

P&W F119 Derivatives

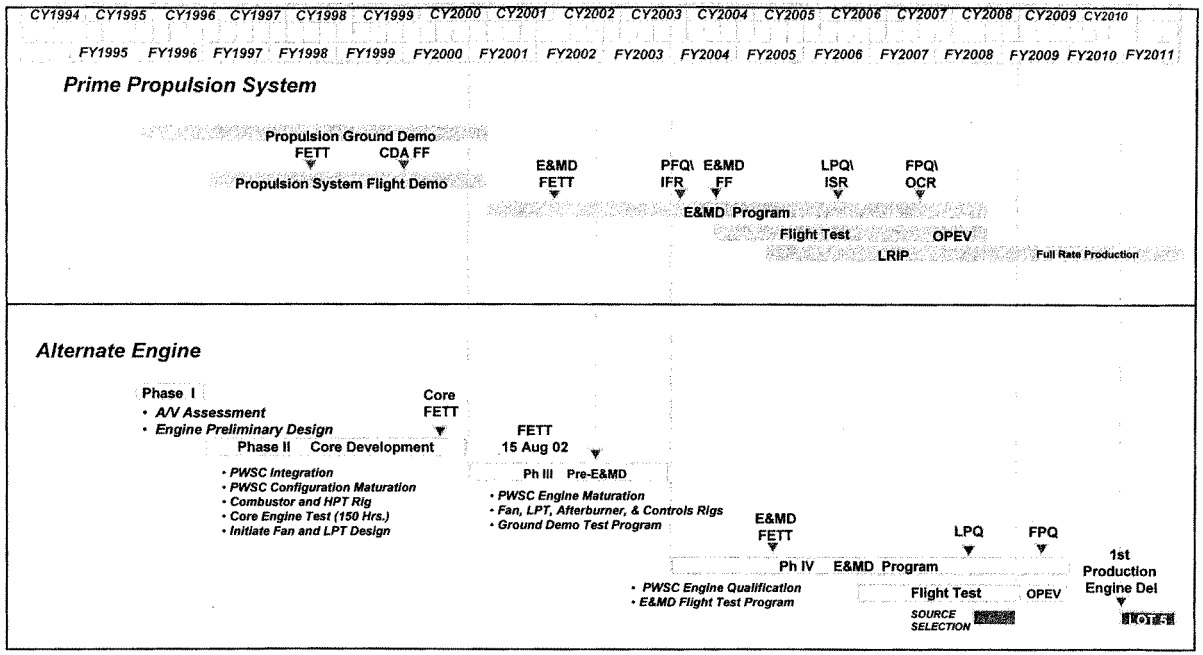




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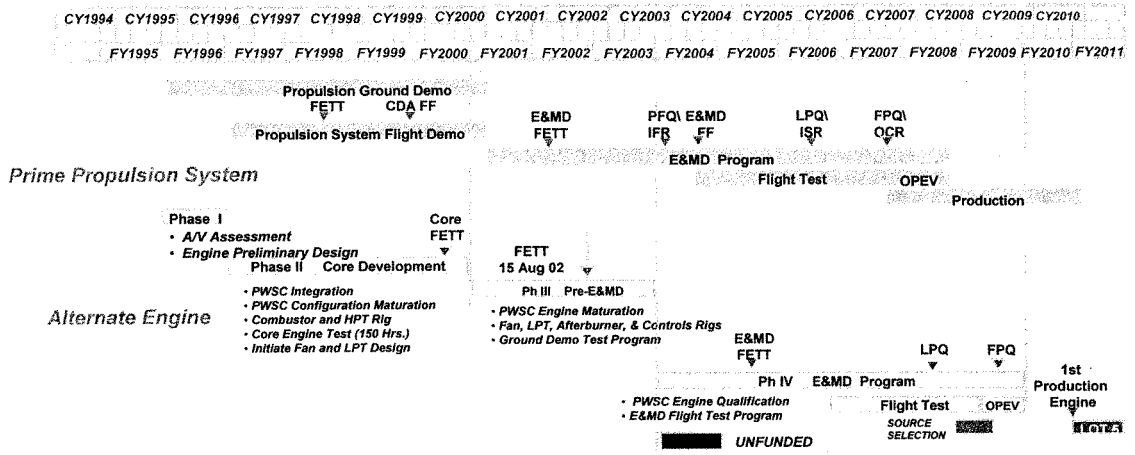
933

Alternate Engine Funding/Unfunded



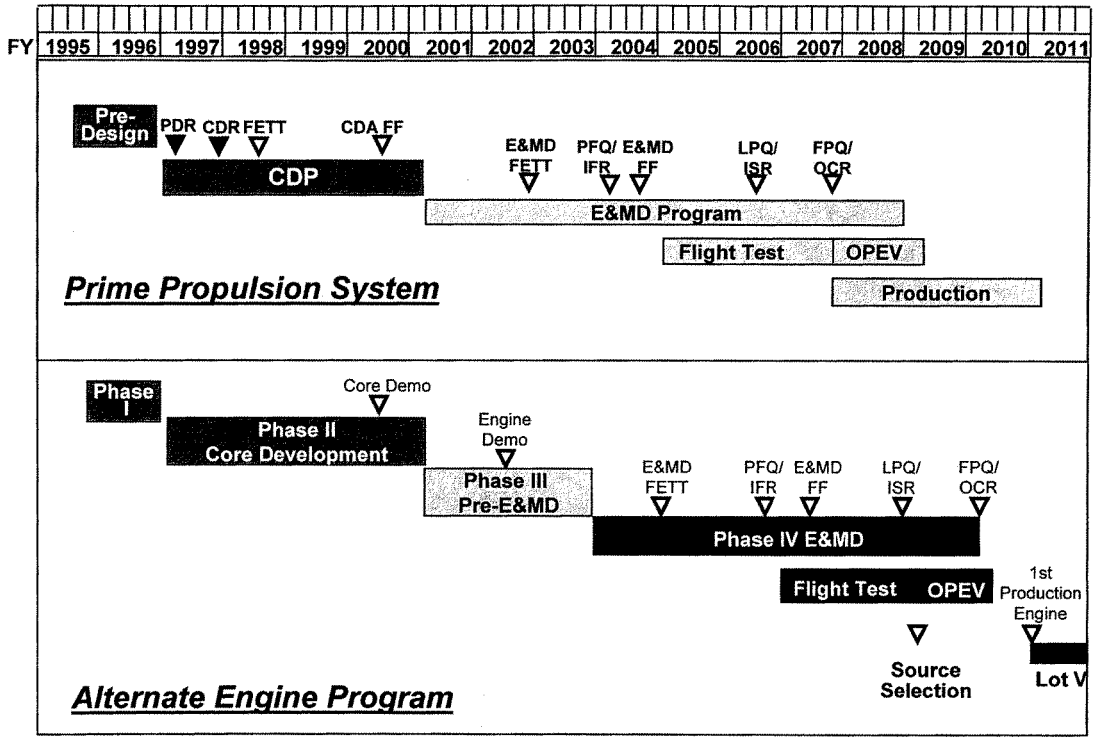
[redacted]	FY04	FY05	FY06	FY07	FY08	FY09	Total
	240	350	310	220	120	50	1753
					Total	1290	

Alternate Engine Development Plan



Government Estimate	1188
Other Government Costs	163
Other Contractor Costs	43
Total Phase IV Cost	1394
Funding in Current Budget	104
Total E&MD POM Requirement	1290

Overall JSF Propulsion Program Plan



936

PMAG Review of F-35 Alternative Engine Program: Cost Update

Presented to:
RADM Tim Heely
&
Mr. Bob May

Executive Summary

- **Tasking: Determine the cost implications of a dual (F-135/F-136) vs. single (F-135) source JSF engine program**
  - **Conducted break even analysis of 63 procurement case scenario**
  - **Recoupment Cost**
    - **2nd Engine SDD costs $ 2.8 billion in constant FY-2002 dollars**
    - **2nd Engine SDD + Loss of Learning costs range from $ 3.5 to $ 4.1 billion in constant FY-2002 dollars depending on case**
- **Cost Conclusion**
  - **A reduction of procurement cost by 16% to 22% (case dependent) would need to be achieved through competition in order to recoup the 2nd Engine SDD + Loss of Learning costs**

Outline

- Cost Team
- Tasking
- Ground Rules & Assumptions
- Procurement Scenarios/Case Definition
- Procurement Profiles
- Approach
- Results
  - Break Even Analysis
  - Case Results
- O&S Assessment
- Engine O&S MS II Cost Estimate
- Conclusion

Cost Team

- Membership
  - Don Allen — Study Lead
  - Steve Gagen — Propulsion Analyst /Air Force Advisor
  - Al Pressman — Propulsion Analyst
  - Sonia Sharkey — Propulsion Analyst
  - Corey Gomez — Propulsion Analyst
  - Doug McGinnes — O&S Analyst
  - John Dorsett — Navy Advisor
  - Paul Moseley — MOD Advisor
  - Tom Coonce — OSD Advisor

Tasking

- **To update the January 1998 PMAG Review of the F-35 Alternative Engine Program**
  - ➢ **Determine the cost implications of a dual (F-135/F-136) vs. single (F-135) source JSF engine program for the following procurement quantity scenarios:**
    - **US & UK Program of Record**
    - **US & UK TACAIR Study**
    - **US & All Current Partners**
  - ➢ **Perform the following analysis:**
    - **Quantitative Analysis**
      - § **SDD & Procurement Cost**
    - **Qualitative Analysis**
      - § **Operating and Support Cost**

Ground Rules & Assumptions

- All cost shown in constant FY-02$
- Sunk costs (GE/RR Phase I, II and III) not included
- SDD includes
  - GE/RR, P&W, and Lockheed Martin costs
- CTOL/CV hardware and common components will be competed
  - U.S. and International hardware configurations are the same
- STOVL common hardware will not be competed
- 15% spares factor will be applied to all production quantities
- Effects of varying business base on the contractors labor rates will not be addressed as part of this analysis

Ground Rules & Assumptions

- Procurement sharing assumptions
  - Lots 1 - 3: Sole source contract to P&W
  - Lots 4 & 5: Sole source contracts to P&W and GEAE with the following procurement sharing ratios
    - 80% P&W / 20% GEAE
    - 50% P&W / 50% GEAE
  - Lots 6 & Beyond: Limited competition between P&W and GEAE with the following procurement sharing ratios
    - 80% P&W / 20% GEAE
    - 20% P&W / 80% GEAE
    - 50% P&W / 50% GEAE
  - Lots 6 & Beyond: International procurement sharing ratios
    - 100% P&W / 0% GEAE
    - 0% P&W / 100% GEAE

Procurement Scenario I
Case Definitions

- U.S. and U.K. Program of Record Procurement Profile
  - U.S. & U.K. in single competitive pool
  - U.S. & U.K in separate competitive pools

Case #	Production Split											
	Competitive Pool 1	Lots 1-3		Lots 4-5		Lots 6 & Beyond		Competitive Pool 2	Lots 1-3		Lots 4-5		Lots 6 & Beyond	
		PW	GE	PW	GE	PW	GE		PW	GE	PW	GE	PW	GE
Base A	US + UK	100%		100%		100%								
Case 1	US + UK	100%		80%	20%	80%	20%							
Case 2	US + UK	100%		80%	20%	20%	80%							
Case 3	US + UK	100%		80%	20%	50%	50%							
Case 4	US + UK	100%		50%	50%	80%	20%							
Case 5	US + UK	100%		50%	50%	20%	80%							
Case 6	US + UK	100%		50%	50%	50%	50%							
Case 7	US	100%		80%	20%	80%	20%	UK	100%		80%	20%	100%	
Case 8	US	100%		80%	20%	20%	80%	UK	100%		80%	20%	100%	
Case 9	US	100%		80%	20%	50%	50%	UK	100%		80%	20%	100%	
Case 10	US	100%		50%	50%	80%	20%	UK	100%		50%	50%	100%	
Case 11	US	100%		50%	50%	20%	80%	UK	100%		50%	50%	100%	
Case 12	US	100%		50%	50%	50%	50%	UK	100%		50%	50%	100%	
Case 13	US	100%		80%	20%	80%	20%	UK	100%		80%	20%		100%
Case 14	US	100%		80%	20%	20%	80%	UK	100%		80%	20%		100%
Case 15	US	100%		80%	20%	50%	50%	UK	100%		80%	20%		100%
Case 16	US	100%		50%	50%	80%	20%	UK	100%		50%	50%		100%
Case 17	US	100%		50%	50%	20%	80%	UK	100%		50%	50%		100%
Case 18	US	100%		50%	50%	50%	50%	UK	100%		50%	50%		100%

U.S. & U.K. Program of Record Profile

- **Aircraft Quantities: 3002**
  - **U.S. Quantity : 2852**
  - **U.K. Quantity: 150**

Country	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Total
U.S. CTOL	6	14	20	30	44	72	110	110	110	110	110	110	110	110	110	110	110	110	110	110	37	1763
U.S. CV			9	20	32	48	48	48	48	48	48	48	48	35								480
U.S. STOVL	4	8	20	32	32	36	36	36	36	36	36	36	36	36	36	36	36	36	36	9		609
Australia																						0
Canada																						0
Denmark																						0
Italy STOVL																						0
Italy CTOL																						0
Italy STOVL																						0
Netherlands																						0
Norway																						0
Turkey																						0
U. K.			5	9	12	12	12	12	12	12	12	12	12	12	12	4						150
Total	10	22	54	91	120	168	206	206	206	206	206	206	206	193	158	150	146	146	146	119	37	3002
Cum Total	10	32	86	177	297	465	671	877	1083	1289	1495	1701	1907	2100	2258	2408	2554	2700	2846	2965	3002	

Procurement Scenario II
Case Definitions

- U.S. and U.K. TACAIR Procurement Profile
  - U.S. & U.K. in single competitive pool
  - U.S. & U.K in separate competitive pools

Case #	Production Split											
	Competitive Pool 1	Lots 1-3		Lots 4-5		Lots 6 &		Competitive Pool 2	Lots 1-3		Lots 4-5		Lots 6 &	
		PW	GE	PW	GE	PW	GE		PW	GE	PW	GE	PW	GE
Base B	US + UK	100%		100%		100%								
Case 19	US + UK	100%		80%	20%	80%	20%							
Case 20	US + UK	100%		80%	20%	20%	80%							
Case 21	US + UK	100%		80%	20%	50%	50%							
Case 22	US + UK	100%		50%	50%	80%	20%							
Case 23	US + UK	100%		50%	50%	20%	80%							
Case 24	US + UK	100%		50%	50%	50%	50%							
Case 25	US	100%		80%	20%	80%	20%	UK	100%	0%	80%	20%	100%	0%
Case 26	US	100%		80%	20%	20%	80%	UK	100%	0%	80%	20%	100%	0%
Case 27	US	100%		80%	20%	50%	50%	UK	100%	0%	80%	20%	100%	0%
Case 28	US	100%		50%	50%	80%	20%	UK	100%	0%	50%	50%	100%	0%
Case 29	US	100%		50%	50%	20%	80%	UK	100%	0%	50%	50%	100%	0%
Case 30	US	100%		50%	50%	50%	50%	UK	100%	0%	50%	50%	100%	0%
Case 31	US	100%		80%	20%	80%	20%	UK	100%	0%	80%	20%	0%	100%
Case 32	US	100%		80%	20%	20%	80%	UK	100%	0%	80%	20%	0%	100%
Case 33	US	100%		80%	20%	50%	50%	UK	100%	0%	80%	20%	0%	100%
Case 34	US	100%		50%	50%	80%	20%	UK	100%	0%	50%	50%	0%	100%
Case 35	US	100%		50%	50%	20%	80%	UK	100%	0%	50%	50%	0%	100%
Case 36	US	100%		50%	50%	50%	50%	UK	100%	0%	50%	50%	0%	100%

U.S. & U.K. TACAIR Profile

- **Aircraft Quantities: 2593**
  - **U.S. Quantity : 2443**
  - **U.K. Quantity: 150**

Country	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Total
U.S. CTOL	5	12	19	31	47	72	110	110	110	110	110	110	110	110	110	110	110	110	110	110	37	1763
U.S. CV			5	5	26	27	32	37	37	37	37	37	37	39	39	39	8					442
U.S. STOVL	4	8	10	11	15	15	15	18	18	18	18	18	18	16	16	16	4					238
Australia																						0
Canada																						0
Denmark																						0
Italy STOVL																						0
Italy CTOL																						0
Italy STOVL																						0
Netherlands																						0
Norway																						0
Turkey																						0
U. K.			5	8	9	10	12	12	12	12	12	12	12	12	12	10						150
Total	9	20	39	55	97	124	169	177	177	177	177	177	177	177	177	175	122	110	110	110	37	2593
Cum Total	9	29	68	123	220	344	513	690	867	1044	1221	1398	1575	1752	1929	2104	2226	2336	2446	2556	2593	

Procurement Scenario III Case Definitions

- **U.S. and Current Partner Procurement Profile**
  - ➢ **U.S. & CPP in single competitive pool**
  - ➢ **U.S. & CPP in separate competitive pools**
  - ➢ **U.S./Australia /Canada in one competitive pool and European countries in another**

Case #	Production Split											
	Competitive Pool 1	Lots 1-3		Lots 4-5		Lots 6 & Beyond		Competitive Pool 2	Lots 1-3		Lots 4-5		Lots 6 & Beyond	
		PW	GE	PW	GE	PW	GE		PW	GE	PW	GE	PW	GE
Base C	US + CPP	100%		100%		100%								
Case 37	US + CPP	100%		80%	20%	80%	20%							
Case 38	US + CPP	100%		80%	20%	20%	80%							
Case 39	US + CPP	100%		80%	20%	50%	50%							
Case 40	US + CPP	100%		50%	50%	80%	20%							
Case 41	US + CPP	100%		50%	50%	20%	80%							
Case 42	US + CPP	100%		50%	50%	50%	50%							
Case 43	US	100%		80%	20%	80%	20%	CPP	100%		80%	20%	100%	
Case 44	US	100%		80%	20%	20%	80%	CPP	100%		80%	20%	100%	
Case 45	US	100%		80%	20%	50%	50%	CPP	100%		80%	20%	100%	
Case 46	US	100%		50%	50%	80%	20%	CPP	100%		50%	50%	100%	
Case 47	US	100%		50%	50%	20%	80%	CPP	100%		50%	50%	100%	
Case 48	US	100%		50%	50%	50%	50%	CPP	100%		50%	50%	100%	

Procurement Scenario III
Case Definitions (Continued)

- **U.S. and Current Partner Procurement Profile**
  - ➢ U.S. & CPP in single competitive pool
  - ➢ U.S. & CPP in separate competitive pools
  - ➢ U.S./Australia/Canada in one competitive pool and European countries in another

Case #	Production Split											
	Competitive Pool 1	Lots 1-3		Lots 4-5		Lots 6 & Beyond		Competitive Pool 2	Lots 1-3		Lots 4-5		Lots 6 & Beyond	
		PW	GE	PW	GE	PW	GE		PW	GE	PW	GE	PW	GE
Base C	US + CPP	100%		100%		100%								
Case 49	US	100%		80%	20%	80%	20%	CPP	100%		80%	20%		100%
Case 50	US	100%		80%	20%	20%	80%	CPP	100%		80%	20%		100%
Case 51	US	100%		80%	20%	50%	50%	CPP	100%		80%	20%		100%
Case 52	US	100%		50%	50%	80%	20%	CPP	100%		50%	50%		100%
Case 53	US	100%		50%	50%	20%	80%	CPP	100%		50%	50%		100%
Case 54	US	100%		50%	50%	50%	50%	CPP	100%		50%	50%		100%
Case 55	US + AS + CA	100%		80%	20%	80%	20%	Europe	100%		80%	20%		100%
Case 56	US + AS + CA	100%		80%	20%	20%	80%	Europe	100%		80%	20%		100%
Case 57	US + AS + CA	100%		80%	20%	50%	50%	Europe	100%		80%	20%		100%
Case 58	US + AS + CA	100%		50%	50%	80%	20%	Europe	100%		50%	50%		100%
Case 59	US + AS + CA	100%		50%	50%	20%	80%	Europe	100%		50%	50%		100%
Case 60	US + AS + CA	100%		50%	50%	50%	50%	Europe	100%		50%	50%		100%

U.S. & Current Partner Profile

- **Aircraft Quantities: 3565**
  - **U.S. Quantity : 2852**
  - **Current Partner Quantity: 713**
  - **U.S./Australia/Canada Quantity: 2954**
  - **European Quantity: 611**

Country	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	Total
U.S. CTOL	6	14	20	30	44	72	110	110	110	110	110	110	110	110	110	110	110	110	110	110	37	1763
U.S. CV			9	20	32	48	48	48	48	48	48	48	48	35								480
U.S. STOVL	4	8	20	32	32	36	36	36	36	36	36	36	36	36	36	36	36	36	36	9		609
Australia					14	14	14															42
Canada										15	15	15	15									60
Denmark						6	8	8	8	8	8	6	8									60
Italy STOVL							24	24	24	24												96
Italy CTOL											24	24										48
Italy STOVL									12	12												24
Netherlands			2	8	8	8	8	8	8	8	8	8	8	3								85
Norway					6	6	6	6	6	6	6	6										48
Turkey					20	20	20	20	20													100
U. K.			5	9	12	12	12	12	12	12	12	12	12	12	12	4						150
Total	10	22	56	99	168	222	286	272	284	279	267	265	237	196	158	150	146	146	146	119	37	3565
Cum Total	10	32	88	187	355	577	863	1135	1419	1698	1965	2230	2467	2663	2821	2971	3117	3263	3409	3528	3565	

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Approach

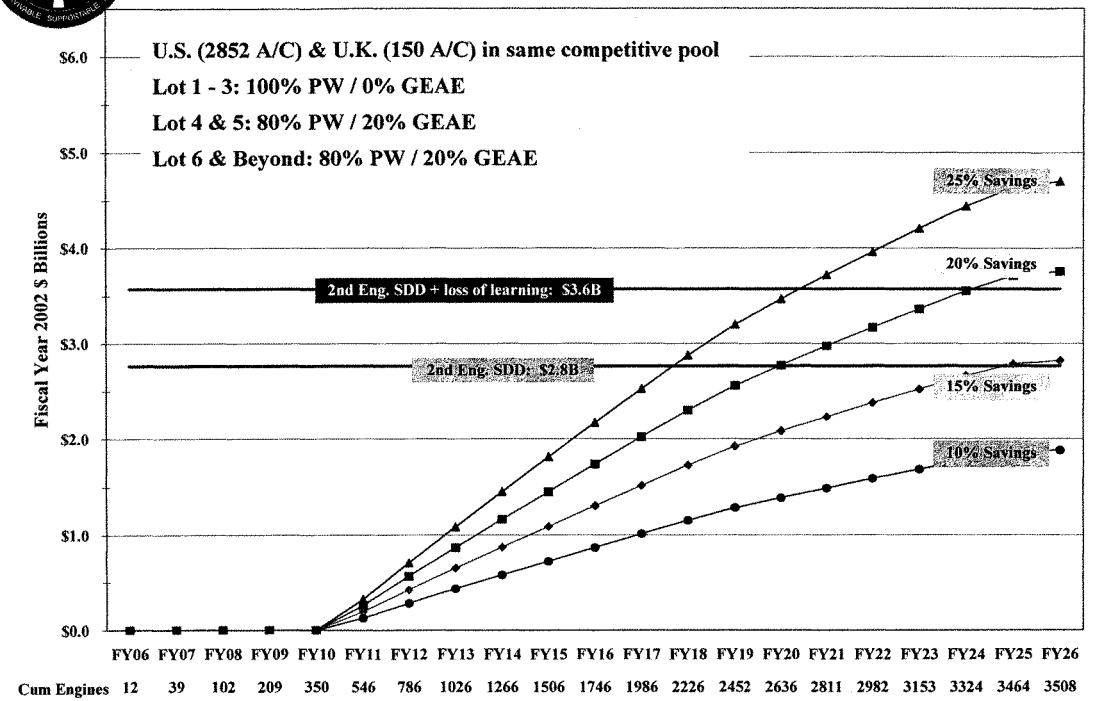
- Develop propulsion quantity profiles based on aircraft profiles, spares factor, and procurement share ratios
- Generate a range of competitive savings required by:
  - Applying F-135 and F-136 production profiles to the JPO propulsion cost model
  - Displacing the engine learning curve at the point of competition by:
    - 0%, 5%, 10%, 15%, 20%, and 25%

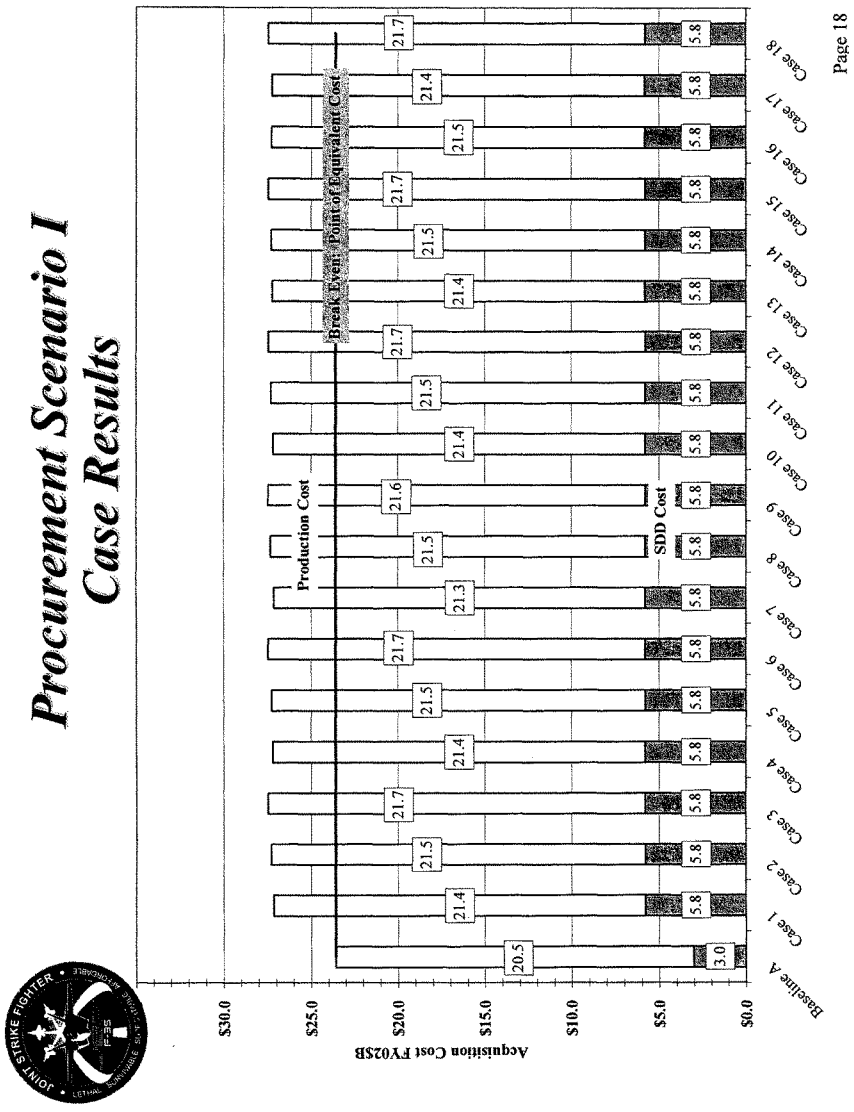
Results: Competitive Savings Required for Recoupment

FY 2002 $ Billions

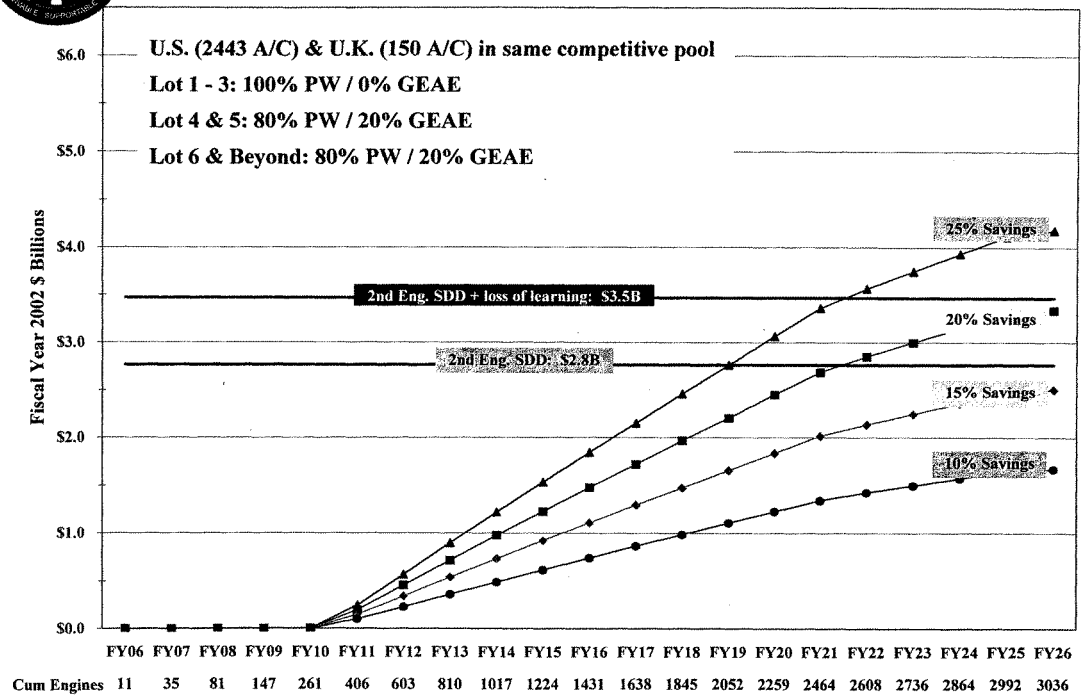
	Competitive Savings Required for Lot 6 & Beyond	
	2 Eng. SDD	2nd. Eng. SDD + Loss of Learning
Procurement Scenario I **Case 1 - Case 18** **U.S. & U.K.** **3002 Aircraft**	**$2.8**	**$3.6 to $3.9**
Procurement Scenario II **Case 19 - Case 36** **U.S. & U.K.** **2593 Aircraft**	**$2.8**	**$3.5 to $3.7**
Procurement Scenario III **Case 37 - Case 60** **U.S. & CPP** **3565 Aircraft**	**$2.8**	**$3.6 to $4.1**

Case 1 Break Even Analysis

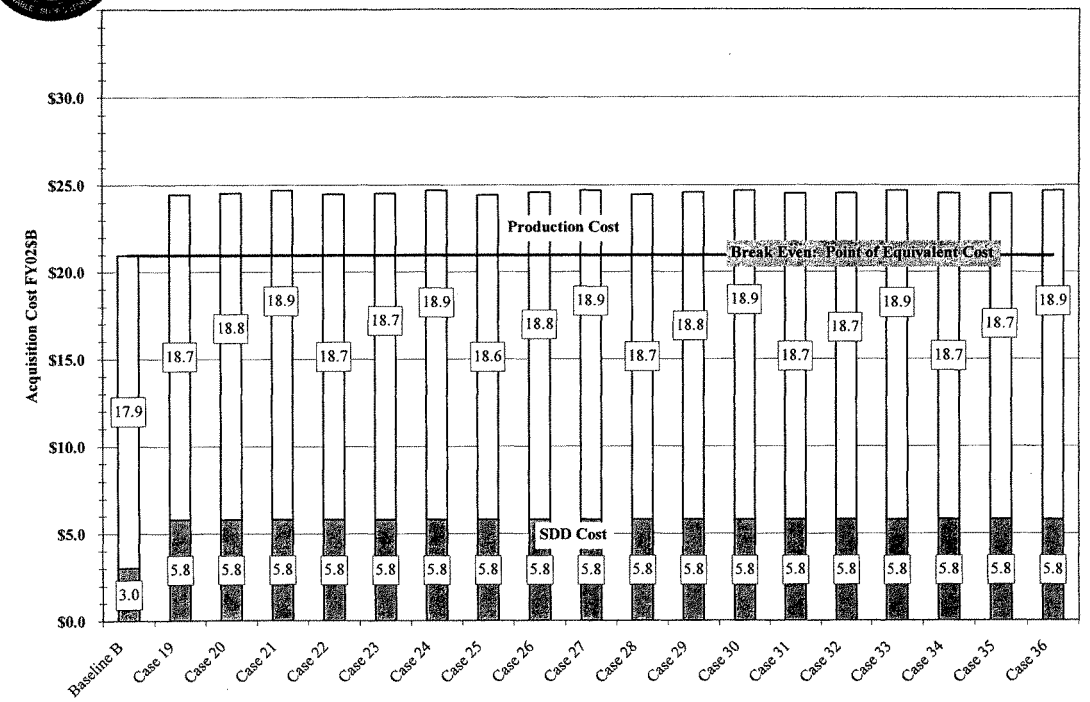



Procurement Scenario I
Case Results
Acquisition Cost FY02$B
$0.0
$5.0
$10.0
$15.0
$20.0
$25.0
$30.0
Production Cost
SDD Cost
Break Even Point of Equivalent Cost
Baseline 4
Case 1
Case 2
Case 3
Case 4
Case 5
Case 6
Case 7
Case 8
Case 9
Case 10
Case 11
Case 12
Case 13
Case 14
Case 15
Case 16
Case 17
Case 18
3.0
20.5
5.8
21.4
5.8
21.5
5.8
21.7
5.8
21.4
5.8
21.5
5.8
21.7
5.8
21.5
5.8
21.7
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21.3
5.8
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5.8
21.6
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21.4
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21.7
5.8

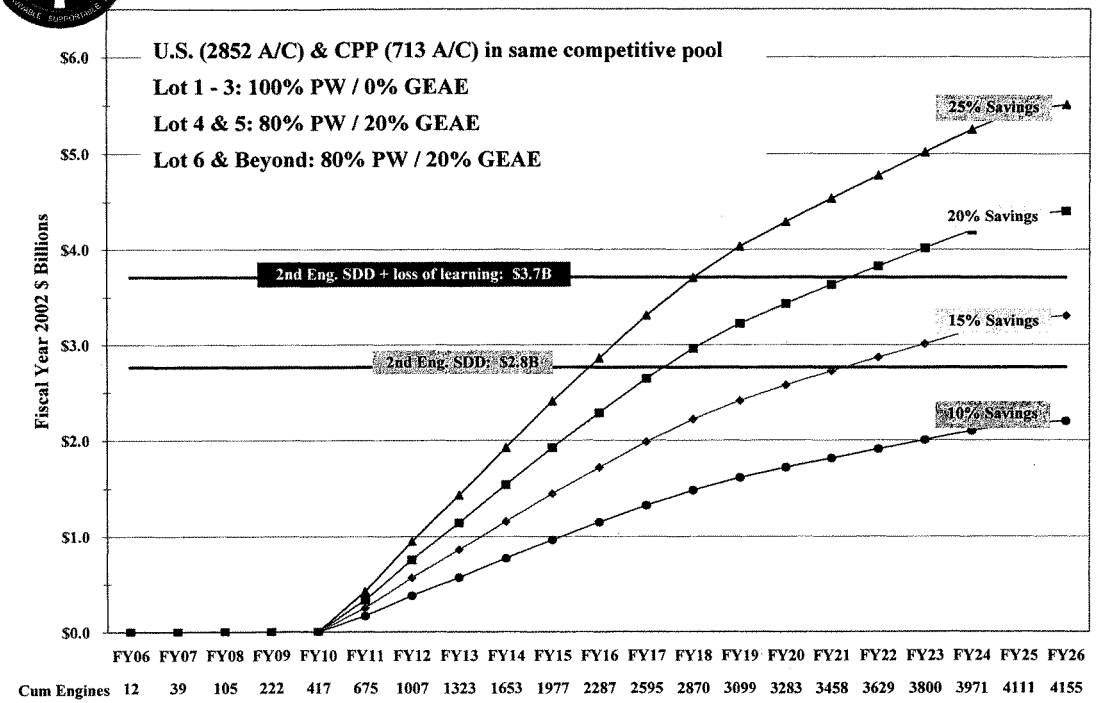
Case 19 Break Even Analysis



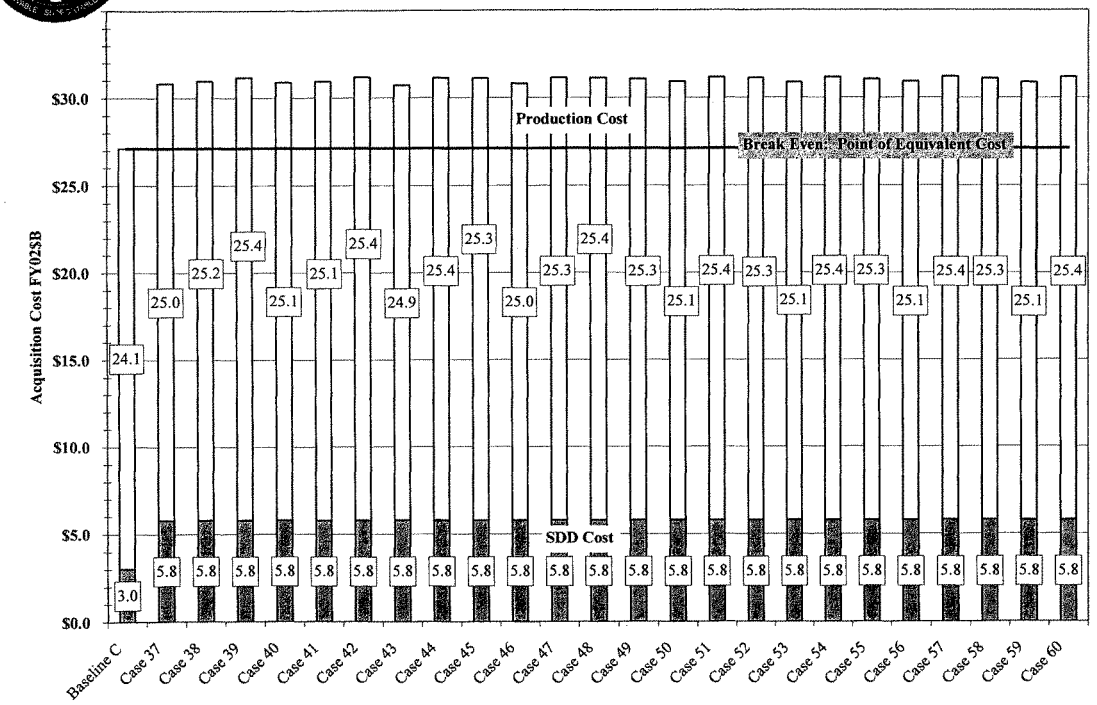
Procurement Scenario II
Case Results



Case 37 Break Even Analysis



Procurement Scenario III
Case Results



Total JSF O&S Assessment

O & S Cost Category	% of O&S	Cost Impact	Comments
Mission Personnel	30 %	—	Not expected to change manning at squadron level
Unit level Consumption	39 %	↓	Savings potential - from improved reliability, lower SFC, & reduced spares cost as a result of engine competition
Intermediate Maintenance	1%	—	No expected impact
Depot Maintenance	5 %	↓	Less depot maintenance - more reliable & maintainable engines
Support	25 %	↑	Duplicative support systems

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Engine O&S MS II Cost Estimate

	FY94$B	FY02$B
Platform		
CTOL	**$9.4**	**$10.8**
CV	**$2.6**	**$3.0**
STOVL	**$3.2**	**$3.7**
Total	**$15.2**	**$17.5**

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Cost Conclusion

- **A reduction of procurement cost by 16% to 22% (case dependent) would need to be achieved through competition in order to recoup the 2nd Engine SDD + Loss of Learning costs**

Backups

Rate Tooling

- **Rough Order of Magnitude estimate based P&W SDD Contract**

	Cost FY02$M	# of Tooling Sets	Capacity Engines/Yr
Tooling	**$60**	**1**	**34**

Max Engine Quantity per Year

Production Share	**100%**	**80%**	**50%**	**20%**
Scenario I	**206**	**165**	**103**	**41**
Scenario II	**177**	**142**	**89**	**35**
Scenario III	**286**	**229**	**143**	**57**

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Rate Tooling (Continued)

- Rough Order of Magnitude estimate based P&W SDD Contract

	Single Contractor 100% Rate Tooling	Two Contractors 80% Rate Tooling	
	# of Additional Sets	# of Additional Sets	
Scenario I	5	8	
Scenario II	4	6	
Scenario III	7	12	
FY02 $ M	Cost	Cost	Delta
Scenario I	$300	$480	$180
Scenario II	$240	$360	$120
Scenario III	$420	$720	$300

Results: Competitive Savings Required for SDD Recoupment

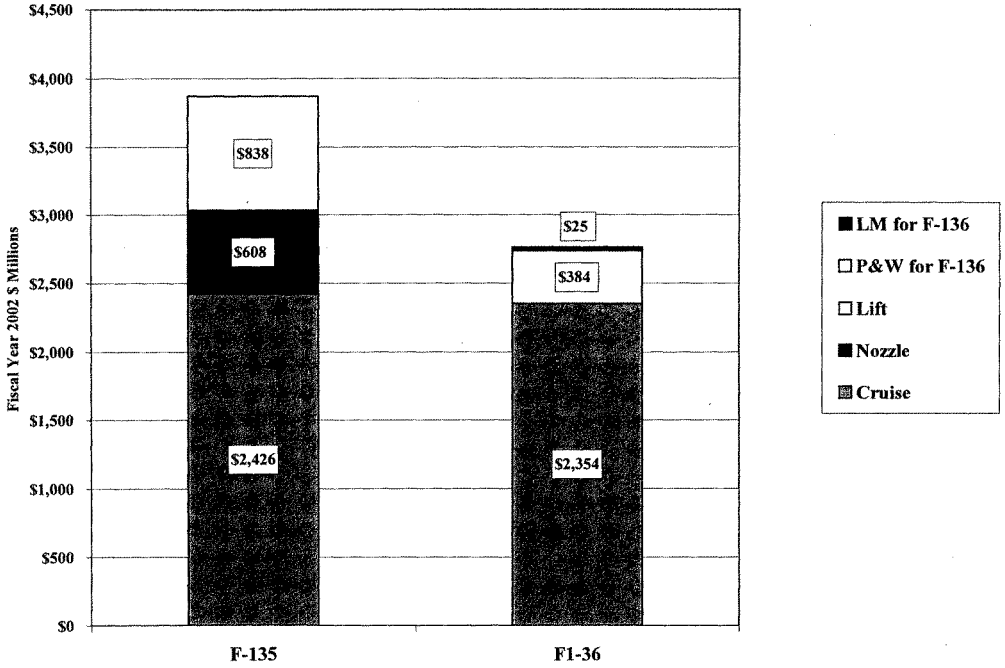
	Competitive Savings Required for Lot 6 & Beyond					
	2 Eng. SDD			2nd. Eng. SDD + Loss of Learning		
Procurement Scenario I **Case 1 - Case 18** **U.S. & U.K.** **3002 Aircraft**	**14%**	**to**	**15%**	**19%**	**to**	**20%**
Procurement Scenario II **Case 19 - Case 36** **U.S. & U.K.** **2593 Aircraft**	**16%**	**to**	**17%**	**21%**	**to**	**22%**
Procurement Scenario III **Case 37 - Case 60** **U.S. & CPP** **3565 Aircraft**	**12%**	**to**	**13%**	**16%**	**to**	**18%**

Comparison of Savings Percentage Calculation

Comparison of Savings Percentage Calculation

Procurement Scenario I	Total Production		Lot 6 & Beyond	
Case 1				
2nd Eng. SDD		$2.8		$2.8
Production	divided by	$21.4	divided by	$18.8
	equals	13%	equals	15%
2nd Eng. SDD + LL		$3.6		$3.6
Production	divided by	$21.4	divided by	$18.8
	equals	17%	equals	19%

SDD Costs


$4,500
$4,000
$3,500
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
Fiscal Year 2002 $ Millions
$838
$608
$2,426
$25
$384
$2,354
F-135
F1-36
LM for F-136
P&W for F-136
Lift
Nozzle
Cruise

O&S Cost
Expensed During Red Flag

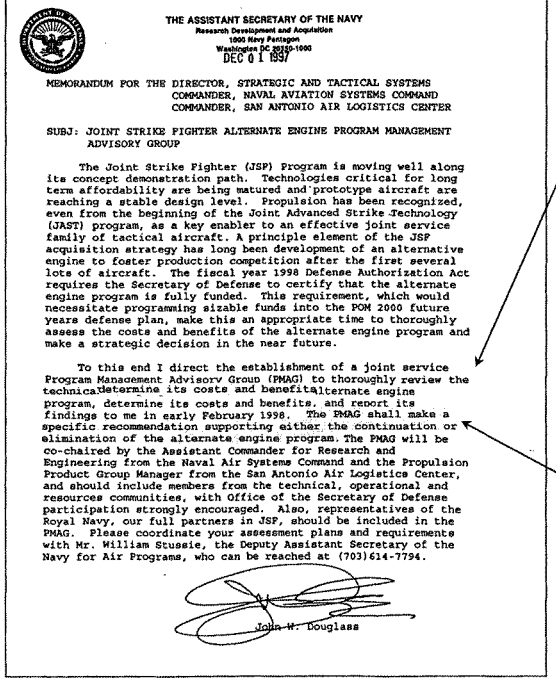
Single Engine Fleet Scenario

	Engine	Fixed O&S $M/Month	Conditions
Squadron A	**F-135**	**$1**	**Red Flag: Grounds F-135 for Month of January**
Squadron B	**F-135**	**$1**	**Red Flag: Grounds F-135 for Month of January**
Total O&S		**$2**	

Two Engine Fleet Scenario

	Engine	Fixed O&S $/Month	
Squadron A	**F-135**	**$1**	**Red Flag: Grounds F-135 for Month of January**
Squadron B	**F-136**	**$0**	
Squadron A	**F-135**	**$0**	
Squadron B	**F-136**	**$1**	**Red Flag: Grounds F-136 for Month of June**
Total O&S		**$2**	

January 1998 Tasking



THE ASSISTANT SECRETARY OF THE NAVY
Research Development and Acquisition
1000 Navy Pentagon
Washington DC 20350-1000
DEC 01 1997

MEMORANDUM FOR THE DIRECTOR, STRATEGIC AND TACTICAL SYSTEMS
COMMANDER, NAVAL AVIATION SYSTEMS COMMAND
COMMANDER, SAN ANTONIO AIR LOGISTICS CENTER

SUBJ: JOINT STRIKE FIGHTER ALTERNATE ENGINE PROGRAM MANAGEMENT ADVISORY GROUP

The Joint Strike Fighter (JSF) Program is moving well along its concept demonstration path. Technologies critical for long term affordability are being matured and prototype aircraft are reaching a stable design level. Propulsion has been recognized, even from the beginning of the Joint Advanced Strike Technology (JAST) program, as a key enabler to an effective joint service family of tactical aircraft. A principle element of the JSF acquisition strategy has long been development of an alternative engine to foster production competition after the first several lots of aircraft. The fiscal year 1998 Defense Authorization Act requires the Secretary of Defense to certify that the alternate engine program is fully funded. This requirement, which would necessitate programming sizable funds into the POM 2000 future years defense plan, make this an appropriate time to thoroughly assess the costs and benefits of the alternate engine program and make a strategic decision in the near future.

To this end I direct the establishment of a joint service Program Management Advisory Group (PMAG) to thoroughly review the technical, determine its costs and benefits, alternate engine program, determine its costs and benefits, and report its findings to me in early February 1998. The PMAG shall make a specific recommendation supporting either the continuation or elimination of the alternate engine program. The PMAG will be co-chaired by the Assistant Commander for Research and Engineering from the Naval Air Systems Command and the Propulsion Product Group Manager from the San Antonio Air Logistics Center, and should include members from the technical, operational and resources communities, with Office of the Secretary of Defense participation strongly encouraged. Also, representatives of the Royal Navy, our full partners in JSF, should be included in the PMAG. Please coordinate your assessment plans and requirements with Mr. William Stussie, the Deputy Assistant Secretary of the Navy for Air Programs, who can be reached at (703)614-7794.

John W. Douglass

ASN(RDA) Letter of 01 Dec 97

> ...review the technical and progammatic issues...determine its costs and benefits

> ...make a specific recommendation supporting either the continuation or elimination of the alternate engine program

Engine O&S MS II Est.

CAIG Element	Methodology
• 2.2 Consumables and • 2.3 Depot-Level Repairable	• Legacy F/A-18C& F-16C data adjusted for Improved Reliability and Increased Complexity
• 4.2 Engine Overhaul	• Contractor data used

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Engine O&S Baseline Est.

CAIG Element	Methodology
• 2.2 Consumables and • 2.3 Depot-Level Repairable	• Legacy F/A-18C& F-16C data adjusted for Improved Reliability, Increased Complexity, and additional STOVL requirements
• 4.2 Engine Overhaul	• Legacy F/A-18C& F-16C data adjusted for Improved Reliability, Increased Complexity, and additional STOVL requirements

SDD Estimate

- Utilize F119 module level data (Fan, Compressor,...)
- Identify differences between F119 & JSF
  - I.e. Design, Complexity, Manufacturing Processes, Materials
- Apply calculated Complexity Factors to F119 module level data
- Apply commonality assessment
  - Commonality with F119

- Resulting JSF estimate equals F119 engine redesigned to meet JSF requirements

Production Cruise Methodology

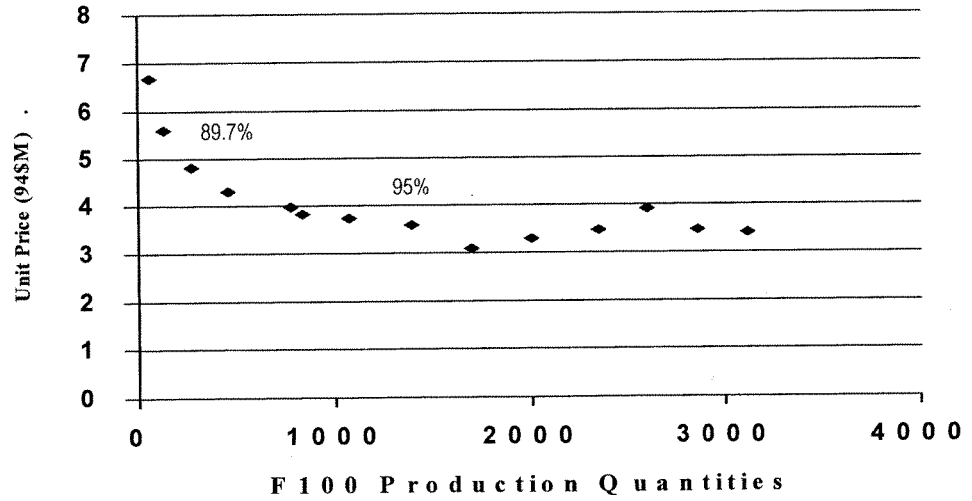
- **Assumptions for URF**
  - Used the actual F119 Flight Test Engines 1 - 25 (December 2000) as the baseline
  - Assessed Commonality based on Part No. & Process Common to the F119
  - Applied G&A of 23% provided by P&W
  - Applied 15% Fee

- **Methodology**
  - Applied manufacturing assessments to the F119 T_1
  - Used an 89.7% Product Improvement Curve for the first 250 units and 95% slope through end of production

Learning Curve F100 Data

Use F100 learning curve history based on

- Pratt and Whitney Engine
- Similar Program Length
- Most recent P&W military engine in production



Chairman WARNER. But it is perplexing. The total contract award in August was what? Or was it August or early September?

Admiral ENEWOLD. The actual award is dated in August. The total contract value is $2.4 billion.

Chairman WARNER. You don't lightly make a $2.4 billion decision in August to have a reversal in probably less than 90 days.

Secretary ENGLAND. Senator, we were in the process, if I can interrupt——

Chairman WARNER. You're not interrupting, you're providing statements for the record.

Secretary ENGLAND. Thank you. Senator, last year we were working the QDR and when we got into I would say the August, September, October time period but mind you we were doing the 2007 budget in parallel with the QDR. As we moved along in the QDR, we were then looking to see how we could accommodate as much of this shift in emphasis in the QDR because we knew that we needed to shift emphasis for the U.S. military.

So then we started looking at the funding available, programs, and the amount of shifting we needed to do and at that time we started looking across our portfolio of programs again to balance the cost, risk, and benefit of all these programs across the portfolio. So the first time it was looked at as part of the QDR in terms of the dollar impact of this was probably in about the September time period. I don't know exactly, but about that period of time, so we were progressively looking across programs and this was one of the programs we looked at. We had looked at all three variants of this airplane. Frankly I had some hope that there were other ways that we could satisfy the requirement for air power than develop three different versions of the airplane. We concluded we needed all three versions of the airplane but we also concluded at that time while we needed all three versions we did not need a second engine and there was a lot of discussion. People made presentations, discussions, data reviewing past histories, et cetera. So this was an outcome of I would say a very thoughtful, deliberative process and it arrived at the best decision we could in terms of the total portfolio of programs, the cost of those programs, and the benefit and the risk associated with them.

Chairman WARNER. I will return to this line of questioning. I don't want to dominate it here. Please proceed with yours.

Senator LIEBERMAN. Thanks, Mr. Chairman, and thanks, Mr. Secretary and witnesses. It seems to me, Admiral, that you said something that we have to remember and that you said it colloquially but two engines suppliers is a great idea if you can afford it. But the obvious judgment was that we can't afford it and I presume on the other side I know this from what testimony you've offered, Secretary England, that obviously if you felt there was operational risk associated with one engine you'd go ahead with the two. Am I right?

In other words, you've reached a judgment militarily and operationally that the single engine program does not involve risks that would cause you to want to go for the two.

Secretary ENGLAND. That's correct. Let me put that in the light of the people who are going to fly the airplane, what if I have them answer the question for you, Senator?

Senator LIEBERMAN. Okay.

Admiral WILLARD. Sir, that's correct. When we look at both engines, the many years of competition that resulted in the decision that we ultimately made, the advances in engineering that were discussed earlier, and the degree of confidence and reliability evidence not only in the F–22 variant that has a great deal in common with the F135——

Senator LIEBERMAN. Excuse me for interrupting but I take what you mean there is that we have the F119 engine on the F–22. That's a Pratt & Whitney engine which has performed well and is a kind of forerunner to the engine for the JSF.

Admiral WILLARD. Yes, sir. It has performed extremely well and has about 70 percent or so of engineering in common with the F135. Our level of confidence in the F135 is entirely within the risk guidelines that you allude to.

Senator LIEBERMAN. Incidentally, and I believe Secretary England mentioned this, but just in terms of single-source engine programs, the experience with the GE single-source engine of the F/A–18 has been similarly positive, has it not?

Secretary ENGLAND. Yes, it has, Senator. We're very satisfied with that engine program. It has performed well in the F/A–18 and we do not have an alternate engine for the F/A–18.

Senator LIEBERMAN. Incidentally, I asked Lord Drayson from the U.K. yesterday about some of their air programs and they're all single-engine, the Harriers, Toronados, Eurofighter, and part of the answer I think was that they couldn't afford a two-engine program but neither can we anymore.

In terms of the risk, I want to ask you to respond to the concern that has been expressed which is that part of the risk in pursuing a single engine for the JSF is due to the threat of grounding, the nightmare scenario of grounding the entire fleet if there was a serious design or operational problem and if there were two engine makers then that's less likely to occur. But I know you consider that and give me your evaluation of that.

Secretary ENGLAND. Senator, first of all, the F119 which is the forerunner of the F135 as you commented, has over 42,000 hours and we've never had a grounding, haven't had injury related losses so——

Senator LIEBERMAN. Never?

Secretary ENGLAND. That's the data I have, that's correct.

Senator LIEBERMAN. I believe that's true.

Secretary ENGLAND. So also I will tell you my judgment based on my technical background and running a lot of complex programs myself before government, I will tell you that in my judgment you want to concentrate on the product, that is invest your money, your talent, and your energy on making the product work and not go to a redundancy because that detracts in terms of money and concentration, both management talent and technical talent.

So in my judgment you will get far better performance if you concentrate on the single product at hand. You have a single supply chain, you have a single type of maintenance, you don't even have to have people worried about two different types of maintenance. There are some benefits to having the two engines but there are also disadvantages. There are supply chain issues, there are a lot

of added cost issues, training issues, manuals, all the things that go with this which we actually have not factored in. The 2025 analysis is factored in, based on the investment cost not the cost of maintaining this over the life of the program and that's another cost and it does add another dimension to a program which in my judgment is not beneficial to the program. So, while there are benefits, there are also negatives to this.

Senator LIEBERMAN. General Corley and General Magnus, if you'd respond, too, on your Service's evaluation of whether there's any risk that you worry about in going with the single engine for the JSF.

General CORLEY. Excellent question, Senator. When we continued this——

Chairman WARNER. Pull your mike up, please. Thank you very much.

General CORLEY. —examination into an alternative engine——

Chairman WARNER. General, can you kindly bring your mike up and speak because there are a lot of people in the back who for one reason or another want to hear this.

General CORLEY. It was a continuing examination on this, not just one time slice. That examination really centered on technical risk as well as cost benefit. In my mind on technical risk, we wanted to ensure that we were doing the right thing from a safety standpoint as well as from a reliability standpoint.

Senator LIEBERMAN. Right.

General CORLEY. That's why this extensive examination and how we have progressed through history where we reduce the overall single engine losses of the F–16 by an order of magnitude from 10 down to 1, speaking to the safety, bringing us forward to where we are today on the F119 engine, and the fact that there's 70 percent commonality of that turbo machinery with this anticipated at the F135 engine that's in the JSF, and the fact that it is anticipated to be 50 percent potentially even more reliable.

So from accepting technical risk, looking at reliability, and looking at safety, we felt well-grounded on that decision. We have not fully examined cost benefit in the past because we've looked solely at the cost of an engine. When we began to aggregate that up and look at other costs as Secretary England has commented, we have other unintended costs that we never anticipated. We have to recruit and then retain two airmen, each with a specialty on a different engine. We have to look toward two different logistics and supply systems. We have to look at unique test equipment across two different engines. All of those costs also become additive. If we wind up with fleets of aircraft that have different engines then we lose flexibility in terms of where they are based because where they need to be supported.

So from a cost benefit and from a technical standpoint, we unanimously agreed that this was the right decision.

From looking at the large engine population inside of our Service, and I'm sure General Magnus will comment here, we have about 18,000 to 20,000 engines, and it's roughly 50 to 55 percent GE, and about 40 to 45 percent Pratt & Whitney. We have engines in bombers, engines in trainers, engines in helicopters, and engines in

fighters, just as Admiral Willard has talked about engines in his as well.

So, sir, from my standpoint that's the examination that we collectively went through both inside the Air Force and with the Department.

Senator LIEBERMAN. General, thanks for that very informative and reassuring answer.

General Magnus.

General MAGNUS. Senator, thank you very much. Mr. Chairman and Senators, I'll just start off by reminding us of comments made by Senator Lieberman about concerns over inadequate quantities of all weapons systems that we're able to procure because of the rising cost as well as the fact that it is rising unfortunately sometimes faster than the defense budget is rising as well as other costs, and the remarks made by the Deputy Secretary of Defense about risk, cost, and benefit. Now to answer your question directly, I'll do it in terms of benefit, cost, and risk to the Marine Corps and I think I completely share the comments of my military colleagues as well as the Deputy Secretary and Admiral Enewold.

In terms of military benefits we're concerned about performance, reliability, and maintainability of engines. As a small Service that's very expeditionary and leaning forward with our partners in the Navy and the Air Force on efficiencies in logistics and supply management, we have a proven record with existing single engine aircraft and single engine manufacturers as providers. We think the military will benefit once we are confident in the performance of the engine and the other attributes that I'll talk to next. We are very comfortable that this program is on the right track with its primary engine.

Let me go to something that's not normal for the Marine Corps, but the industrial base, because I have a little bit of experience in acquisition. I'll defer to Admiral Enewold on the true expertise, but our concern—I believe Senator Clinton had mentioned earlier about industrial base concerns—is that we have a tremendous reliability from the three engines that are associated in this program as of today. Pratt & Whitney, GE, and Rolls-Royce will still be making tactical engines for the military so this is not like one of these would go away, although certainly the consideration here is whether there would be two manufacturers for this particular aircraft engine.

In terms of cost, this is a big concern for the Marine Corps because the Navy and the Marine Corps are literally together sharing the nonrecurring as well the recurring costs of this program and we are very much concerned about the affordability of the fleet that we need for the sailors and marines to be able to go to sea in peace and go to war, as well as the cost of the many different aircraft. We do not see any significant near-term or long-term savings associated with this investment of over $2 billion.

Of course, that's important because if there were significant savings one way or the other, then that gives you a chance to see what would be your next investment you would make either with the savings or the cost avoidance. We are concerned about other impacts, of course, because if we have to absorb the cost, any cost increases in any program and in particular any cost increases in the

JSF program, will be offset by moving money from other things and as Senator Lieberman said, we are already having difficulty with the annual rate in any given line, many critical lines are not at the rates we would like which also affects their cost so it has a kind of a perverse relationship.

But lastly the risk thing is the main thing and the reason why you do make these nonrecurring investments. Engines nowadays as we said earlier and particularly the core of the engines are very reliable. It's not that we don't have engine problems but engine problems are normally associated with accessories and other functions. This engine, the primary engine, is a derivative of the F119 and has a very solid track record to date. Again, particularly in aircraft like the F–18 where we fly with GE engines and like the Harrier that we fly with Rolls-Royce engines, we have a proven track record of dealing with the inevitable problems you will have over the life of an aircraft with problems in the components of the weapons system, but the engines, particularly their cores, are increasingly reliable.

We're concerned about the risk of stretching the initial operational capability (IOC) of the JSF. The Marine Corps already took a somewhat controversial and very significant risk by literally skipping a generation of aircraft as we decided not to team with the Navy on the F–18 E/F Super Hornet, a tremendous aircraft, but we decided that we would defer recapitalizing our Hornets, our F–18As, our F–18Cs, our two-seat F–18Bs, and we would defer recapitalizing our Harriers including their training aircraft and we have literally skipped that generation almost to unacceptable risks right now. Right now the IOC of the JSF has already slid from fiscal year 2010 to fiscal year 2012. We don't have a hot production line for any of our aircraft right now, so we don't have another aircraft weapon system alternative and should the increasing cost of JSF further slide this program to the right, we are already experiencing, in still safe aircraft, limitations to the fatigue life on the aircraft and so that is a significant concern of ours.

The replacement of our Hornets and our Harriers with a single aircraft with as much as possible single major components of the weapon system, gives the attributes that my colleagues and the Deputy talked about previously about a single training system, single supply chain, and logistic management and, therefore, we see all of the benefits of the program as is being recommended now and we are concerned particularly about the risks of absorbing these costs and further stretching the rubber band on Marine tactical air (TACAIR).

Senator LIEBERMAN. General Magnus, thanks again. Very strong answer and I appreciate that all the Vice Chiefs have made very clear here that—and, of course, you're representing the men and women who are going to fly these planes—that there's no risk that you see from the single engine decision, you wouldn't accept a risk, but the second is really an interesting point and it's the point that the Italian and Australian military leaders yesterday were concerned about, which is that if we go with the second engine it's going to cost money and that money is going to come out of other parts of the JSF program and that's going to cause at least delay if not increase in cost, probably both, but the delay then creates a

separate risk of its own which you've testified to. Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much.

Senator Inhofe.

Senator INHOFE. Could I get a clarification because I, you may have had a clarification, I just missed it, but as far as the 1996 mandate that came from the defense authorization bill, my memory served me that it was a mandate for a second, an alternate engine, but I'm hearing now that maybe instead of that it was merely language that directed the engine competition and all the DOD would have to do is report back. Now, could you or maybe Charlie Abell or someone clarify exactly what it was in 1996 bill that we——

Chairman WARNER. Thank you, Senator. I have it all right here and as soon as, I don't want to preempt all the senators here, but this is the first time the Senate authorizing committee recommended the two engines. They said proceed to the manufacture of all jet engines for three Services' future aircraft without any additional competition is not likely to be cost effective. Then here's the record in the conference committee directly that there be two engines made. So I will go into that in some detail.

Senator INHOFE. Okay. That's fine.

Chairman WARNER. Clearly, I'm not so sure you don't have to have an amendment to our law to underpin this decision.

Senator INHOFE. Let me get out of that. I just came from the Readiness and Management Support Subcommittee hearing. I'm going to be going back to that but one of the things that concerns me most, and General Magnus you were talking about, if something happens and we have to take this out, if the cost has to be absorbed in the JSF program what it would do to that program, and I agree wholeheartedly with that. But just as bad is if they took it from someplace else in the defense budget because I came from the Readiness and Management Support Subcommittee hearing, and I'll tell you, Secretary England, we can't afford to cut anything more whether it comes out of the Army or the Navy or the Air Force so it would be equally bad if that has to be absorbed. I may be the only member who came to this without a dog in this fight. I just came to learn as I told you, Secretary England, and I haven't learned that much so far, but what I have learned is this: Drawing from my own experience, you go back historically and look at back during the reciprocating engine days halfway through, well, all the way through World War II, the whole idea of having a twin engine plane at that time was that the engines were not reliable, they'd drop out. In general aviation when the turbine engine came along they quit that concept of having twin engine airplanes because the reliability of one turbine engine was greater than two reciprocating engines. Now if you take that forward it's even much more so.

I found it very interesting, Secretary England, and I'm reading right now from your printed script. I don't think you actually stated this but if you'll take over the last 10 years the reliability of the F16 it was 10 per 100,000 hours in 1996 or prior to that time and now it's 1 per 100,000 hours. So the reliability's increased 10-fold, is that correct? Am I interpreting that right?

Secretary ENGLAND. That's correct, Senator.

Senator INHOFE. When I look at this, it just seems to me that the reliability has reached a point now where if it's going to be $1.8 billion or $2.4 billion it doesn't really matter too much to me, we just can't squeeze it out of any place that I know of in the entire defense budget, let alone in the JSF program.

So I want to continue to listen to this but that would be my decision right now. All these whether it's Pratt & Whitney, GE, or Rolls-Royce, they're all reliable, and probably the same level of reliability. In this particular case, if we can save it by having just the one without the backup I'd want to do that for purely fiscal reasons because I don't see that risk is there at all that even is measurable.

Secretary ENGLAND. Senator, we would certainly agree with your conclusion. Thank you, sir.

Senator INHOFE. Thank you, Mr. Chairman.

Chairman WARNER. Thank you, Senator, and might the record reflect the number of hours that you have piloted planes? I'd say you speak from some experience.

Senator INHOFE. I just passed through 10,000, yes.

Chairman WARNER. Ten thousand, so he's quite a modest man, but is the Senator also aware that the committee understands the F119 engine undergoing tests at Arnold Engineering Development Center in October last year had a low pressure turbine blade liberate causing a Class A mishap? So I'm going to bring that back to the General from the Air Force here who speaks that we've reached the ultimate of perfection in our engineering. Senator Collins.

Senator COLLINS. Thank you, Mr. Chairman. I want to go back to the issue of the industrial base which many of you have touched on in your discussions. Both Pratt & Whitney and GE are terrific companies that contribute greatly to the strength of our military and obviously I think everyone wants to see those two companies continue to contribute to our industrial base and to the strength of our Armed Forces.

Secretary England, I guess I will address this question to you but you can feel free to hand it off if you wish. Given the premise that we need a strong Pratt & Whitney and we need a strong GE, without the JSF alternative engine work, does GE have a sufficient volume of workload to remain a viable and important contributor to our military tactical engine business?

Secretary ENGLAND. First let me say, Senator Collins, your first comment about they're both magnificent companies and I want to second what you said in that regard about both the companies because they both do build us excellent products and we're proud to have them as our suppliers.

The question is probably better directed frankly to the manufacturers themselves, although I guess in my own judgment, there will be jet engine programs for a long time, both commercial and military, of great variety and while engines for fighter airplanes are indeed different in terms of numbers of cycles and core temperature, my own judgment is GE will not go out of this business if they're not the second engine. Now, they may reach that conclusion because business people can decide on what their business prospects are.

My own judgment is I would not expect them to do that. I would expect that there are still long-term opportunities in the marketplace that I would hope they would not walk away from but, of course, that's a business decision they would have. But my judgment would be that you will still have Rolls-Royce in the business, you'll still have GE in the business, you'll still have Pratt & Whitney in the business, because there is still a big business out there. So that's my judgment. If I was putting on my industrial hat, I would think that would be a major decision to walk away from this kind of a market frankly but, again, that's a decision I think you'll need to ask the next panel.

Senator COLLINS. I will, but, General Corley, I think you had some statistics in response to your exchange with Senator Lieberman about the percentage of engines manufactured by GE versus Pratt & Whitney. Could you elaborate on that and provide us with that information again?

General CORLEY. Certainly, and we'll be happy to provide these for the record as well. As we look across the GE and the Pratt & Whitney total engine population, this is all applications from our trainers, our helicopters, our bombers, and our fighters as of today. This is just an approximate number. We have about 10,300 GE engines which represent about 56 percent of the engines in the United State Air Force. We have about 7,800 or so Pratt & Whitney engines or about 43, 44 percent of the U.S. Air Force engines and engine applications. That's what we have in our inventory today. Does that help?

Senator COLLINS. It does indeed. Thank you for that assessment and that data.

[The information referred to follows:]

General Electric (GE) and Pratt & Whitney (PW) currently account for approximately 18,421 engines in the U.S. Air Force/Foreign Military Sales (USAF/FMS) countries with GE representing 57 percent and PW 43 percent of these engines.

Comparison information on GE and PW engine populations:

GE/PW Total Engine Population (all applications)

- Total GE engines: 10,540 (57.2 percent)
- Total PW engines: 7,881 (42.8 percent)
- Total USAF/FMS engines: 18,421

Note: Above data is based on legacy aircraft engines and does not include any JSF engine projections.

Senator COLLINS. Secretary England, the other issue that has come up repeatedly here is the impact on our foreign partners. It's my understanding that regardless of what action Congress takes with regard to the alternate engine program, the U.K. and Rolls-Royce specifically will still play a role in the JSF program, is that correct?

Because when you listen to some of the arguments, you would think that if we go the route that the Pentagon is recommending somehow the U.K. and Rolls-Royce are going to be out of the picture altogether and I don't think that's accurate. Could you elaborate on that issue?

Secretary ENGLAND. Senator, I'd be happy to, but Rolls-Royce is part of the Pratt & Whitney team so they do provide the lift fan engine for the STOVL so at a minimum they have that which is by the way very technically difficult so that is a very significant

problem that they have that is part of the program and so they are part of the fundamental program.

The one comment I would make, by the way, that hasn't been brought up much, if I can, Senator, make a comment here. There are industrial benefits to companies and countries to have an alternate engine because other engines that we've made in other places other than the primary engines, so there would be a lot of industrial benefits and benefits in different countries. I understand that I just don't feel that we in the United States of America should pay for those benefits when it doesn't provide any fundamental technical value to the product itself.

Frankly we are not in the business of providing industrial benefits around the world. Our job is to provide the best product we can for the U.S. military. Now, if other countries and companies care to participate in that second engine and pay for it, I think that's fine. But that's not, I don't believe, the obligation of the United States of America to do that.

Senator COLLINS. Admiral.

Admiral ENEWOLD. Yes, ma'am, the Rolls participation in the F135 propulsion system are significant. They are in charge of lift system components for the STOVL, one of their primary arms of expertise since they were heritage Harrier propulsion people.

They are responsible for the lift fan, roll post, aft nozzle, and if you calculated by their work share in the F135 it's between 20 and 25 percent of the overall F135 effort.

Senator COLLINS. Thank you. I think that's a very important point that's been learned in this debate.

Admiral, one final question for you: is the Pentagon satisfied with the performance of Pratt & Whitney to date in the development of this engine?

Admiral ENEWOLD. Thank you, ma'am, for asking. We are very pleased with Pratt's performance and the engine performance. In fact, we just finished the accelerated mission testing on the F135 in preparation for our first flight clearance for this summer's or this fall's flight. But I should say that I'm equally pleased with the GE performance on the team. So the answer is both engine teams have been performing well.

Senator COLLINS. Thank you.

Chairman WARNER. Are you finished with your questions?

Senator COLLINS. Yes, thank you.

Chairman WARNER. We'll continue with the questions up here. Secretary England, cleverly you're making the case that Congress in its infinite wisdom if it decides to keep the second engine going that we're restricted to the funding from the JSF account. We can go anywhere we want and get that money to put it back in this program. Are you not in agreement with that?

Secretary ENGLAND. Absolutely. Congress can decide——

Chairman WARNER. You bet.

Secretary ENGLAND. Absolutely.

Chairman WARNER. Let's take off the table that what we might do would begin to disturb the continuity of this program and further delay all kinds of things——

Secretary ENGLAND. But you would defer or delay something else. Senator, I just need to comment here. Again, this is a congres-

sionally-mandated QDR and the Nation needs to move in a new direction, shifting emphasis because of the new threats to America, so we have accommodated some of that new direction in the 2005 President's budget submittal to Congress. We have not yet addressed that so there will be intense pressure across the board on all of our programs as we shift from one area to another so we will have intense pressure.

Frankly, we do not have $2.4 billion available. In the meantime we're also getting pressure for a lot of other things from health care, other things, and some of them congressionally mandated. So there isn't money to just do this. We have already been through a priority review of our programs and this did not reach the priority level to be funded in terms of, again, our risk and benefit and cost.

So certainly, we understand that Congress ultimately decides where the money is spent but my judgment is we are better keeping the money we have funded in the JSF program. I would not want to disrupt another program for redundant capability. I believe that if this is a decision then it should be the program and ultimately it will have an impact. If there's no impact for the money then it's easy to address.

Chairman WARNER. I'm listening to you but do want to go back to the basic fundamentals of the separation of powers of Congress and the executive branch. Congress has throughout my 28 years here in this chair modified significantly DOD decisions, and had we not done that we may as well just take out a big rubber stamp and keep stamping everything you send over. I feel strongly about this question.

I have the whole record here of what Congress has said about this program over a period of years. Let me just read the following: "Further, the committee believes supporting competitive propulsion programs would help reduce risks and lead to higher competence in achieving more affordable life cycle costs. The committee fears that the current approach may lead to selecting one power plant manufacturer prematurely. Therefore, the committee directs the Secretary to evaluate at least two propulsion concepts from competing engine companies as a part of the full scale, full thrust aircraft demonstrators."

Secretary ENGLAND. Senator, I do not disagree but I do have to push back and tell you that it is the technical and program judgment and the military officers who fly these airplanes that the second engine is not required, that there is no longer a risk issue that justifies this level of expenditure.

Chairman WARNER. Well, the engine——

Secretary ENGLAND. Obviously we will do whatever Congress directs.

Chairman WARNER. I understand that.

Secretary ENGLAND. But we're trying to give you our best judgment and analysis so that you can make an informed decision.

Chairman WARNER. The engine hasn't flown yet has it?

Secretary ENGLAND. No, sir. It will fly here very shortly but the similar engine in terms of 70 percent content is flying today on the F–22. So we do have at least a legacy of development history for the engine.

Chairman WARNER. Let's talk about that F–22 engine. Am I correct that they had a Class A failure in it?

General CORLEY. Senator, this was a risk assessment and I wish that I could assure you or my other Service colleagues here could assure you that we would achieve perfection but I doubt that we ever will.

Chairman WARNER. No, and I don't think so.

General CORLEY. However, Senator, when we look at the ground testing of that engine as you described on an engine stand, 11,600 hours.

Chairman WARNER. Designate the engine you're talking about now.

General CORLEY. This is the F119 engine, sir, which we've had remarkable enhancements in terms of technology, safety, and reliability. Out of the 11,600 plus hours on the ground, an additional 14,600 hours of, if you will, development testing while airborne plus another 16,000 plus hours of actual operations, there have been zero F–22 engine-related losses and no groundings. We did, Senator, have one blade liberated in ground testing out of those 42,000 almost 43,000 hours worth of flying.

Chairman WARNER. Was that judged to be, and it could easily have been, a material flaw or was it an engineering problem or combination?

General CORLEY. Senator, I don't know, and I would like to take that for the record, if I could, sir, to get you exactly what was the cause and what, of course, would be the proposed fix at that time.

Chairman WARNER. All right. I think that's very helpful for the record.

[The information referred to follows:]

The liberated blade incident during ground testing in October 2005 was the result of a design flaw that could not have been identified when the blade was originally designed in 1994. The F–22 F119 ground test engine experienced a low pressure turbine (LPT) blade failure while being run at the Arnold Engineering & Development Center as part of the Air Force Aircraft Engine Component Improvement Program. The engine was undergoing "Accelerated Maturation Testing," in which engines are subjected to accelerated testing to better understand and forecast how the engine will operate and be maintained in the field. During this type of evaluation, an entire lifetime of engine operation is simulated in a few months of intensive testing. LPT blades in the incident engine had been run for approximately 3,200 total accumulated cycles (TACs) (full life is 4,350 TACs). LPT blade sets from two previous ground test engines were run to full life without failure.

The Air Force investigated this mishap and concluded that the root cause was an LPT blade fracture due to higher than anticipated stresses. These stresses were not identified with state-of-the-art design tools in use when this blade was designed in 1994. However, when today's improved design models were applied to this area, the high stresses were revealed. There is no immediate impact to the operational F–22 engine fleet, which currently averages approximately 700 TACs. A fleet management plan is being developed to assure timely and effective resolution of this issue. In the short term, inspection techniques are being developed to detect these specific cracks and spare LPT blades are being purchased to support early replacement, if required. For the long term, a redesign of the LPT blade is currently in work. Final fleet management options are to be coordinated with Air Combat Command in late summer 2006.

This is a manageable issue and we are moving out smartly. Finding and fixing this issue in a test environment, well ahead of the operational fleet, is a testament to the robust test and development process in place by the Air Force and Pratt & Whitney.

Chairman WARNER. Why don't you take a question or two, Senator Lieberman.

Senator LIEBERMAN. Mr. Chairman, I don't really have any more questions. I think that in the information that you read from the narrative of one of the bills that we passed, DOD was asked to make an evaluation and they've come back to us now with an evaluation of the benefits and costs of two engines as opposed to one and made a very strong argument today. I believe that we save money and we assume no unacceptable risk. That's, again, from the Vice Chiefs of the Services whose personnel will be flying these planes.

Also that there is another cost here and it would be great if this were I think you said free money or extra money but if we go to the second engine it's going to come out of somewhere. These are tough decisions and I understand if you happen to be on the side that hasn't won as I've been a few times, more than a few times, it's not pleasant but we're pressing you and we're going to continue to press you to keep the cost of these acquisition programs down so we can buy more for the men and women of our military. You've given us your best judgment here and I, for one, accept it.

I guess I would ask one final question and it's the one that's been hanging, and it is important to ask you. We touched on it a bit and it was raised yesterday which is what within the system gives you confidence that when you're dealing with a single engine producer you will not have an unnecessary or an otherwise unlikely increase in cost because you've only got the one producer?

Obviously you've had some history with single engine programs in the past but what kind of encouragement can you give us on that?

Secretary ENGLAND. By the Federal Acquisition Regulations (FARs) we have complete visibility into all the costs, everything associated with the company's cost buildup of the engine so we have all their costs to date, we have all their costs in the future, we get insight into all their subcontractor cost, piece part cost, reliability data, all that is available to the Government, Senator, so we have complete visibility into every aspect of the engine manufacture.

Senator LIEBERMAN. So you don't think that because there's one engine manufacturer as opposed to two, and therefore no competition, that we're going to end up paying more?

Secretary ENGLAND. Again, Senator, our analysis and all of our background says if you look at the cost of this program, we never recover the cost. We will not recover this cost over the life of this program. That's our analysis. It would take an extraordinary savings for this to be a break-even and, again, the analysis I have does not even consider all the cost associated with separate maintenance facilities——

Senator LIEBERMAN. Right.

Secretary ENGLAND. —as General Corley pointed out, there are a lot of other complications in this rather than just developing the engine itself.

Senator LIEBERMAN. Thank you.

Secretary ENGLAND. So it's not a cost decision, it would have to be on some other basis and we don't see any other basis for that decision, Senator.

Senator LIEBERMAN. Thank you very much. Thanks, Mr. Chairman.

Chairman WARNER. To pick up on that, my distinguished colleague, I fully accept that you'll have total transparency in every step of the cost structure of this engine but from time to time you're going to issue periodic contracts to buy more engines, won't you? It will be a sequential buy?

Secretary ENGLAND. Yes, we do that today with GE.

Chairman WARNER. Suppose Pratt & Whitney suddenly pushes back from the table and says okay those are our costs but maybe we want a bigger profit or something like that——

Secretary ENGLAND. Well, they don't——

Chairman WARNER. Go buy your engine somewhere else, Mr. Secretary, they might tell you. You don't meet our needs and requirements.

Secretary ENGLAND. Senator, it turns out GE doesn't do that on the F–18 program because at the end of the day there are still pressures, they still want the business. There are competitive pressures, there's other companies out there. People do not get a free ride on Government contracts. They always have the pressure of the marketplace and that continues. Again, the airplane itself is, "sole-source." That is, once you win the competition, there's one manufacturer of this airplane. There's one manufacturer of the submarines. There's one manufacturer of our carriers.

Chairman WARNER. I understand. I did spend a little time in your seat, to be exact, 5 years, 4 months, and 3 days, went through the acquisition of the S–3 and the F–14. I can go through them. I do know that. But I've also seen push back and we're on the brink of making a decision without any precedent, $100 billion to one manufacturer over a period of maybe a quarter of a century, and I think Congress better really roll back every page and look at it carefully because guess who's going to pay the bills? Long after I'm gone, someone else is going to be here.

Secretary ENGLAND. Senator, but we have one manufacturer for the JSF itself, we have one manufacturer, spread a different—but one primary manufacturer.

Chairman WARNER. I understand that.

Secretary ENGLAND. We have one manufacturer. We have one manufacturer of our carriers, we have one manufacturer of our submarines, yet those costs do not just balloon. There's rationale.

Chairman WARNER. Get back to the submarines. It seems to me that Groton and Newport News could each build a submarine if they so desire so I'm not sure there's one——

Secretary ENGLAND. But it's defined by law to be between the two so there's really only one.

Chairman WARNER. We structured that contract right here at this table years ago.

Secretary ENGLAND. I understand.

Chairman WARNER. But I mean it's pushed back, and you also at one time when you were Secretary of the Navy wanted a single manufacturer of a certain class of ships and our colleague down here to my recollection kind of pushed back on that, am I correct on that?

Senator COLLINS. That's correct.

Chairman WARNER. Correct. So there is some history to these various things.

Secretary ENGLAND. Could I ask Admiral Willard to comment just a minute on this?

Admiral WILLARD. Senator Warner, this may be a small point but I think it gets to both your and Senator Lieberman's questions and that is it's not as if the F135 and F136 engines have not undergone some degree of competition already. The authorization language to introduce the second engine was 11 years ago and what we've derived in terms of efficiencies in the F135 I might argue have been partially at least a result of that competition. So the benefits of the competition one might argue have been taken and that at the end game will inevitably impact cost and efficiency so these engines have been competing over years to this point and we're picking now the one that has the maturity and level of confidence that we believe will pay off in the JSF.

Chairman WARNER. Why did you let the contract for $2.8 billion just 6 or 8 months ago?

Admiral WILLARD. Sir, I think independent of the judgments that we were making in QDR and post-QDR there was an acquisition process that was already in play and they were making various milestones and their dates with all of the considerations that go into when a contract should be or shouldn't be let. That again was not necessarily our focus in QDR, our focus was trying to view the reshaping of——

Chairman WARNER. Your focus was trying to carry out the mandate of Congress and you were doing quite well. We're not here as a debating society, we're here to just collect facts as best we can. Senator Collins, do you have additional questions?

Senator COLLINS. The only additional request I would have, Mr. Chairman, for this panel is to ask the other Service Chiefs to provide the comparable information that General Corley provided to me on the number of GE versus Pratt & Whitney engines. That would be helpful in our assessment of the implications for the industrial base. Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much. We have a second panel but there are one or two questions I'd like to bring to your attention. My colleagues, my able staff says that neither engine has flown so it seems to me that competition ended pretty early on.

Secretary England, in reading your statement we noted the absence of any reference on how the Department would control cost on the Pratt & Whitney engine in a noncompetitive environment over 30 years. I think possibly you said that you have all the facts and figures that you need to determine whether the costs are not being properly controlled.

Secretary ENGLAND. We have insight, Senator.

Chairman WARNER. Yes.

Secretary ENGLAND. We have insight into all the costs in the program and we audit those costs and so we know supplier cost et cetera.

Chairman WARNER. We're looking now at page 8 of your presentation, did you all submit this, am I correct here? Break-even analysis?

Secretary ENGLAND. Oh, yes, sir. That was in response I believe to a letter from Senator McCain and that was a response to his letter, Senator.

[The information referred to follows:]

JSF Alternate Engine Decision

1

Background

- Congress requested the alternate engine program to mitigate potential supply issues from a single source and create competition to reduce costs
  - FY96 Appropriations Conference: "The conferees are concerned about the lack of engine competition on the JAST Program and direct the Under-Secretary of Defense (Acquisition and Technology) to report by 1 Mar 1996 the Department's plan to ensure engine competition in the JAST Program and to include a plan for production competition."
  - FY98 Authorization Act required SECDEF to certify "sufficient funding to carry out an Alternate Engine Development Program that includes flight qualification of an alternate engine in a JSF airframe."
- Program Management Advisory Group formed to analyze costs and benefits of the alternate engine
  - Reported initial results in 1998. Updated report in 2002
- The alternate engine SDD contract ($2.4B) was awarded in August 2005 to the GE / Rolls Royce Fighter Engine Team for the F136 engine
- FY07 President's Budget eliminated funding for the F136 alternate engine program, saving DoD $1.8B through FY11, including $408M in FY07

2

Current Budget Decision Rationale

- Relying on single engine supplier incurs minimum operational risk
- No net cost savings from dual source competition

Operational Risk

- Operational risk of relying on a single supplier is reduced by the following considerations:
  - JSF F135PW has benefited greatly from F-22 F119PW lessons learned
    - F119PW has performed well after roughly 18,000 flight hours (will achieve100,000 flight hours by 2009)
  - Current F135PW testing on track and successful
    - 33% complete as of Feb 06 (~4600 test stand hours of 14,000 planned)
    - First aircraft engine delivered Dec 05
  - Industry advances in engine design tools further reduce risk
    - Computational Fluid Design for airflow prediction
    - Advanced software for Prognostic Health Monitoring
  - F-22 and F/A-18E/F rely on sole source engine supplier

Cost Analysis

- Unlikely that any savings from competition will offset $2.4B SDD cost
  - Need >15% competition cost benefit to recover non-recurring development cost
  - Splitting the buy between two competitors can make production and support costs *increase*
    - Learning curve effect is reduced when significantly fewer units are produced by each source
    - Rate-effect impact on in-house manufacturing and outsourcing decreases buying power for each source
    - Fixed costs (e.g. engineering / quality control) amortized over fewer units for each source
    - Increased O&S cost with two engine suppliers
- DoD experience indicates minimum cost benefit from engine competition
  - Great Engine War (PW F100 / GE F110)
  - F404 Competition (GE / PW)

5

Military Jet Aircraft Engine History

Aircraft (Buy)	Engine	Production Competiton	Reason for selection
B-52 (744), F-100 (2294), F-101 (785), F-102 (1000), KC-135 (820), F-8U (1261), F4D (2183), A3D (282)	PW J57	No	- Major jet engine design advances (twin spool) - Increased thrust with more efficient fuel flow
B-707 (1010), DC-8 (262) KC-135 (157 Retrofits)	JT3 TF33	No	- Commercial crossover variant of J57 - Response to GE's CJ805 rear-fan jet
F-105 (833), F-106 (340)	PW J75	No	- Improved J57 – increased thrust
F-4D (2874), A-3J/A-5 (156)	PW J79	No	- Increased thrust, fewer compressor stall issues
F-111 (563), F-14A (557)	PW TF30	No	- First operational afterburning turbofan - Compressor stall problems throughout development.
F-15 (1032) F-16 (2231)	PW F100 PW F100 GE F110	Competed with GE	- Advances in thrust / power combined with more maneuverable aircraft led to compressor stall issues and reliability / maintenance problems. - These problems led Air Force to seek alternatives and thus began the "Great Engine War."

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Military Jet Aircraft Engine History (cont)

Aircraft (Buy)	Engine	Production Competiton	Reason for selection
F/A-18A-D (1124)	GE F404 400/402	- Not initially; PW later designated second source for competition	- Simple / reliable engine with same thrust as J79, but half the weight and fewer parts - Competition introduced in 1985 for cost benefits / reliability. No cost savings realized, cancelled in 1990. - Durability issues discovered in 1992. Problem resolved by 1998.
F/A-18E/F (542)*	GE F414	- No	- Reliable derivative of F404
F-22 (183)*	PW F119	- No - Design competition with GE YF120	- Lower technical risk / lower cost

* Still in production

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9

Conclusions from 2002 Analysis

The JSF Alternate Engine Program Offers:

- *Significant Benefits*
  - Contractor Responsiveness
  - Industrial Base
  - Readiness
    - Reliability / Availability
    - Protection from Fleet grounding
  - International Participation
- *But Does Not Provide Significant*
  - E&MD Risk Reduction
  - Cost Savings
  - Additional Growth Capabilities

Source: Program Management Advisory Group 2002

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Chairman WARNER. Yes, and we'll put that in the record. At this point we're going to have to turn to the second panel. We will provide for our witnesses a series of questions but I want to return to one which I had intended to initiate in my first round of questions but I yielded to our colleague from New York, and that is,

what does "level one partner" mean in this in terms of voice, management, and decisionmaking in the program?

Admiral ENEWOLD. Thank you, Senator. As the committee understands it, we have three levels of international partners in the program. The U.K. is a level one partner and the biggest contributor to the SDD program at $2 billion. Part and parcel to that contribution and designation is a high level of involvement in the program office and participation in leadership forums. Being a partner also gives priority on the production line, and the U.K. is also a signatory on the Operational Requirements Document (ORD).

Chairman WARNER. Did they contribute to the R&D, as is my understanding of this engine?

Admiral ENEWOLD. To the total program. The engine is not, neither engine is called out as a unique piece of the program. The money's not allocated.

Chairman WARNER. Cash goes in and is allocated by the program office but they are a contributor because I think the record of this morning reflects several comments to the effect that the U.S. is paying for it all. That's not correct.

Admiral ENEWOLD. No, the U.S. is paying 90 percent of the total development cost, the partners have about 10 percent of the development cost.

Chairman WARNER. Right.

Admiral ENEWOLD. So they are part and parcel to the program and as a level one partner they are afforded involvement in the program. Right now embedded within the program office I have 15 to 20 U.K. Navy and Air Force officers that are functioning members of my integrated product teams.

In the governance structure they are full members of the senior warfighting group that discusses the operational trades we make. They are full members of a configuration steering board that talks about changes that are upcoming within the program. They participate in the what we call the CEO conference at the highest level where the Service Secretaries and their Chiefs come and we discuss the status of the program semi-annually. So they are well embedded into the program and its execution.

Chairman WARNER. Then how do you account for the distinguished witness that we had before us yesterday who has the overall responsibility for acquisition for the U.K. simply saying in a polite way there was no consultation on this issue with us?

Admiral ENEWOLD. From within the program office, first of all, what I just outlined——

Chairman WARNER. I understand. I listened to it. I have it all.

Admiral ENEWOLD. Sir, what happened outside the program office and in the QDR is where the decision on the F136 was made. Specifically by Department policy and direction I am not allowed to tell the partners what's coming up in the President's budget so that we don't preempt the President's submission to Congress.

So that's where I think the demarcation of what I can release to the partners financially and what I can't is made.

Chairman WARNER. Mr. Secretary, I believe the shrinking industrial environment we have in this country we have to maintain the best of relationships and I don't think it's for Congress to try and engineer how you deal with these partners, but I must say that

was a riveting bit of testimony we received yesterday and we will further think about it. I just have to say the industrial base situation is serious. We have to rely on our partners overseas to complement what skills we have in this country.

I just repeat by history, my dear friend, and we are good friends, when I was privileged to be Secretary of the Navy the total force structure of the Department of the Navy was about 1.2 million sailors and marines, and some 700,000 civilians. Your total force of all the Services today is a fraction here or there above that so I just mention that for the order of the magnitude of this scaling down.

When we put out bids for aircraft we had four or five major producers that could build our airplanes and our engines so it's an entirely different world and I think we have to guard very carefully the relationships that we have with our allies abroad as they participate in programs of this nature.

Secretary ENGLAND. Senator, I will tell you, we have extraordinarily close and cooperative relationships with our friends and allies. We work extraordinarily at this. They are great, great friends and allies, we know that. We go to great lengths to strengthen those bonds. We will continue to do so. I believe this is the closest relationship we've probably ever had, particularly with the United Kingdom, Australia, and all our friends and allies, but we do have these very special relationships.

Yesterday the question came up and you raised it about technology transfer. That is a subject we have to have separately. I will tell you there is great, great technology transfer on this program. There are a couple of items which we cannot discuss here but we will need to have a separate discussion with you but I can assure you we have very close relationships. I've talked to my counterpart in the United Kingdom. Our agreement is that by the beginning of June we will close out all these issues regarding technology transfer. We're working to do that in good faith but there are some issues, serious issues that need to be discussed and we can have a private conversation with you in that regard. But I can assure you, these are great friends, great allies of America and the DOD. We fight together, we use each other's equipment, and we will continue to strengthen those bonds. I understand there are some issues on this particular program but they're ones we need to discuss separately, Senator.

Chairman WARNER. Fine. We'll have that opportunity.

Senator LIEBERMAN. Mr. Chairman, if I could say a very last word. I appreciate what you've said. My impression from the testimony yesterday from the U.K., Italy, and Australia was that they were certainly more unified and I would say generally more intense in their feelings about the technology transfer question than about whether there were one or two engines on the JSF.

The second thing I would like to say in terms of the industrial base and global industrial base as we heard testimony on yesterday, on the JSF as, Admiral, you know with more detail than I do, just taking the example of the U.K. because obviously Rolls-Royce is a partner with GE on the second engine and we've talked about that if you put together Rolls-Royce, BAE, and Smith's Industries they're right now contracted for over $5.5 billion worth of business where British companies with billions more in sales potential here

so I think with this program, it's not fair probably to compare the $2 billion they're putting in with what their industry is getting out, but the program is contributing to the global allied industrial defense base in a very significant way. Thank you.

Chairman WARNER. That raises a question I'll direct to General Corley. You mentioned that there would have to be literally two sets of trained personnel certainly in the maintenance side to have both engines in the inventory. My understanding is that these engines were to be interchangeable. In other words, if an aircraft were flying with a Pratt engine and you had to have a stand-down or it was in a location where maybe a replacement Pratt wasn't available that the other GE/Rolls engine could be plugged right into the cavity and off she goes. Now, that's an oversimplification of a very complicated thing, but can you enlighten us on that?

General CORLEY. Certainly, Senator. Let me give it a try this way. You are correct in saying that the form and the fit between both this F135 engine and the proposed F136 engine would fit in the same cavity and essentially the plumbing or the hookups would be the same, but I think it's also fair to say that internally there would still be differences to the engines themselves. For example, fan, turbo machinery, and the like, so a difference in terms of what level, what would be required to maintain and to continue to operate throughout the life of the engine, sir.

Chairman WARNER. All right. I accept that. Gentlemen, thank you very much. We'll now proceed to take a 2-minute break and have the next panel come out. [Break.]

Thank you, gentlemen. We'll now resume with our second panel of very distinguished witnesses. We'll have Scott Donnelly, President and CEO of GE Aviation; James Guyette—is that——

Mr. GUYETTE. Guyette, yes.

Chairman WARNER. Guyette—pretty close, President and CEO of Rolls-Royce North America; Louis Chênevert, is that correct—thank you—President and Chief Operating Officer of United Technologies and the parent company of Pratt & Whitney; and Lloyd Newton—we know you as general, but if you want Mr., we'll give it to you.

General NEWTON. Either one, sir, that's fine.

Chairman WARNER. I'll bet you would—Executive Vice President of Military Engines, Pratt & Whitney. Nice to see you again, General.

General NEWTON. Thank you, sir.

Chairman WARNER. The last time was under circumstances which are memorable.

General NEWTON. Sir, I prefer not to do that one again until I'm there. [Laughter.]

Chairman WARNER. No, I know. I don't think you'll volunteer for another one of those. [Laughter.]

General NEWTON. No, sir.

Chairman WARNER. Fine, and I understand that we'll accord to our GE/Rolls consortium the opportunity to go first. Is that agreeable among you? Please proceed as you wish.

STATEMENT OF SCOTT C. DONNELLY, PRESIDENT AND CEO, GE AVIATION

Mr. DONNELLY. Thank you, Mr. Chairman, members of the committee. I do have a prepared statement that will be put into the record.

Chairman WARNER. We'll put all those in the record, but I'm not in any way trying to squeeze you down. We have the time to hear you through, and you were able to have the benefit of the earlier hearing. You, I think, sat through it.

Mr. DONNELLY. Yes, sir, absolutely.

Chairman WARNER. So, there are some statements made, which seems to me that the Secretary said that should be properly addressed to you, but nevertheless, they gave opinions.

Mr. DONNELLY. We'd be very happy to address those in the questions and answers.

Thank you for this opportunity to appear before the committee to share our views on the desirability of continuing the development of competing engines for the JSF program. I am Scott Donnelly, President and CEO of GE Aviation, and I'm accompanied by Jim Guyette, President and CEO of Rolls-Royce North America. We are pleased to jointly present this statement to you.

GE and Rolls-Royce have formed a 60/40 partnership to develop and produce the F136 engine for the JSF. We have brought together the best talent from the United States and the United Kingdom to develop and produce this engine. We believe our partnership is a shining example of transatlantic cooperation. If our program is continued, the F136 will compete head-to-head with the Pratt & Whitney F135 engine for the honor to power the JSF. These two engines will be the most powerful, capable, and technologically advanced fighter engines ever produced.

Chairman WARNER. May I suggest that you slow your pace down a little bit because this is not the greatest audio system in this room.

Mr. DONNELLY. Very well.

Chairman WARNER. We have a number of persons not the least of which are the Senators here who want to hear carefully what you're saying. So, if you could pace yourself a little bit.

Mr. DONNELLY. Very well, Mr. Chairman.

Simply put, we are here to seek your continued support for this competition. The JSF program will be the largest aircraft procurement program in the history of the DOD. It is a single engine aircraft that will be used by the Air Force, Navy, Marines, and several international partners, including the U.K. It will have conventional, carrier-based, and STOVL variants and over time, will replace the F–16, the F–18, the A–10, and the AV–8B fleets.

Pratt & Whitney was initially chosen as the sole-engine supplier for the JSF based on its earlier competitive selection to power the F–22. That engine, the F119, has since been modified and adapted to JSF requirements and is called the F135. In 1995, Congress added $7 million to the DOD budget and directed the establishment of a second engine source for the JSF, the F136.

For the past 10 years, Congress has strongly supported the JSF engine competition, citing the demonstrated benefits of competition resulting from the original Great Engine War.

As you'll recall, Mr. Chairman, the Great Engine War pitted the Pratt & Whitney F100 against the GE F110. The F110 was initially competitively selected to power the new F–14s and F–16s and also to re-engine older F–14s. Until recently, only Pratt & Whitney's F100 has powered F–15s. However, in 2002, Korea selected GE to power its fleet of F–15s, and in 2005, GE was also selected to power Singapore's F–15s. Meanwhile, in recent years, Pratt & Whitney has won their fair share of engine competitions worldwide.

The point I'm making is that 20 years after the Great Engine War, all of the competitive benefits—reduced operational risks, better performance, increased readiness, enhanced contractor responsiveness, and lower costs continue to endure because customers have a competitive choice of engines and are not captive to a single engine supplier, as was the case in the 1970s and early 1980s prior to the so-called Great Engine War.

An excellent history of this competition is detailed in Robert Drewes' book, The Air Force and the Great Engine War, and it has been chronicled in several other publications as well.

Mr. Chairman, with this background, let's get to the purpose of your hearing today. Is it wise to terminate this second Great Engine War and rely on a sole-engine supplier for a single-engine aircraft to do multiple missions for multiple Services and multiple nations? Is it wise to become dependent on only one engine supplier and then hand over a volume of engine business that will reach tens of billions of dollars? Is it smart to put all your eggs in one basket, knowing this is a course of action that can't be easily rectified later? We believe the answer to these questions is a resounding no. This is a rare instance in defense procurement with not only a compelling operational case for continued competition, but also a compelling business case. Through the enduring value of competition, sufficient savings will be generated from a competitive JSF engine procurement that will more than offset the cost of completing the F136 engine development.

Attached to our full statement is a matrix that places a rough order of magnitude on the money to be spent on engines and spare parts over the life of the JSF program. This is the attachment we have, I think, that's turned in. Of course, all analyses are assumptions dependent, and we have not attempted to predict a precise figure. That is not necessarily to make our point. Rather, we show a broad range of numbers based on potential aircraft procured and the number of engines bought per aircraft and the price per engine.

The take-away from this matrix, Mr. Chairman, is that the potential revenues generated from the sale of engines and parts associated with the JSF program are huge. With competition, there is a chance to contain these revenues near the lower left hand of the matrix. Without competition, the revenues will trend upward and to the right hand of the matrix. One of the main lessons learned from the original Great Engine War is that costs are lowered through vigorous head-to-head competition. We are confident a second Great Engine War will yield similar results.

Mr. Chairman, we are convinced there is a sufficient volume of engine business to justify continuing the engine competition—both for critical operational and business purposes. The warfighter will

be assured of the security that comes with not being dependent on a single engine source, and competition will drive costs down.

In closing, we have one final point. We have been on the F136 journey for 10 years, and Congress has appropriated nearly $1.3 billion to date to support that program. We were awarded a $2.4 billion SDD contract in August 2005. Our engine development is on schedule and slightly under cost.

If we can complete our journey, the F136 will be a formidable competitor to the F135 in both price and performance, and our engine industrial base will remain robust, resilient, and capable of responding in a competitive way to all current and future requirements. If our program is terminated, our highly skilled GE and Rolls-Royce team will be disbanded, $1.3 billion will have been wasted, and the United States, the United Kingdom, and our allies will be dependent on a single engine supplier to meet the challenging requirements for high-performance fighter engines. We submit to you that that is not a good thing. We respectfully request your continued support for this Great Engine War.

Thank you again for giving us this opportunity to share our views with your committee.

Chairman WARNER. Thank you very much.

Mr. Guyette.

STATEMENT OF JAMES M. GUYETTE, PRESIDENT AND CEO, ROLLS-ROYCE AVIATION

Mr. GUYETTE. Good morning, Mr. Chairman and Senator Lieberman. First, thank you for the opportunity to express my views on this strategic, and I would like to underscore the word "strategic," global program in its importance to the U.S. military and our partners around the world. Now, my business career has all been involved in aviation—design requirements, performance requirements, aircraft acquisition, aircraft operations, aircraft maintenance and engineering, aircraft life cycle cost, and most recently, propulsion.

In my view, the JSF acquisition strategy was brilliant. A common base airframe for the Air Force, Navy, and Marines. A very, very bloody airframe competition among Boeing, McDonald Douglas, Northrop Grumman, and Lockheed Martin. Replacing four current fleet types with a single JSF, bringing our allies into the program very early on, and allowing our allies to invest not just money, but also invest technology. The U.K. alone invested $2 billion and became a full partner. This program is the finest example of transatlantic cooperation and technology transfer.

However, there was a flaw. We had the largest propulsion production program in DOD history and no real competition and the attendant developmental and operational risks. We vigorously competed the airframes. We did not vigorously compete engines. Now, Congress did cure this flaw 10 years ago by funding for the F136. The GE company invited Rolls-Royce into the program, not out of benevolence, I can assure you, but because we could bring some unique technology, which would provide a superior product. The GE and Rolls-Royce fighter engine team has been very motivated. We kind of feel like Avis. We're number two, and we're trying very, very hard. So, we've worked hard, and we have performed. We

have done exceedingly well. We are on schedule, and we're under cost.

In December 2004, Presidential Budget Decision 753 confirmed the need for an alternate engine with all of the benefits that it brings. Last August, the need for competition was confirmed again with a $2.4 billion SDD contract. So, what's changed in the last few months? Less risk? Less cost savings? I don't think so.

In my view, it was a shortsighted budget decision, an easy take now, pushing consequences into future years. So, we can eliminate $1.8 billion in near-term costs and forego something in the neighborhood of $16 billion in financial benefits and forego the other benefits of competition. It's pay me now, or pay me a lot more later on.

To kill the F136 is to abandon 10 years of very thoughtful investment. In my business experience, monopoly has never provided the customer with best value ever. As a nation, we have a choice—monopoly or competition—monopoly or the next Great Engine War. As my British colleagues are so fond of saying, pennywise, pound foolish. Thank you, Mr. Chairman.

[The joint prepared statement of Mr. Donnelly and Mr. Guyette follows:]

JOINT PREPARED STATEMENT BY SCOTT C. DONNELLY AND JAMES M. GUYETTE

Mr. Chairman, Senator Levin, members of the committee—thank you for this opportunity to appear before the committee to share our views on the desirability of continuing the development of competing engines for the Joint Strike Fighter (JSF) program. I'm Scott Donnelly, President and Chief Executive Officer (CEO) of General Electric (GE) Aviation; and I'm Jim Guyette, President and CEO of Rolls-Royce North America. We are pleased to jointly present this statement to you.

As you may know, GE and Rolls-Royce have formed a 60/40 partnership to develop and produce the F136 engine for the JSF. We have brought together the best talent from the United States and the United Kingdom to develop and produce the GE/Rolls-Royce F136 engine. We believe our partnership is a shining example of transatlantic cooperation. If our program is continued, the F136 will compete head-to-head with the Pratt & Whitney (P&W) F135 engine for the honor to power the JSF. These two engines will be the most powerful, capable, and technologically advanced fighter engines ever produced.

Mr. Chairman, simply put, we are here to seek your continued support for this competition. The JSF program will be the largest aircraft procurement program in the history of the Department of Defense. It is a single engine aircraft that will be used by the Air Force, Navy, Marines, and several international partners, including the U.K. It will have conventional, carrier-based, and short take-off vertical-landing variants and over time, will replace the F–16, F–18, A–10, and AV–8B fleets.

P&W was initially chosen as the sole-engine supplier for JSF based on its earlier competitive selection to power the F–22. That engine, the F119, has since been modified and adapted to JSF requirements and is called the F135. In 1995, Congress added $7 million to the DOD budget and directed the establishment of a second engine source for the JSF. Today, that engine, first known as the "Alternate Engine" and then as the "Interchangeable Engine," is now designated the F136 engine. Attached is a chronological history of the F136 program (Attachment 1).

Chronology of the F136 Competitive Fighter Engine for the JSF

1991 – Advanced Tactical Fighter Program ends with selection of YF-22 (vice YF-23) powered by P&W YF119 (vice GE YF120) engine.

1992 – A-12 Program is cancelled by DoD.

1993 – UnderSec Def (AT&L) John Deutch launched "Joint Advanced Strike Technology" (JAST) Program – a "catalog" of advanced technologies and parts, to be used to draw from for future aircraft.

1994 – AT&L forms Joint Program Office (JPO) – changes focus from "catalog" to "aircraft" – keeps JAST title – requests $200M R&D in FY95 budget to begin design – neither Airframe, nor Engine specific.

-- Air Force LtGen George Muellner named first JPO PEO.

-- Four Airframe/ STOVL Propulsion concept teams formed:

Lockheed (shaft coupled lift fan)
Boeing (Direct lift – e.g. current generation Harrier)
McDonnell-Douglas (gas coupled lift fan)
Northrop Grumman (lift + lift cruise)

1995 – Lockheed, Boeing and Northrop Grumman "choose" P&W F119 power, as JPO emphasizes advantages of "commonality" with the F-22 Program.

-- McDonnell-Douglas chooses the GE F120 due to larger core size.

-- JPO requests funding of F119 engine for JAST.

-- McDonnell-Douglas abandons "gas coupled lift fan", teams with Northrop Grumman (lift + lift cruise) – now 3 competitors, all powered by F119.

-- Congress establishes second source engine by adding $7M and directive language to the FY96 JAST Budget.

1996 – JPO agrees to look at "competitive" engine, but asks GE to complete "trade studies" of variants of F120 vs existing F110 (again stressing "commonality" with exiting USAF production).

-- in keeping with Congressional directives, FY97 budget reflects first government funding request ($18M) for "Competitive Engine Program."

-- JPO renames Program "Joint Strike Fighter"; "down-selects" to 2 airframe teams: Lockheed and Boeing; and, establishes a Production Lot V introduction plan for the "Competitive Engine."

-- Congress adds $10M to the $18M in the Competitive Engine baseline AND changes name to the "Alternate Engine Program" (AEP).

1997 – Major Office of the Secretary of Defense (OSD) initiative includes Program Decision Memorandum (PBD) to add $300M to the AEP baseline in order to accelerate competition entry to Lot III; compromises with JPO and re-scopes AEP profile for production entry at Lot IV.

-- IDA study approves AEP as cost effective.

-- JPO continues to hold AEP entry to Lot V due to other funding priorities.

-- Congress adds $15M more to AEP baseline in the FY98 budget, to support Lot IV competition entry AND requires Department of Defense to "certify" that full program funding is in place for the AEP.

1998 – First Program Managers Advisory Group (PMAG) recommends SecDef certify full funding as required by Congress, but to do so, moves competition entry to Lot VII.

-- Congress adds $7.5M more to the new "certified fully funded" AEP baseline and directs the Department to accelerate competition entry to earlier than Lot VII.

1999 -- GE signs Phase III (pre-SDD) contract.

-- Congress again adds funding ($15M) to the AEP budget request for acceleration of competition entry AND breaks out AEP as "Congressional Interest Program" in JSF budget line.

-- "Plug and Play" (PnP) concept for JSF engine development is first step toward total "interchangeability."

2000 – Congress continues to express dissatisfaction that the AEP as currently funded, will not be capable of completing development and flight qualification until after award of Lot V of JSF Production.

-- PnP definition continues to evolve (JPO wants GE to build to print the PW engine; GE wants both Engine Companies to retain unique hardware, but remain "interchangeable.")

— OSD suggests Executive Independent Review Team (EIRT) meeting to review Plug n Play definition as a "Propulsion Acquisition Strategy."

-- JPO charters EIRT to "conduct technical assessment of implementation strategy against objectives of affordability, industrial base and operational readiness" (Specific areas chartered: technical feasibility of interface planes, systems engineering approach to achieve interchangeability, and ability to maintain EQUITY IN COMPETION).

2001 – Joint Strike Fighter Engine Interchangeability Team Operating Agreement signed. ("Interchangeability" defined- common hardware still at issue).

-- JPO agrees with acceleration of competition – issues plan to bring F120 to "directed production" at Lots IV and V (for learning curve), and "full competition" beginning at Lot VI.

-- Congress adds $2.5M to the FY02 request ($118M) for the F120 AEP Engine.

-- JSF formally designated "F-35"; P&W F119 variant and GE F120 variant designated "F135 and F136" respectively. *(Editorial note: Although the common reference to both the F135 and F136 is "Interchangeable Engines," the JPO still lists the F136 as the AEP)*

2002 – Congress adds $29.75M to the $150M requested by DoD in the FY03 budget for the F136 Engine, "only to continue the current effort to develop and maintain two, competing, interchangeable engine programs for the JSF."

-- Second Program Manager's Advisory Group (PMAG –II) again validates merits of maintaining propulsion competition for the JSF Program.

-- GE and Rolls-Royce, NA officially form 60/40 Limited Partnership (LLC) to become the "Fighter Engine Team" to co-produce the F136 Engine.

2003 – JPO receives $56M CPI reduction in overall JSF funding and elects to levy entire reduction to the F136 Program.

-- Congress adds $66.8M to F136 FY04 budget request ($52.8M to return all but equal program share ($3.2M) of CPI reduction to the F136 and $14M for Interchangeable Engine risk reduction).

2004 – Congress adds $3.5M to continue acceleration of competition entry ($235M total FY05 F136 Appropriations)

-- Final DemVal and Pre-SDD funding Appropriated ($211M of $235M)

-- First F136 SDD funding Appropriated ($24M of $235M).

2005 – FET Awarded $2.4B SDD contract for F136 development

-- Congress again provides language in support of two competing engines for JSF; $338M appropriated for F136 SDD in FY06.

-- Total F136 funding appropriated through FY06 reaches $1.28B ($.92B for DemVal and Pre-SDD; $.36B for SDD).

-- $2B remaining on F136 development.

2006 – FY07 DoD Budget proposes termination of the F136 Program; no funding requested ($400M was FY06 budget estimate for FY07 request in F136 program of record).

-- $104M of FY06 funding ($338M) placed on contract; funds team through March 2006.

-- FET asked to provide Termination Liability costs by month, starting in April 2006.

-- Senate Armed Services Committee leadership send letter to SecDef urging DoD to continue F136 FY06 SDD funding until Congress fully evaluates the proposed termination.

-- DepSecDef concurs with Senate Armed Services Committee request and agrees, in writing, to continue to fund F136 with FY06 Appropriation.

-- House Appropriations Committee further includes language in the FY06 Supplemental that directs the DoD to execute the F136 program as Appropriated in the FY06 Bill.

Attachment 1

For the past 10 years, Congress has included language and/or additional funding strongly supporting a JSF engine competition, citing the demonstrated benefits of competition resulting from the original "Great Engine War." That much-heralded competition had its roots in the late 1970s and early 1980s when P&W was the only supplier for high-performance fighter engines. During that time period, DOD experienced significant problems with P&W TF30-powered F–14s and P&W F100-powered F–15s and F–16s. Over a 2-year period, Congress added $41 million to the Navy budget to begin a TF30 replacement program. When the Navy failed to spend the $41 million, and when problems with the F100 worsened, the money was shifted to the Air Force to develop an engine to compete with the F100. That engine, a derivative of the GE F101 engine for the B–1 bomber, was ultimately designated the F110.

Beginning in the 1980s, the "Great Engine War" pitted the F100 against the F110. The F110 was initially selected for new F–14s and F–16s and also to re-engine older F–14s. Until recently, only P&W's F100 has powered F–15s. However, in 2002, Korea selected GE to power its fleet of F–15s, and in 2005, GE was also selected to power Singapore's F–15s. Meanwhile, in recent years, P&W has also won their fair share of engine competitions worldwide. After 20 years of the "Great Engine War," all of the competitive benefits (reduced operational risks, better perform-

ance, increased readiness, enhanced contractor responsiveness, lower costs, etc.) continue to endure because our customers have a competitive choice for engines and are not captive to a single engine supplier as was the case in the early 1970s and 1980s.

An excellent history of this competition is detailed in Robert W. Drewes' book "The Air Force and the Great Engine War." Drewes notes that the "Great Engine War" was not initiated to achieve cost savings. In fact, it was expected to actually cost more money to bring on a second supplier to address significant operational problems and to obtain better reliability, durability, and supportability. The competition established unprecedented levels of engine durability, reliability, operability, and supportability for large, high-thrust fighter engines. Surprisingly, the competition achieved this at a significantly lower cost of engine ownership. The Air Force estimated—over the purchase of the first 1,800 engines—that it achieved approximately 20 percent cost savings over what the program would have cost with a sole-engine provider.

Mr. Chairman, with this background, let's get to the purpose of your hearing today. Is it wise to terminate this second "Great Engine War," and rely on a sole engine supplier for a single-engine aircraft to do multiple missions for multiple Services and multiple nations? Is it wise to become dependent upon only one engine supplier and then hand over a volume of engine business that will reach tens of billions of dollars? Is it smart to put all your eggs in one basket, knowing this is a course of action that can't easily be rectified later? We believe the answer to these questions is a resounding "NO." This is a rare instance in defense procurement with not only a compelling operational case for continued competition, but also a compelling business case. Through the enduring value of competition, sufficient savings will be generated from a competitive JSF engine procurement that will more than offset the cost of completing the F136 engine development.

Attachment 2 of our statement is a matrix that places a rough order of magnitude on the money to be spent on engines and spare parts over the life of the JSF program. All analyses are assumption dependent and we have not attempted to predict a precise figure—that is not necessary to make our point. Rather, we show a broad range of numbers based on potential aircraft procured, the number of engines bought per aircraft, and the price per engine. To produce the matrix, we selected the current aircraft program of record (3,176 total of which 2,443 are U.S. only), while assuming an initial spares level of 15 percent. These assumptions yield an initial engine buy for JSF aircraft of approximately 3,652 (worldwide)/2,809 (U.S.).

Business Case Matrix

P = Price of a JSF Engine	n = Number of Equivalent Engines Bought over the Lifetime of a JSF		
	2.0	2.5	3.0
$10 M	$73 Billion ($56 B)	$91 Billion ($70 B)	$110 Billion ($84 B)
$9 M	$66 Billion ($50 B)	$82 Billion ($63 B)	$98 Billion ($76 B)
$8 M	$58 Billion ($45 B)	$73 Billion ($56 B)	$88 Billion ($67 B)
$7 M	$51 Billion ($39 B)	$64 Billion ($49 B)	$77 Billion ($59 B)

R = P x N

R = Sole Source Revenue to Pratt
P = Price of a JSF engine
N = Total Engines Bought = [n x (Initial Engine Buy)]

PRATT & WHITNEY SOLE SOURCE REVENUES ARE HUGE!

Attachment 2

F136 Business Case

Sample Calculation

1. Assume the JSF engine price **(P)** is approximately the same as the current F-22 engine price ≈ $9 M
2. Aircraft Buys 3176 (U.S. + International) / 2443 (U.S. only)
3. Initial Spares ~ 15%
4. Initial Engine Buy ≈ 3652 / 2809
5. Sustainment (all parts consumed in the operational life of the engine) ≈ 1.5 x (Initial Engine Buy)
6. Total JSF Business = 2.5 x (3652 / 2809) = 9130 / 7022
7. Sole Source JSF Engine Volume to Pratt @ $9 M/engine
   R ≈ $82 B / $63 B
8. Savings from competition:
   10% = $8.2 B / $6.3 B
   15% = $12.3 B / $9.5 B
   20% = $16.4 B / $12.6 B

Attachment 2

As an example only, if we assume that over the operating life of a JSF engine, the spare parts consumed will equal an additional 1.5 "equivalent" engines, then the total number of engines and equivalent engines bought will be approximately 2.5x (3652/2809) = 9130/7022 engines. Further, assume the price of a F135 engine to be equal to the current selling price of the F119 (the F135 is based on the F119 and is about 10 percent higher in thrust), which is about $9 million per engine. In this example, the money spent on engines for the total JSF program of record will be $82 billion/$63 billion. If we assume that competition between two engine sources would reduce these costs by 10 percent, a savings on the order of $8 billion/$6 billion will result. For the original "Great Engine War," the savings through engine competition was on the order of 20 percent. Such a figure on the JSF would yield $16 billion/$12 billion in savings.

Mr. Chairman, let's acknowledge that someone will surely challenge our assumptions on engine price, or spare parts usage, or aircraft procurement levels, etc. Using lower numbers, such as an engine price of $7 million and spares usage of one equivalent engine per JSF procured, yields total revenues of $51 billion/$39 billion. A 10 percent savings from competition produces total savings of $5 billion/$3.9 billion. Again, large savings that more than offset the investment needed to complete the F136 development.

The take-away from this matrix, Mr. Chairman, is that the potential revenues generated from the sale of engines and spare parts associated with the JSF program are huge! With competition, there is a chance to contain those revenues near the lower left hand corner of the matrix. Without competition, the revenues will trend upward and to the right of the matrix. One of the main lessons that was learned from the original "Great Engine War" is that costs are lowered through vigorous

head-to-head competition. We are confident a second "Great Engine War" will yield similar results.

Mr. Chairman, we are convinced there is a sufficient volume of engine business to justify continuing the engine competition—both for critical operational and for business considerations. The warfighter will be assured of the security that comes with not being dependent on a single engine source i.e., less risk, better performance, higher readiness, more technology infusion, enhanced contractor responsiveness . . . and competition will drive down costs.

In closing, we have one final point. We have been on the F136 journey for 10 years and Congress has appropriated nearly $1.3 billion to date to support the program. We were awarded a $2.4 billion system development and demonstration contract in August 2005. Our engine development is on schedule and slightly under cost. Our GE and Rolls-Royce partnership is strong. We will require approximately $2 billion in additional appropriations, including about $400 million in fiscal year 2007, and it will take about 6 more years to complete the F136 development and be ready for production. If we can complete our journey, the F136 engine will be a formidable competitor to the F135, in both price and performance, and our engine industrial base will remain robust, resilient, and capable of responding in a competitive way to all current and future requirements. If our program is terminated, our highly skilled GE/Rolls-Royce team will be disbanded, $1.3 billion will have been wasted, and the United States, the United Kingdom, and our allies will depend upon only one engine supplier to meet the challenging requirements for high-performance fighter engines. We submit to you that this is not a good thing. We respectfully request your continued support for this second "great engine war."

Thank you again for giving us the opportunity to share our views on this very important issue.

Chairman WARNER. Thank you. Would you please proceed as you desire between your two witnesses?

STATEMENT OF LOUIS CHÊNEVERT, PRESIDENT AND CHIEF OPERATING OFFICER, UNITED TECHNOLOGIES CORPORATION, PRATT & WHITNEY

Mr. CHÊNEVERT. Thank you, Mr. Chairman.

On behalf of United Technologies Corporation and Pratt & Whitney, I thank Chairman Warner, Senator Lieberman, and members of the committee for giving me the opportunity to testify today. I'm pleased to be joined this morning by General (retired) Lloyd Newton.

My purpose today is to assure the committee that the administration's decision to eliminate funding for the alternate engine for the JSF is operationally and economically sound. I also assure you that Pratt & Whitney is committed to meeting our military customers' needs as we jointly support our service men, women, and allies around the world. We believe the Pentagon's wish to use the $1.8 billion a second engine would cost over the next 5 years for higher priority items deserves your support.

The source of my confidence in making this statement, Mr. Chairman, is Pratt & Whitney's F135 engine.

In December 2005, we delivered the world's most powerful tactical fighter engine to Lockheed Martin ahead of schedule. We have already logged more than 4,500 ground test hours on nine test engines and are on track to support the first flight of the JSF later this year.

The Pratt & Whitney JSF engine is a derivative of the engine on the F–22 Raptor. By the time the JSF is operational, the main or core portion of these engines will have accumulated more than 800,000 flight hours.

The F135 has passed every test and met every milestone, and we are committed to maintaining that flawless record of performance and support to our customer.

In my testimony today, I will address four areas relevant to the JSF alternate engine decision: The U.S. industrial base for fighter engines, operational readiness, the additional costs associated with an alternate engine program, and international participation to this program.

The impetus for an alternate engine was the need to ensure the health of the U.S. industrial base for manufacturing tactical fighter engines. At the time, an argument was put forth that if there were no alternative engine for the JSF, the U.S. would be left with only one tactical fighter engine manufacturer.

Mr. Chairman, I respectfully submit that there is no such thing as the fighter engine business per se—just the engine business. I don't mean that building an engine for an F–18 or for a F–22 doesn't require specialized skills and technology, but the basic tools, the technology, materials, and processes used in large turbine military and commercial engines have become very closely aligned over the years. The engineering and manufacturing workforce can readily move from commercial programs to military programs and vice-versa, as can the supply base.

Today, GE is the world's largest jet engine manufacturer, and it is likely to continue to be so for the foreseeable future, as my chart shows. If you look at the area in blue, that is the GE install base of engines as we go forward in 2015, where the red part is the Pratt & Whitney install base of commercial and military engines. GE has produced more than 4,300 sole-source engines for the F–18 and will continue to produce these tactical fighter engines until at least 2012. GE has also been the sole-source production of more than 12,000 T700 engines for Black Hawk and Apache helicopters and will continue to be the sole-source for the next 15 years.

Our company, through Sikorsky actually, buys Black Hawk and Sea Hawk engines and builds them on an ongoing basis for the next 15 years with sole-source GE engines. That doesn't take into account the other engine development programs in which GE will participate, such as those for UAVs and the next generation long-range strike fighter. Rolls-Royce, too, has a healthy backlog and has been selected as the sole source for engines on C–130J and the V–22.

The second area that has been discussed is operational readiness. This argument basically translates as develop a second engine in case something goes wrong with the first one. Given unlimited funds, that would be good logic. Everyone would want to have a backup version of just about anything just in case.

But there are no backup engines for the GE-powered F–18 or Black Hawk aircraft, the Rolls-Royce-powered V–22 or C–130 or, for a matter of fact, the Pratt & Whitney F–22 or C–17. For that matter, there are no alternate suppliers for flight controls, ejection seats, or avionics. All these mission-critical systems on fighter jets are sole-source.

We don't require these because resources are limited. When resources are limited, the wise course is to conduct a risk assessment. Where you determine the risk level is unacceptable, you find

the resources for a redundant system. Where it's not, you hold a competition to make sure the one supplier you do choose is the best one.

That's exactly what happened. Pratt & Whitney competed head-to-head against GE in 1991, and we were awarded the engineering and manufacturing development program for the F119 engine. That program was the source of the derivative engine for the JSF selected by Boeing and Lockheed Martin for their concept demonstrators, and they flew those concept demonstrators for 100 hours a piece. Why? Because it was the right combination of performance, development cost, and operational risk—factors even more valid today than in the past.

The readiness question really boils down to one of engine reliability, and the good news, Mr. Chairman, is that all engines—and I mean GE engines, Rolls engines, and Pratt & Whitney engines have become far more reliable. Partnering with our customers and industry, we have seen advances in manufacturing processes, materials, design tools, fleet management, predictive maintenance, and risk management tools. Many of these advancements have been championed by our customers and have greatly improved engine reliability and reduced safety-related incident rates by a factor of 10 over the last 30 years.

The U.S. Air Force's data demonstrates this. Single engine fighter aircraft Class A mishap rates have been reduced from 10 per 100,000 hours of flight to 1 per 100,000 hours of flight, and we show this on chart number two, which shows the great progress made in fleet reliability over the last 30 years.

Mr. Chairman, we've heard a lot of comparisons to the F–16 and the F–14 programs, but this situation is fundamentally different. Over 20 years ago, Congress funded an alternate engine at the request of the customer—that is, the DOD. Now, the customer believes one engine is sufficient to meet its needs and has laid out more pressing uses for the $1.8 billion a second engine would cost over the next 5 years.

A third area under discussion today is the idea that a second engine will save taxpayers' money. This argument asserts that where there is competition, cost savings follow automatically. Mr. Chairman, I believe it is likely that a second engine for the JSF will save American taxpayers little or any money. It is certain, however, that an alternate engine will add billions to the overall program cost, which may ultimately translate to fewer aircraft for the Services and international partners.

I believe the additional costs associated with a second engine will outweigh any savings and will be impossible to recover over the life of the program. This is a situation, after all, in which the Government is not only doing the buying, but also paying twice for product development. If the Government opts to split the purchase between two suppliers, neither supplier will be able to deliver maximum savings from economies of scale. A split buy will also double the Government's support costs over the next 30 years over its product life cycle. In a situation like this, costs will mount rapidly and quickly overtake the savings. Here is our analysis of the additional cost factors: Completion of the SDD program for the second engine in 2013 will cost at least $2.4 billion; sustaining engineering

and component improvement for a second engine will each add hundreds of millions to a billion dollars over the life of the program; and as I said before, splitting the buy of engines will also depress economies of scale for each manufacturer. As a result, the production cost for engines could increase. This is confirmed by the Government's cost model for the JSF program; and finally, doing a mid-life upgrade on a alternate engine will add additional costs.

All totaled, the increase in cost to qualify and support an alternate engine is between $4 to $6 billion.

Competition may be effective to obtain the best price in situations where costs are unknown. However, since F135 costs are disclosed to the Government, it is hard to imagine significant savings from competition in this case.

The cost disclosure requirement is an important factor. It provides built-in protection against a single-source provider raising prices to unreasonable levels. Under our contract, cost and pricing data are fully disclosed to the Government and are audited on a regular basis. Moreover, the Government sets the pricing targets, and our profit is related directly to meeting these targets. It is our full expectation that the F135 production contract will have similar cost management incentives.

Finally, Mr. Chairman, members of the committee have often expressed concern for our international partners on the JSF and an interest in their meaningful participation to this program. We fully understand the importance of the international coalition, and I'm proud to tell you that Pratt & Whitney has teamed up with more than 40 companies from all eight partner countries, and this is our chart three, showing the different partners that we've signed up with in several countries on best value. These companies are providing technology, manufacturing capability, and the overall best value to the JSF and the partner countries.

On the F135 program, our single largest teammate, in fact, is Rolls-Royce. In December 2001, we signed a contract with Rolls-Royce, now worth more than $1 billion, for the development of lift components for the vertical lift variant. This past January, we signed a memorandum of understanding (MOU) to continue our teaming relationship into the production and sustainment phase of the JSF program. That work is expected to earn Rolls-Royce many additional billions over the life of the program.

The truth is, Rolls-Royce will be a winner with billions of dollars of JSF business whether there is an alternate engine or not, and so will others in the U.K., including BAE Systems, which has been awarded a significant share of the airframe work. This will be a substantial return on the United Kingdom's initial $2 billion investment.

Mr. Chairman, for our part, I can assure you that Pratt & Whitney will remain dedicated to achieving the objectives of the administration and Congress and provide an engine whose reliability and performance will be unsurpassed. Our total commitment is to meet the needs of our military customers as we jointly support our service men and women and allies around the world. We believe the administration's decision will save taxpayers' money, maintain the Nation's industrial base, enhance fleet operational readiness, and

ensure participation by international partners. We urge you to support the administration on this important question.

Thank you, and I welcome the opportunity to answer your questions, Mr. Chairman.

[The prepared statement of Mr. Chênevert follows:]

PREPARED STATEMENT BY LOUIS CHÊNEVERT

On behalf of United Technologies Corporation and Pratt & Whitney (P&W), I thank Chairman Warner, Senator Levin, and members of the committee for giving me the opportunity to testify today.

My purpose today is to assure the committee that the administration's decision to eliminate funding for the alternate engine for the Joint Strike Fighter (JSF) is, operationally and economically, a sound and secure one. I also assure you that P&W is committed to meeting our military customer's needs as we jointly support our service men, women, and allies around the world. We believe the Pentagon's wish, to use the $1.8 billion a second engine would have cost over the next 5 years for higher priority items, deserves your support.

The source of my confidence in making this statement, Mr. Chairman, is P&W's F135 engine.

In December 2005, we delivered the world's most powerful tactical fighter engine to Lockheed Martin, ahead of schedule. It is now installed in the first flight test aircraft. We have already logged more than 4,700 ground test hours on nine test engines, and are on track to support the first flight of the JSF later this year.

The P&W JSF engine is a derivative of the engine for the F–22 Raptor. By the time the JSF is operational, the main or core portion of these engines will have accumulated more than 800,000 flight hours, which will ensure reliable operation.

The F135 has passed every test and met every milestone, and we are committed to maintaining that flawless record of performance and support to our customer.

In my testimony today, I will address four areas relevant to the Joint Strike Fighter alternate engine decision:

- the U.S. industrial base for fighter engines,
- operational readiness,
- the additional costs associated with an alternate engine program, and
- international participation in the program.

INDUSTRIAL BASE

The impetus for an alternate engine was the need to ensure the health of the U.S. industrial base for manufacturing tactical fighter engines. At the time, an argument was put forth that if there were no alternative engine for the JSF, the U.S. would be left with only one tactical fighter engine manufacturer.

Mr. Chairman, I respectfully submit that there is no such thing as the fighter engine business per se—just the engine business. I don't mean that building an engine for an F–18 or an F–22 doesn't require specialized skills and technology. But the basic tools, technology, materials, and processes used in large turbine military and commercial engines have become closely aligned over the years. The engineering and manufacturing workforce can readily move from commercial programs to military programs and vice-versa, as can the supply base.

Today, General Electric (GE) is the world's largest jet engine manufacturer, and it is likely to continue to be so for the foreseeable future. GE has produced more than 4,300 sole-source engines for the F–18 and will continue to produce these tactical fighter engines until at least 2012. GE has also been the sole production source of more than 12,000 T700 engines for Black Hawk and Apache helicopters, and will continue to be the sole source for the next 15 years. That doesn't take into account the other engine development programs in which GE will participate, such as those for unmanned aerial vehicles and the next generation long-range strike aircraft. Rolls-Royce, too, has a healthy backlog of orders, and has been selected as the sole source for engines on the C–130J and the V–22.

OPERATIONAL READINESS

The second area that has been discussed is operational readiness. This argument basically translates as "develop a second engine in case something goes wrong with the first one." Given unlimited funds, that would be good logic. Everyone would want a backup version of just about anything—just in case.

But there are no backup engines for the GE-powered F–18 or Black Hawk, the Rolls-Royce-powered V–22 or C–130 or the P&W-powered F–22 or C–17. For that

matter, there are no alternate suppliers for flight controls, ejection seats, or avionics—all these mission-critical systems on fighter jets are sole source.

We don't require these because resources are limited. When resources are limited, the wise course is to conduct a risk assessment. Where you determine the risk level is unacceptable, you find the resources for a redundant system. Where it's not, you hold a competition to make sure the one supplier you do choose is the best one.

That's exactly what did happen. P&W did compete head-to-head against GE in 1991, and we were awarded the engineering and manufacturing development (EMD) program for the F119 engine. That program was the source of the derivative engine for the JSF selected by both Boeing and Lockheed Martin for their concept demonstrators. Why? Because it was the right combination of performance, development cost, and operational risk—factors even more valid today than in the past.

The readiness question really boils down to one of engine reliability, and the good news, Mr. Chairman, is that all engines—and I mean GE engines, Rolls-Royce engines, and P&W engines—have become far more reliable in recent years. Partnering with our customers and industry, we have seen advances in manufacturing processes, materials, design tools, fleet management, predictive maintenance, and risk management tools. Many of these advancements have been championed by our customer, and have greatly improved engine reliability and reduced safety-related incident rates by a factor of 10 over the last 30 years.

The U.S. Air Force's data demonstrates this. Single engine fighter aircraft class A mishap rates have been reduced from 10 per 100,000 hours to less than 1 per 100,000 hours in that time period.

In this context, Mr. Chairman, we've heard a lot of comparisons to the F–16 and the F–14 programs. But, this situation is fundamentally different. Over 20 years ago, Congress funded an alternative engine at the request of the customer—that is, the Defense Department. Now the Department believes one engine is sufficient to meet its needs, and has laid out more pressing uses for the $1.8 billion a second engine would cost over the next 5 years.

ADDITIONAL COSTS

A third area under discussion today is the idea that a second engine will save taxpayers' money. This argument asserts that where there is competition, cost savings follow automatically. But, Mr. Chairman, it is unlikely that a second engine for the JSF will save American taxpayers a penny. It is certain, however, that an alternate engine will add billions to the overall program cost, which may ultimately translate to fewer aircraft for the Services and international partners.

The additional costs associated with a second engine will outweigh any savings, and will be impossible to recover over the life of the program. This is a situation, after all, in which the Government is not only doing the buying, but also paying twice for product development. If the Government opts to split the purchase between two suppliers, neither will be able to deliver maximum savings from economies of scale. A split buy will also double the Government's support costs over the 30-year product life cycle. In a situation like this, costs will mount rapidly and quickly overtake savings.

Here is our analysis of the additional cost factors:

- Completion of the System Development and Demonstration program for the second engine in 2013 will cost at least $2.4 billion.
- Sustaining engineering and component improvement of a second engine will each add hundreds of millions to a $1 billion over the life of the program.
- Splitting the buy of engines will also depress economies of scale for each manufacturer. As a result, the production cost for engines will increase. This is confirmed by the Government cost model for the JSF program.
- Finally, doing a mid-life upgrade on an additional engine will add additional costs.

All totaled, the increase in cost to qualify and support an alternate engine is between $4 and $6 billion.

Competition may be effective to obtain the best price in situations where costs are unknown. However, since F135 costs are disclosed to the Government, it is hard to imagine significant savings from competition in this case.

The cost disclosure requirement is an important factor. It provides built-in protection against a single-source provider raising prices to unreasonable levels. Under our contract, cost and pricing data are fully disclosed to the Government and are audited on a regular basis. Moreover, the Government sets the pricing targets and our profit is related directly to meeting these targets. It is our full expectation that the F135 production contract will have similar cost management incentives.

INTERNATIONAL PARTICIPATION

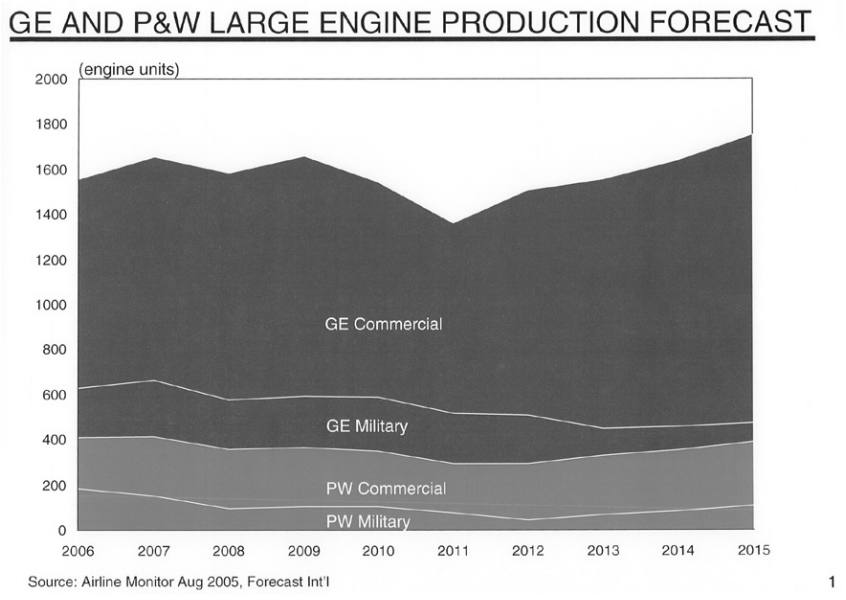
Finally, Mr. Chairman, members of the committee have often expressed concern for our international partners on the JSF, and an interest in their meaningful participation in the program. We fully understand the importance of the international coalition, and I'm proud to tell you that P&W has teamed up with more than 40 companies from all eight partner countries. These companies are providing technology, manufacturing capability, and the overall best value to the JSF and the partner countries.

On the F135 program, our single largest teammate, in fact, is Rolls-Royce. In December 2001, we signed a contract with Rolls-Royce now worth more than $1 billion for the development of lift components for the short take-off, vertical landing (STOVL) variant. This past January we signed a memorandum of understanding to continue our teaming relationship into the production and sustainment phase of the JSF program. That work is expected to earn Rolls-Royce many additional billions over the life of the program.

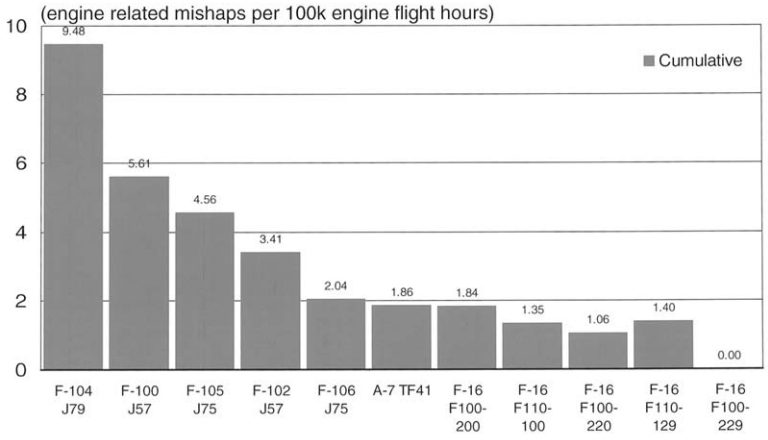
The truth is, Rolls-Royce will be a winner—with billions of dollars of JSF business—whether there is an alternate engine or not. So will others in the U.K, including BAE Systems, which has been awarded a significant share of the airframe work. This will be a substantial return on the United Kingdom's initial $2 billion investment.

For our part, I can assure you that P&W will remain dedicated to achieving the objectives of the administration and Congress and provide an engine whose reliability and performance will be unsurpassed. Our total commitment is to meet the needs of our military customers as we jointly support our service men, women, and allies around the world. We believe the administration's decision will save taxpayers money, maintain the Nation's industrial base, enhance fleet operational readiness, and ensure participation by our international partners. We urge you to support the administration on this important question.

Thank you. I welcome the opportunity to answer your questions.



SINGLE ENGINE SAFETY AND RELIABILITY



Class A flight mishap rates for single engine aircraft
Source: USAF

2

F135 INTERNATIONAL INDUSTRIAL STATUS

Teaming with over 40 companies from the JSF partner countries

U.K.
Callender
Dunlop
Firth Rixon
GKN
HS Marston
OMG
Rolls-Royce
Serck
Smiths
Ultra
HS Claverham

Turkey
ALP Aviation
KaleKalip

Netherlands
Axxiflex
DAP
Eldim
Elmo
NCLR
Stork
Urenco

Norway
Volvo Aero

Australia
Production Parts
WASA

Denmark
IFAD
GPV

Italy
CIRA
Microtecnica
Piaggio
Aerea
ASE
Forgital

Canada
Bristol Aerospace
FAG
Gastops
Haley
MDS
Magellan
MindReady
Montreal Carbide
PWC
Univ. Quebec - AMIL
Xantrex

Committed to Expanding Opportunities in all Partner Countries

Chairman WARNER. General?

General NEWTON. No, sir.

Chairman WARNER. We'll proceed with some questions. Repeatedly, I think the first panel and you again have mentioned the fact that there are several categories of U.S. aircraft in operation today

where there's just one engine. You cited the C–17 and certain of the F–18s. Is that correct?

Mr. CHÊNEVERT. The F–18, the helicopter, the Apaches, and——

Chairman WARNER. Yes, all right, but just stop to think. Of the C–17, we're looking at a total buy of 180 planes. Maybe total them all together, 1,000 planes. This is 5,000 aircraft. I can't seem to get that point across—5,000. This isn't 180 C–17s, and the people came up as if you all have reached the penultimate of all technology—perfection, never going to be a flaw. I'm just not accepting those premises. The magnitude of this contract is gargantuan, and it seems that it is a function of this committee to make certain that all the facts are known before all 100 Senators have to cast their vote on this. That's what troubles me here. It's not that you all haven't done a brilliant job in all of this business, but I tell you, this is a big, big gamble we're taking, and I think we better look at it very carefully.

Now, a lot's been said about GE. The chart's gone, but I guess you had a chance to look at them. Are you going to stay in the single engine business? You have to keep your current fleet of engines, the spare parts, and whatever, but are you going to keep that engineering design team there? In other words, can America look if there were a problem with this engine down the road, if the Pentagon came trotting at the door, hat in hand, said please go back and restart this program, let's take a look at the second engine because we're experiencing unforeseen problems?

Mr. DONNELLY. I think, Mr. Chairman, this issue of industrial base is a very good question, and I don't think anybody's ever said that GE's going to just shut up shop and go home if they're not part of this contract. We're proud of the fact that we're a very viable and successful concern with respect to commercial engines. We obviously continue to stay in that business and are very successful in that business. We have plenty of opportunities in the military side with respect to use of that technology for cargo and tankers. We have a very successful helicopter program. All those things will continue. Certainly, we will continue to do everything to support the installed base and the fleet that we have out there today that powers a number of different variants of military fighter aircraft.

But the fact of the matter is, there's only one fighter engine program—now or in the foreseeable future, and that is the JSF program. So, if we are not included in the JSF program, it's not a question—I guess Secretary England referenced earlier of a business decision. There's not a business. There's only one airplane, and if you're not on that airplane, then you're not in the fighter engine business.

So, certainly we'd continue production and spare part support of our existing fighter aircraft, but we would absolutely disband that program. We have plenty of programs in the commercial world. Our guys would be quite happy to pick up a lot of technical talent that would come out of the program and apply it to other programs—both military and commercial. If the Government came back and said it was a bad decision, and it turns out that we do want to have an alternative engine for that airplane, you're talking about—is the ability there to reconstitute the program? Absolutely. We'll get the technical talent. We'll rebuild the team.

But frankly, you'll start back where we were. These are programs that, whether we all like it or not, are 10 to 15 year programs. So, the program would be disbanded. There is no other fighter engine program to give us a rationale to keep such a team in place. Absolutely we could reconfigure it.

Chairman WARNER. What magnitude of personnel are we talking about? Is this going to result in a lot of layoffs, or are you just going to transfer the military people on JSF into the civilian, and they quietly integrate and go on about their business?

Mr. DONNELLY. You're always going to have some layoff and some restructuring of the program. This is a team today, I think, between GE and Rolls-Royce that represents about 750 engineers and scientists that are participating in the development phase of this program. Certainly, a number of those people would end up in some of our commercial engine programs or international military programs that we have going on today, our helicopter programs, things like that.

But certainly, there's going to be an impact in terms of the total number of people that are employed when you take out a couple billion' worth of program dollars.

Chairman WARNER. I remember when I had the privilege of working on this in the Department. We used to have charts showing benchmarks in the development of any program, milestones, and a lot of other things. Supposing Congress were to continue the funding for this program for just another fiscal year—and my understanding is that would take about $400 million to keep it alive.

Mr. DONNELLY. That's right.

Chairman WARNER. Will there, in that time, be scheduled benchmarks which can really solidify the decision process has to go to one or two engines? I can think of one benchmark, and that is the scheduled first flight of this engine into the air, which is this fall. Is that correct? That's a very significant benchmark—will it fly? You put it up there and drive it around and subject it to whatever envelope of tests in the initial phases. I don't know how much stress you put on the engine and so forth. Maybe you can amplify that. In other words, if we're sitting here a year from today, and we're faced with the decision do we go another year, how much will be learned in this year that would help dictate a clear and more precise decision for the future?

Mr. DONNELLY. There's no question that every year that goes by, the teams are continuing to work very hard and pursue and accomplish milestones every year. So, you'll see additional hours of ground testing in the case of our——

Chairman WARNER. Are you ground testing? Are you that far yet with your——

Mr. DONNELLY. Absolutely.

Chairman WARNER. How many hours have you got on yours?

Mr. DONNELLY. There's about 200.

Chairman WARNER. Two hundred hours. They have thousands of hours.

Mr. DONNELLY. Sure. There's about a 3-year difference in the program.

Chairman WARNER. Oh, I understand. So, in other words, yours is just cranked up and putting along on 200 hours.

Mr. DONNELLY. Absolutely. It's a very important milestone to achieve that point.

Chairman WARNER. You just have to run it, and that's for sure.

Mr. DONNELLY. Absolutely.

Chairman WARNER. But can you help me at all as to what might happen in the next 12 months?

Mr. DONNELLY. Sure, we'll continue to demonstrate the milestones, including extensive continuation of the test program. So, we'll have a lot of data by the time a year from now comes in terms of the performance of the engine. Obviously, the same is true for the Pratt & Whitney engine. They're going to go through first flight testings. So, these are major milestones for the programs that are going to give important——

Chairman WARNER. They're going to through the first flight tests. It's hard for Congress, if we lurch in and out of these things, to have the extraordinary vast factual base that you possess, but I'm just trying to put it in place. Next year, Senator McCain, who's a great aviator, will be sitting in this seat, hopefully. What will be before him to determine whether or not we push it 1 more year, assuming we can get it another year?

Mr. DONNELLY. We could go back and put information before you that gives explicitly what milestones will be accomplished in the next year of performance.

Chairman WARNER. How many more years of testing before you move into the operational evaluation?

Mr. DONNELLY. Our first flight test is in 2010, so we're 4 years from having first flight, which is, as we say, about 3 years behind where the Pratt & Whitney program has been.

Chairman WARNER. We will have had the first flight on the Pratt engine?

Mr. DONNELLY. That's correct.

Chairman WARNER. I'll ask Pratt. Do you feel that, if we're to keep the program going a year, are there any benchmarks which would, in your judgment, make stronger your case to be the single engine?

Mr. CHÊNEVERT. I believe right now, Mr. Chairman, our focus is solely on delivering a superb engine for the first flight test. The engine's now loaded to the aircraft, and we're eagerly awaiting first flight. As I listened to Secretary England this morning, my concern is that any slippage to the program, if there is a funding issue, becomes detrimental to our success long-term.

Chairman WARNER. Senator Lieberman.

Senator LIEBERMAN. Thanks, Mr. Chairman. Thanks, gentlemen, for very helpful testimony. I must say that, in listening and thinking about where we are, you represent three great companies, and I appreciated the directness of your response, Mr. Donnelly, to the chairman's question. There's enough aircraft engine business in the world, military and commercial. These companies are going to continue to be in existence and be successful.

On the record, GE has the largest share of the engine market. Now, I know that can change over time, but my own conclusion about the industrial base in this case is that these are three strong companies.

I want to just refer back to the Great Engine War of the past and the one that we're being urged to continue now. There is some disagreement about the result of that Great Engine War. I think you know that. I know that there is a report put out by the Brookings Institute under a so-called Pilling Report, which actually says that in the long run, the competition did not save money, but I want to set that aside a minute and go to a question that's based on something that Admiral Willard, the Vice Chief of Naval Operations, asked today. I'm going to ask you this, Mr. Chênevert or General Newton. It was an interesting point, which is that, in fact, there has been a competition for the engine for the JSF, and we've paid for it. The Government has paid for it. It's the result of that competition that has been part of the DOD recommendation to go sole source for all the reasons stated by the first panel with the Pratt & Whitney engine. So, Mr. Chênevert or General Newton, can you describe the results of the testing between the Pratt & Whitney and GE/Rolls-Royce engines that has occurred so far?

General NEWTON. Let me try that. Senator, thanks very much for that question. As was mentioned by the earlier panel, and we can certainly attest to that, there was this, as we put it, head-to-head competition between GE and Pratt & Whitney. GE had what we call the F120, and we had the F119 at that time. The F119 won, and that was for the JSF F–22.

Senator LIEBERMAN. Right.

General NEWTON. As a result of that, Pratt & Whitney then continued to develop that through the contract which we had with the Government, and then came along the opportunity to participate in the JSF program. It was called by a different name at that point. As time went on, then both of us presented again, and the Pratt & Whitney engine was selected by the companies to power their aircraft so it could go through this initial test, and I think that was called the CDA.

Senator LIEBERMAN. Right.

General NEWTON. So, after we came out of that and had the down select, as was mentioned earlier, where Lockheed and Boeing competed, and then Lockheed was selected, our engine then continued on with Lockheed, and that's where we find ourselves today with a significant amount of maturity and experience with the technologies which we are using, which I would say is also a quantum leap from where we were with the earlier F100 products.

Senator LIEBERMAN. I agree. Again, the engines made by all three of you are remarkable achievements of the industrial technological age, but the important point I wanted to make was that in some sense, you might read the DOD recommendation to go to a single source for the engine for the JSF as saying that essentially, we have achieved the cost benefits of competition up until this point, and now we're ready to make a decision.

Mr. Chênevert, I want to ask you this question, you talked a bit about it in your opening statement, but I want to ask you to develop it a little bit more, and you've heard questions raised that obviously, one benefit of competition is that prices are held down. As I mentioned, Pilling would contest that about the earlier Great Engine War. But from your point of view, just develop it a little bit. Let me just state it at the extreme, as some people would say, that

if Pratt & Whitney is the only source of the engines, that somehow you'd be capable of price gouging the DOD and the taxpayers. How do you respond to that?

Mr. CHÊNEVERT. First of all, thank you, Senator, and I think we work very closely with our customer. Obviously, we leverage the supply chain aggressively. As we source these components, whether they are a source in the U.S. or a source to partner countries, there's a lot of competing that goes on to win the position on materials that compose the Pratt engine. That is all overseen, basically, through the Government accounting practices, and I think one thing that's very different as well on this program is the jointness of the program through the whole cycle.

It is the first time in my career, as an example, that over the last several years, there has been—since 2002, I think it goes back—we have had the two JSF company conferences per year. All the key players of the industry show up. We disclose enormous amount of material and where we stand with the status of the program and sourcing with the partner countries, et cetera, at every meeting. This is one where our cost disclosure is fully open book with our Government customer, and it is absolutely sourced in a very competitive fashion.

If I compare my knowledge of our own commercial engines versus the military engine, I would say that the cost base achieved on these engines is exceptional given the level of technology that we are pushing in these engines. So, I feel very confident that as we move forward—we've been in this business for many years, and we see a bright future. So, we have the advantage of working closely with our customer to make sure we provide him best value. That's how we win in the long-term.

Senator LIEBERMAN. So, if I hear you correctly, and I——

Chairman WARNER. Extra time. Go ahead. Take it.

Senator LIEBERMAN. That's all right. This is my last question anyway, thanks. You've talked, and the Secretary did earlier, about the full disclosure of all the elements of cost on this kind of engine, and what that really means is that if you started to essentially overprice to a point of making more profit than seemed reasonable to anybody because the Pentagon had no other source for the engine—what's the recourse that the Pentagon has?

Mr. CHÊNEVERT. First of all, this would not happen in our company. United Technologies is a superb company. We won again, this year, the Aerospace Most Admired Company. We have several divisions in aerospace, it's our reputation.

Senator LIEBERMAN. Right.

Mr. CHÊNEVERT. In our ethics as a company, there is not at all any intent of ever price gouging with the customer because it's not the way to operate, and you'll pay back later.

Senator LIEBERMAN. Pay back later because this—to put it more directly, the Pentagon is one of your biggest customers, I suppose.

Mr. CHÊNEVERT. The Pentagon is basically 30 percent of my business.

Senator LIEBERMAN. Yes.

Mr. CHÊNEVERT. So, this is why we operate very closely as partners to make sure the right outcome occurs. I can assure you that

our company will deliver the best product, reliability, et cetera, but also will be very cost competitive, and this is the journey we're on.

Maybe I'll just add also a little more, in this partnership with the customer, what's different about this product is also on a reliability perspective, the maturing of the F119 on the F–22 and then the diagnostics that are on this aircraft ensure that the fleet is going to be operating at a level of performance reliability that has been unseen before, and that's why I feel very confident showing up at every JSF Company conference representing our company and what Pratt & Whitney has delivered and will deliver in the future on the F–22 and on the JSF. The commitment is there, Senator.

Senator LIEBERMAN. I appreciate it very much, and I suppose it's also a reflection of the interweaving of this whole industry that Rolls-Royce is subcontracting with Pratt on parts of this contract that GE supplies the engines for helicopters made by your parent company, United Technologies, and the connections can go back and forth, so that the industrial base is strong, and we all have an interest in seeing that happen. Mr. Chairman, I have to move onto another session, and I'm late, too. I thank you for your courtesies. This has been an important set of hearings and very informative.

I appreciate very much the testimony of the witnesses. What strikes me, just looking beyond the immediate controversy, is that these are going to be extraordinary aircraft. Obviously, the sooner, as General Magnus of the Marine Corps said, we get them out, the better. But these planes are going to play a critically important role in maintaining the advantage in the air of the United States of America, and I thank all of you and your respective companies for what you've both done on this program and are doing on all the other programs that matter so much to our national security in what continues to be, unfortunately, a dangerous time. Thank you very much.

Chairman WARNER. One question by me before you leave, and then I'm going to wrap right up, so you go ahead. If you go back through this book on the Great Engine War as I and others have done, you'll find that strikes and labor controversies were a major factor. When you have all of it, and their unions come to you, and they'll sure do it and try to get higher wages—that's their job, to get better wages and benefits—I don't know what your defense is then, it could be down in your vast subcontractor supply tier.

Mr. CHÊNEVERT. Thank you, Mr. Chairman. I think today, the way we have sourced this program so far with the international countries and with the different partners around America as well, in many cases, we have dual sourcing on some of the components, which gives us a backup.

We have multiple sites within our company that assemble different components of these engines, and I feel confident that we also have a capability for final assembly that says we could create redundancy, and we could eliminate some of the risks if we had a local strike, either at a supplier or a——

Chairman WARNER. All right. I put the question, and only history will answer it, and we'll just have to see. Yes, you want to make a comment on it?

Mr. DONNELLY. Mr. Chairman, is it possible to clarify just a couple of brief points?

Chairman WARNER. Yes.

Mr. DONNELLY. One around cost.

Chairman WARNER. I'm going to give you the opportunity to come back on as much as you wish.

Mr. DONNELLY. I think what's been stated is certainly true, that in the pricing issue there is full clarity that the Government has to your cost basis, and obviously, then the ability to negotiate price on top of that. However, I would contend that when you look at the overall cost to the Government, this price, this margin, is a relatively small percent relative to the overall cost of the system, and having visibility to cost is not to say it creates lower cost. The whole notion of competition is that we look at the cost and not simply represent truthfully that cost to the Government and negotiate these margins on top of that, but that we put our energy into reducing those costs. Therein lies the purpose of competition.

Chairman WARNER. Yes, I agree with you fully on that, and that'll be absent in this program. Yes, go ahead, Mr. Guyette.

Mr. GUYETTE. Mr. Chairman, maybe a couple of other points just to——

Chairman WARNER. Take your time, gentlemen. I want to make a good record. This is a momentous decision for Congress to make.

Mr. GUYETTE. I agree with you. I think it is strategic in and of itself, the JSF, and I think for our Nation, deciding whether or not we're going to have competition is strategic as well. I'll come to the question that you asked Mr. Donnelly at the beginning, which was relative to the industrial base. Would GE go out of the fighter engine business? If you were to apply that question to me, I would say to you that you, meaning the customer, determine the market. If you elect as the customer to have a monopoly for several decades, there is no market. Therefore, we have no business. Therefore, we will not have people working on these kinds of programs.

By the way, these are our very best engineers, not the mediocre, the best. So, we have them focused on developing this high-technology, very important program. That team will be dispersed. What will it take to start this back up again in 10 to 15 years, and I don't know that people really have focused on that point. They think that engines are interchangeable, and I believe someone this morning raised the issue of Southwest Airlines; they have one engine, and they rely on that. I'd make a couple of comments, having been in the business. Number one, this is a single engine on this airplane. Southwest Airlines has a multiple engine.

Chairman WARNER. The F–22 comparably has two engines.

Mr. GUYETTE. Yes, sir, it does. In addition to that, you have a number of other things that are equally important in all of this, things like maturity. Now, we have heard today that the F119 is kind of the F135. Let's talk about the reality of that statement. The F119 is point designed for the F–22, which has its own operating environment. The F135 goes on a JSF with an entirely different mission, a lot of throttle——

Chairman WARNER. You're quite correct. One's an air-to-air basic combat. The other is a multiple strike fighter with a lot of differing missions, and that's one of the reasons I feel so strongly that the second engine might provide some advantages given that total change of mission profile.

Mr. GUYETTE. Mr. Chairman, you're absolutely correct on that, and I would just continue on by saying that on the maturity side, I disagree with the earlier panel. I think the earlier panel said that the commonality between these two products, the F119 and the F135, was something like 70 percent. In our judgment, that is incorrect. We think it is more like a new engine than a derivative. If it were simply a derivative, Mr. Chairman, why would it cost somewhere in the neighborhood of another $4 to $5 billion to develop it when the engine that we're developing for this mission is costing $3.7? So, all I would suggest to you, Mr. Chairman, is there are a number of issues. The other, and most important of all, is the benefit of competition. It is not just in the price. It is in the product. It's on reliability. It's on durability. Mr. Chairman, at least my experience in aviation always suggests that with time, the end user always has another mission that you have never thought of, there is always new and required capability. So, I would simply say that I think for our Nation to move to a monopoly is absolutely wrong.

Chairman WARNER. I'm not going to give you my final analysis, but I'm certainly highly persuaded by what you have said, and it is what concerned me. General Newton, you're taking a lot of responsibilities on your shoulders for all those young airmen coming on in the years to come. You're making a decision that this is it, and I'd like to have your views on the varying missions of the JSF, which are a totally different envelope than we envisioned to be from the F–22. Am I not correct?

General NEWTON. Sir, thanks for the opportunity because I wanted to respond and to share a couple of thoughts as well. I certainly want you to understand that we understand your concern in the gravity of this decision. We certainly don't want to try to minimize that at all. However, what we wanted to do is try to put some facts on the table, and let me start from there, and let's go back to the various missions that we were talking about with reference to a single-engine fighter as well as a dual-engine fighter or whatever, and I've done both of those. I've flown both the F–15, and the F–16. I've also flown the F–117 Stealth Fighter. I understand and can clearly say to you that when we develop an engine—and particularly, this engine that we are developing—you have the opportunity to put it through the normal test that is required to ensure that it can meet those various environments and conditions that you want the aircraft to fly in, and with today's tools that we are modeling in simulation as well as the ground tests that we are doing, it gives you the opportunity to determine whether this engine meets all of the requirements which the DOD has laid out. As was said earlier, we've met all of those requirements, and some of those, we have surpassed.

So, this idea that this decision can't be made in a way where you have logical facts that allow you to make that decision, I have to respectfully say I disagree with.

Chairman WARNER. But talk about the missions of the JSF, the varied missions.

General NEWTON. Sure.

Chairman WARNER. So much difference, that you have three models of this aircraft when you look at the proportions of the extraordinary precedence set by this contract, one airframe basically

modified in a certain way to do three different missions—three variants of an airplane, not an inventory of 300 or 400 aircraft, 5,000 aircraft, and we're asking eight international partners to join us.

It seems to me somebody ought to buy a little insurance. That's what we're talking about today—a little insurance; one, to use proven concepts of how to hold down costs, i.e., competition; and two, to have a backup engine which could, 3 years coming behind yours, have some modifications which would help in one or more of the missions that these planes are to carry. Then, as was very astutely pointed out, there's always another mission that the plane will be tasked with future generations of young airmen.

General NEWTON. Yes, sir, and I understand that very, very well, being in the training business, which I was in. Our young aviators certainly will put airplanes through the paces. However, let's take the F–22, for instance. We put them through their paces, that engine, that aircraft. All of that met all of those requirements. I certainly wouldn't suggest, and I don't think any of us can suggest that as we look into the future, there will not be some event that causes us concern. I think it happens on every air system, and it certainly happens on every propulsion system.

But the way you design the engine, and the way you get the maturity and confidence in it, it allows you the opportunity to do the risk assessment and make a decision, even at the command level, that'll allow you to continue to operate the aircraft. We were talking with reference to readiness and capability earlier, and we were talking about how we stand down fleets.

If you take a look back at the history, though, and look across large fleets of airplanes—and let's use the F–16 and the F–15—across the entire fleet, I think you will find that we have never grounded the entire fleet. On smaller fleets, we would certainly probably stand those down, and that's a commando's call so that we can make the decision prudently so that you can ensure that you don't lose an airplane, lose a pilot—those kinds of things.

I would also go back to a point that Mr. Chênevert made, and that is the relationship which we have with our Service partners as we are developing systems today and the way that we are able to drive down cost with various cost models, and both of these new airplanes have that—on the F–22 and on the JSF. Pratt & Whitney is meeting that cost on both of those systems today, and I see those as the kinds of tools that are so different from years ago where we wouldn't have competition after the acquisition process, and this is truly what helps you to drive down costs.

Chairman WARNER. Your testimony is very valued, and I am in no position to match my modest career against yours in aviation. As a matter of fact, I didn't have a career to speak of at all in aviation. I was just a ground officer that hung around, and I always admired those who were behind the controls. So, I respect your views, but this decision is driven by one thing—money. I watched these admirals, and I've had a little experience with the good old Navy, and I saw them—the body language. They were coming along with that program office, and they were consulting with you folks. All of a sudden, a rollout of the QDR process beheaded them.

That's as simple as that. Like good officers, they stood back and saluted, and that was the end of it.

But Congress has a voice in this thing. I'm going to task you, the GE/Rolls teams, to come back, and it seems to me this case is hanging on the balance of what can be achieved in 1 more year to eliminate the risks associated with not only competition and the engineering risks. Certainly, the first flight is an important milestone. It seems to me that $400 million is a large sum of money, but it's very small in comparison to the magnitude of this program. Also, it seems to me that it would give the partners—I'm not all together sold on just how you all would treat it in this management. I thought you had a voice in it. Did you feel you had a voice in decisions of this magnitude?

Mr. GUYETTE. No, sir.

Chairman WARNER. You didn't have a voice.

Mr. GUYETTE. We had zero——

Chairman WARNER. Let's go back and stop the negatives. Tell me, how do you feel about the consultation process?

Mr. GUYETTE. It was nonexistent, Mr. Chairman. There was no consultation.

Chairman WARNER. Did you anticipate that a decision of this magnitude would have involved a consultation process?

Mr. GUYETTE. Yes, we would have, Mr. Chairman. In fact, we requested to meet with Secretary England, and we were unable to get an appointment.

Chairman WARNER. Any comments further on that, Mr. Donnelly?

Mr. DONNELLY. No, I think that's accurate. There were indications—we certainly heard that these discussions were underway, and we made numerous requests to meet with numerous officials within the Government and were denied any attempts at having such a meeting with the DOD.

Chairman WARNER. Very well, gentlemen. I thank you all. Yes, General?

General NEWTON. I'm sorry, Mr. Chairman. Senator Lieberman mentioned the Pilling study. There are a few pages in there that reference the Great Engine War, and I would if at all possible, I'd like to have that in the record for my testimony.

General NEWTON. Thank you very much.

[The information referred to follows:]

"Competition in Defense Procurement," by Donald L. Pilling; Brookings Institution Press 1989; 62 pp. is retained in committee files.

Mr. DONNELLY. If we're going to put things in the record in that regard I think it'd be very interesting to note that even Pratt & Whitney has publicly disclosed that they believe that there was $3 billion saved in that Great Engine War as a result of the competition. [Laughter.]

I'm happy to enter that into the record as well.

Chairman WARNER. The record stays open until March 17. All right. Thank you, gentlemen. The hearing is adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JOHN WARNER

F404 ENGINE COMPETITION

1. Senator WARNER. Secretary England, both you and the United Technologies Corporation witnesses on the industry panel cited the F/A–18 program as a successful, non-competitive sole-source engine program. Didn't the Navy, in fact, conduct a leader-follower, build-to-print, second source engine competition for F404 production engines for the F/A–18 program?

Secretary ENGLAND. It is inaccurate to cite to the F/A–18 program's F404 engines as an example of a successful, non-competitive sole-source engine program, because as you have correctly pointed out, several F404 production year buys were competed between the original and a second source.

The F404 engine was initially procured via a sole-source contract with General Electric (GE). In the mid-1980s, the Navy established a second-source for the F404 engine based upon projected increased F404 engine requirements and a belief that competition would drive down overall F404 program costs. After Pratt & Whitney (P&W) opened an F404 production line to manufacture an F404 engine identical to GEs, the Navy split the award of its production requirements for fiscal years 1988 and 1989 between the two companies. Only a few years after the program was initiated, projected F404 quantities were reduced to the point that maintaining two sources was no longer deemed viable. In 1989, the Department competitively awarded 100 percent of its fiscal year 1990 through fiscal year 1995 F404 requirements to GE, effectively ending the second source program at P&W.

Rather than being an example of a successful sole-source program, we believe that the history of the F404 engine program highlights some of the risks inherent with dual sourcing strategies. Successful dual sourcing requires long-term commitments and/or large production quantities in order to achieve savings and maintain the long-term viability of two production sources.

2. Senator WARNER. Secretary England, didn't P&W produce over 200 F404 engines before the Navy terminated the program for cause due to procurement improprieties?

Secretary ENGLAND. P&W produced a total of 215 F404 engines before the Navy ended the F404 dual-source program, see response to Question 1. The P&W F404 engine program was not terminated for cause due to procurement improprieties.

3. Senator WARNER. Secretary England, didn't the program get caught up in the so-called "Ill Wind" scandal?

Secretary ENGLAND. Many defense programs were caught up in the Ill Wind investigation, including the F404 program, due to the involvement of the former Assistant Secretary of the Navy for Research and Development, Melvyn R. Paisley.

4. Senator WARNER. Secretary England, wasn't there a large settlement paid by P&W?

Secretary ENGLAND. United Technologies Corporation entered into a plea agreement with the Government in 1992 in which the corporation agreed to pay a criminal fine of $2 million relating to conduct of its P&W division as well as its wholly owned subsidiary, Norden Systems, Inc. By the terms of this agreement, United Technologies Corporation also paid civil claims in the amount of $2.5 million and reimbursed investigative costs in the amount of $1.5 million.

5. Senator WARNER. Secretary England, didn't people go to jail?

Secretary ENGLAND. Yes, former Assistant Secretary of the Navy Melvyn R. Paisley was sentenced to prison.

6. Senator WARNER. Secretary England, wasn't there a subsequent counter-claim filed by P&W challenging the Navy's termination of the program?

Secretary ENGLAND. P&W filed claims with the Armed Services Board of Contract Appeals on the grounds that the Government prematurely ended its dual source F404 engine program.

7. Senator WARNER. Secretary England, would you please provide a detailed history and chronology of these events, including the amounts paid by P&W and the Navy to settle these claims?

Secretary ENGLAND. A detailed history and chronology of events related to the dual source F404 engine program can be found in Administrative Judge Peter D. Ting's decision in United Technologies Corp., Pratt & Whitney Group, Government

Engines and Space Propulsion, ASBCA NO. 46880, 97–1 BCA 28818 (February 21, 1997), provided as attachment (1).

The Government paid P&W a total of approximately $150 million in settlement of all F404 contract claims.

Attachment: (1) Chronology of Events, F404 Engine Program

Westlaw.

ASBCA

Appeals of United Technologies Corporation Pratt & Whitney Group, Government Engines and Space Propulsion

Under Contract No. N00019-85-C-0052

Under COntract No. N00019-85-C-0144

Under Contract No. N00019-87-C-0045

February 21, 1997

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OPINION BY ADMINISTRATIVE JUDGE TING

United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Propulsion ("Pratt and Whitney" or "P&W") entered into a contractual business arrangement with the Naval Air Systems Command ("the Navy" or "NAVAIR") to become a dual source producer of the F404 engine. The terms of the agreement material to these appeals were embodied in a negotiated contract clause known as the "Investment Incentive" clause. Pratt and Whitney contends that the Navy breached this clause when it awarded all of its fiscal years 1990 through 1992 F404 engine requirements to its other source, General Electric Company (GE), and thus prematurely ended P&W's participation as a dual source. Pratt and Whitney also contends that the Navy breached its contractual obligations in inappropriately definitizing its FY87 contract (the 0144 Contract) and in pricing the FY88 contract (the 0045 Contract).

Depending on the theory of recovery, P&W's certified claim sought damages between $274 and $389 million. The contracting officer failed to issue a decision on the claim. Pratt and Whitney appealed pursuant to Section 606(c)(5) of the Contract Disputes Act, 41 U.S.C. § 605(c)(5). We heard the appeal, including all protective appeals, on issues of entitlement only.

FINDINGS OF FACT

I. Establishment Of The F404 Engine Second Source Program

1. The F404-GE-400 ("the F404 engine") is a jet engine used primarily in the Navy's F/A-18 fighter/attack (Hornet) aircraft. The carrier-based F/A-18 is powered by two F404 turbofan engines (R4, tab 389). General Electric Company ("GE") developed the engine under a government contract in the early 1970's. From the mid-1970's until 1985, GE was the sole source producer of the F404 engine. (Tr. 3/60, 4/62, 18/241; R4, tab 98)

2. Because of the constraints of space, it was not feasible to maintain more than one kind of engine aboard aircraft carriers (tr. 4/9). The modular construction of the F404 engines allows entire sections to be replaced rapidly (R4, tab 389). Considered the "workhorse" of the Navy's carrier-based aircraft, the Navy expected

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to purchase the F404 engine and its derivatives for the next 20-30 years (tr. 4/10, 61, 6/231).

3. In 1981, John F. Lehman, Jr., became Secretary of the Navy (tr. 4/6). Because of the draw downs in the 1970's, the Navy was making a significant percentage of its procurement on a sole source basis. So that it could afford to expand to a 600-ship Navy, the Navy decided to bring in second sources in a number of its procurement programs to drive down prices through competition. (Tr. 4/6-7, 138) The Navy extended the second source concept to the procurement of ships, aircraft, components, missiles and "every program where we could see long [term] procurement" (tr. 4/8). By mid-1985, NAVAIR alone had 25 dual source programs, and more were being created (R4, tab 145).

4. General Electric, at that time, had sufficient capacity to manufacture all of the Navy's projected F404 engine requirements (tr. 4/133). The Navy however, also had an unrelated mobilization concern. There was a concern that in the event of war, GE alone might not be able to handle a surge in engine requirements. Also, the Navy did not feel comfortable with just one F404 engine supplier for the "backbone of carrier aviation" in the event of strike or sabotage. (Tr. 4/12, 14, 58)

5. Under the then existing sole source arrangement with GE, the Navy felt that GE was charging excessive prices for the F404 engines, spare parts and modules (tr. 4/58-60). GE's profit margin was in excess of 20 percent (tr. 18/242-43). GE was also becoming increasingly less responsive to the Navy's needs (tr. 5/8). In formulating the Navy's second source strategy, Secretary Lehman had initially wanted GE to lower its engine price on a multi-year basis. GE reacted negatively to the Secretary's proposition. (Tr. 4/134)

6. At the same time, Secretary Lehman also discussed the second source idea with the Chief Executive Officer (CEO) of United Technologies Corporation, parent of P&W. According to the Secretary, UTC's CEO was "understandably skeptical that we [the Navy] were simply trying to use Pratt as a stalking horse in our negotiations to get the costs down with G.E. And he was concerned that he not get drawn into a major investment on behalf of Pratt & Whitney that would simply lead to General Electric dropping its prices and the Navy going with General Electric, leaving Pratt with the large expenses and no program." (tr. 4/16-17)

7. There were other reasons for P&W's reluctance to enter into the Navy's F404 Second Source Program. Since P&W was being asked to produce an engine designed by its chief competitor, it was concerned whether it would be able to obtain all the necessary manufacturing information from GE. Since GE had a number of years head start on producing the engine, P&W was concerned about its initial production costs which inevitably would be higher. And, because this was a "top-down" initiative, P&W was concerned too, whether it would receive "support at the working levels." (Tr. 3/9-11, 5/9) There was, indeed opposition within NAVAIR as well as DoD (tr. 4/14-15). Some thought the second source initiative did not make sense (tr. 4/133); others labeled it as a "dumb idea" (tr. 4/63). For about a year after it was first approached, P&W resisted participation as a second source (tr. 3/9).

8. Secretary Lehman testified that he told UTC's CEO that the Navy was committed to standardizing the F404 engine [FN1], and that while the Navy "would not pay for his cost of entry," it would let P&W amortize its start-up and tooling costs on the price of the engines. He testified:

"Q. And were you offering him a long term opportunity in this 30 year market? A. Yes, I told him that we would commit to a long enough period to keep all of the costs and we would guarantee we would keep him in the business assuming he kept, performed in a fair and reasonable manner and gave best efforts to the process."

(Tr. 4/18) The Secretary also conveyed to UTC's CEO that:

". . . if he took the risk of investing his company money of a very material size to get into this business, and he performed in a fair and reasonable fashion, then we would commit to keep the competition going long enough for him to get his

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investment back."

(Tr. 4/21)

9. At the time of the F404 engine second source initiative, Arthur E. Wegner was president of Pratt & Whitney Aircraft (tr. 5/6). He testified that the specific incentive Secretary Lehman offered P&W to become the second source was:

". . . an opportunity for us to participate over the life of the 404 Program not only in the production of the engine, but also in subsequent design of upgrades or derivatives . . . . So this was not a one-year or a two-year or a five-year program, it was a program that he was offering to us through the life of that 404."

(Tr. 5/13)

10. On 19 September 1984, Secretary Lehman issued the following memorandum to the Chief of Naval Operations:

"I have determined that there is a requirement to develop a competitive second production source for the F404-GE-400 engine. The extensive use of the F404 engine in current tactical aircraft and the potential for its use in future aircraft dictate the need to establish a second source for mobilization base and competitive acquisition considerations. The sooner the second source is qualified the greater the benefit.

The fleet operational performance demonstrated by the F404-GE-400 engine has been outstanding when measured against any standard. Furthermore, the logistic support elements are in place and are functioning smoothly. As a result, there is no requirement to improve or replace the F404 but rather to reproduce it to the same quality standards at a second manufacturing facility. Thus, the goal of the acquisition strategy for the F404 second source should be for the new manufacturer to produce an exact copy of the F404-GE-400.

In order to achieve that goal economically, the F404 second sourcing plan must maximize transfer of F404-GE-400 manufacturing technology from General Electric to the second source in minimum time, at minimum cost to the Navy and with minimum risk. The following guidance is provided to assure those criteria are met:

1. To assure design fidelity, General Electric should be required to transfer its manufacturing technology to the second source to the maximum extent.

2. Pratt and Whitney Aircraft should be established as the second source of F404 engines. Pratt and Whitney is the only domestic engine manufacturer other than General Electric, with extensive, current experience in the design and rate production of marinized, high-performance, augmented, turbofan engines. . . .

3. To keep this vital supplier available in the event of a national emergency and to minimize time, risk and cost to satisfy this mobilization requirement, processing of a RAN D&F to authorize negotiation with Pratt and Whitney should be initiated.

4. A detailed plan of action and milestone (POA&M) for rapidly developing and qualifying an F404 engine second source should be prepared. The POA&M should assume an FY 85 start, should be structured to minimize government costs in FY85 and FY86 and should address acquisition strategy including appropriate contractual incentives.

5. General Electric and Pratt and Whitney should be notified of the Navy plan to develop a second source for the F404 engine. They should participate to the maximum extent in structuring the second sourcing requirements and plans. An appropriate Memorandum of Understanding should be established between the Navy and the two companies to achieve this result."

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(R4, tab 20)

11. To implement the F404 Second Source Program, Secretary Lehman designated Vice Admiral J.B. Busey (Admiral Busey), Commander of NAVAIR at that time, to be the Navy's "point man" (tr. 3/24-25). Pratt and Whitney appointed its Vice President in charge of Government Engine Business, William C. Missimer, Jr., as its "point man" for making the "initial business arrangement and program structure" between the Navy and P&W (tr. 3/6-7).

12. By letter dated 27 September 1984, Admiral Busey advised P&W that P&W "will be established as the second source." Pratt & Whitney was requested to participate in an initial planning session scheduled for 1 October 1984. (R4, tab 2204)

13. At the 1 October 1984 meeting. P&W advised the Navy that successful qualification as the second source would depend upon access to all of the engine information from GE (tr. 3/16), that P&W needed to produce 100 F404 engines "in order to close the gap on General Electric," and that there must be a minimum sustaining production rate each year to continue as a production source. Five engines a month or 30 percent of the annual procurement was mentioned as the minimum sustaining production rate. (Tr. 3/16) Pratt & Whitney also told the Navy that while it would warrant the engine for materials and workmanship, it would not warrant engine performance since it was GE's design (tr. 3/17).

14. The Navy met with GE on 2 October 1984. General Electric was "shocked, very emotional . . . [and] reacted with anger" at the Second Source initiative. It refused to participate in a "lead/follow" arrangement whereby it would share F404 information with P&W and help P&W to a point where it could produce the F404 engine. Nor was it willing to license P&W to manufacture the engine. (Tr. 6/263-64, 11/47) It later took the position that it would not cooperate directly with P&W but would provide the Navy "any assistance that we [the Navy] paid for . . .[and] we [the Navy] were going to have to pay for everything that we got from them" (tr. 6/263). In particular, GE was unwilling to give up any drawings containing what it believed to be proprietary information. The Navy was left with its least favored option of effecting a data package transfer from GE (tr. 6/263-64). A Navy memorandum to Secretary Lehman stated that GE presented "a posture of reluctant and sometimes adversarial cooperation" (R4, tab 2205).

15. On 29 October 1984, the Chief of Naval Material approved a Request for Authority to Negotiate/Determination and Findings (RAN/D&F) to negotiate pursuant to 10 U.S.C. § 2304(a)(16) (national defense and industrial mobilization) the following contracts with P&W without formal advertising:

"(1) A no cost supply contract to P&W under Phase 0 providing an engine, assembly/disassembly tooling and technical data to allow P&W to study the F404 engines[,] (2) a second contract for long lead time funding to procure one hundred and two (102) engines or such quantities as subsequently determined by the Secretary of the Navy and (3) definitization of said contract."

(R4, tab 36) The Navy estimated that $256 million in then-year dollars (TY $) would be required to definitize the Advance Acquisition Contract for "the lot production of 102 engines" (R4, tab 36).

16. The Navy Technical Data Package as it existed at that time was outdated, incomplete and illegible; it was, therefore, not adequate for P&W to manufacture the F404 engine without validation (tr. 4/172, 7/40, 18/216). On 5 November 1984, the Navy entered into Contract No. N00019-85-C-0052 (the "data validation contract" or the "0052 contract") with P&W. Under this contract, P&W was to validate:

"a Government Furnished Technical Data Package for the F404-GE-400 engine, develop a program plan and submit a proposal to the Navy for fabricating, delivering, testing and qualifying of F404-GE-400 engines produced by Pratt and Whitney Aircraft [conforming to certain specification and drawings] . . . ."

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(R4, tab 2181) The data validation contract was entered into at no cost to the Navy. According to P&W, it simply "wanted to be cooperative with the Navy," and expected ultimately to recover the costs through its overhead, G&A or profit in subsequent F404 contracts. (Tr. 3/23-24)

17. During a telephone discussion held on 22 December 1984 with Admiral Busey, Mr. Missimer expressed his concern with regard to the fate of the Second Source Program if Secretary Lehman, its staunch supporter, were to leave office. Admiral Busey was told that P&W would want protection from program cancellation, and that such protection would be a "deal breaker" for P&W. This meant that this was a point over which P&W "can't give" and would not compromise. (Tr. 3/26; R4, tab 51)

18. At a NAVAIR/GE/P&W meeting held on 3 January 1985, the Navy took the position that P&W must "carry up front costs to qualification and then recoup these espenses [sic] in production." Pratt & Whitney expressed its willingness to "carry the cost of fabrication tooling, inspection gages [sic], substantiation test and engineering manpower." It insisted, however, that it would require "contractual protection against program cancellation." (Tr. 3/29; R4, tab 54)

19. By mid-January, 1985, NAVAIR had developed a Plan of Action and Milestones for the F404 engine Second Source Program. In a memorandum dated 15 January 1985 to Secretary Lehman, Admiral Busey set out NAVAIR's strategy with P&W:

". . . In return for P&W'S investment and support for the program the Navy will allow P&W to compete for a portion of the F404 business annually and to amortize their investment. The competition will be structured to split each years's buy between the two sources, subject to both preparing a fair and reasonable price and congressional authorization and appropriations. The quantity of engines guaranteed to each manufacturer will be sufficient to maintain a minimum sustaining rate for mobilization considerations at two sources. . . .

P&W will be required to capitalize/amortize all tooling, test equipment, engineering, and other start-up costs. The Navy will provide appropriate contract clause(s) which will protect P&W's investment in the event of program cancellation. This clause will be written in accordance with the appropriate provisions of the Federal Acquisition Regulations (FAR) and is subject to the Navy securing proper approvals from higher authority as mentioned above."

(R4, tab 2219)

20. To implement NAVAIR's Plan of Action, Admiral Busey advised both GE and P&W by letter dated 18 January 1985:

". . . To permit P&W to demonstrate their rate production capability and to smoothly transition to a dual source environment, we plan to noncompetitively procure two fabrication demonstrator engines and ten pilot production engines from P&W, in addition to our existing requirement from GE in fiscal year (FY) 1985 and FY 1986. We will noncompetitively split the FY 1987 F404 procurement between contractors, and then competitively split all awards beginning with FY 1988 procurement. The Navy will not accept a head-to-head competition until this rate production demonstration has been successfully completed."

(R4, tab 65)

21. In addition to the 2 demonstrators and the 10 pilot F404 engines, NAVAIR would later decide to order from P&W 90 more engines to enable it to demonstrate its rate production capability. These 90 engines would otherwise have been procured sole source from GE as a part of the Navy's FY87 requirement. (Tr. 3/32-33)

22. As reflected in the Navy's 31 January 1985 status report, by the end of January 1985, P&W had "agreed to carry all up-front costs including tooling, test

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equipment and engineering manpower." It wanted recoupment of its tooling investment in 2 years, over the 102 engines to be procured non-competitively in 1985. As to this point, there was no agreement. Still unresolved was P&W's insistence on program cancellation protection. (Tr. 3/35-36; R4, tab 71)

23. On 4 February 1985, the president of P&W (Wegner) called Secretary Lehman's office to stress P&W's position on program cancellation. The Navy's memorandum on the call stated:

"3. Mr. Wegner then stressed that there was one final condition necessary for Pratt to proceed. . . . This is to cover the possibility that Pratt will be proceeding properly with the program and the Navy will choose to terminate for reasons that are beyond Pratt's control. . . . Pratt will assume the risk of their ability to perform satisfactorily and wants the Navy to assume the risk of a unilateral termination on the Navy's part."

(R4, tab 2225; tr. 5/17)

24. Since the Navy had not budgeted for the F404 Second Source Program, finding a way to fund the program became a problem (tr. 17/56). After months of exploring alternatives, Navy officials internally agreed to the following approaches on 11 February 1985:

. "The Navy will not provide any up-front funding to P&W for tooling, test equipment, substantiation costs, etc.

. There will be no program cancellation guarantees. . . .

. Termination liability funding to cover long lead procurement of engine materials and hardware will be provided to P&W just as it is to GE.

. . . . P&W must bear the expense of becoming a certified production source for the F404-GE-400.

. In recognition of the contractor's investment, the Navy will structure a competitive scenario which will guarantee a certain percent of the annual F404 business to P&W for a period of time following qualification. The exact percentage is negotiable as is the length of time P&W's market share is guaranteed."

(R4, tab 2228)

25. Program cancellation guarantees is sometimes confused with termination liability. "Termination liability" pertained to the Navy's liability stemming from parts and materials a contractor purchased for an existing contract [FN2]. The Navy was agreeable to reimbursing P&W such costs in the event of program cancellation. (Tr. 17/30) Because of the sizeable initial investments it would have to make to become a second source for the F404 engine, P&W wanted a Navy guarantee that it would recoup its investments from future engine contracts. The Navy's unwillingness to provide P&W "program cancellation guarantees" stemmed from its inability to obligate funds without Congress first appropriating them [FN3]. (see R4, tab 2612) Navy officials apparently felt at that time that it could guarantee P&W a percentage of the market share if there were a contract. The Navy's F404 Second Source Program Manager testified:

"We could not guarantee that there would be a future contract. What we were guaranteeing is that if there . . . were a future contract, they would receive a percentage."

(Tr. 17/77)

26. On 19 February 1985, Mr. Missimer and other P&W representatives met with high-level Navy officials, among them, Admiral Busey, Assistant Secretary of the Navy

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(for Research & Engineering), Melvyn R. Paisley (ASN Paisley), and his deputy, William J. Schaefer, Jr. At this meeting, the parties discussed a 30/30/40 market share split following production by P&W of the 102 engines. This meant that P&W and GE would each get 30 percent of the annual F404 engine buy with the remaining 40 percent to be awarded on the basis of "evaluation of the proposals." [FN4] (Tr. 3/48; R4, tabs 80, 2233) With respect to tooling recoupment, the Navy wanted a 5-year period as opposed to the 2-year period proposed by P&W. Pratt & Whitney was willing to consider a 5-year front-loaded recoupment schedule to reduce carrying costs (R4, tabs 80, 2233). To ensure reasonable pricing, ASN Paisley proposed that P&W's engine prices be tied to GE prices. This idea was rejected by P&W out of concern that GE might bid in such a way as to force P&W out of the market and, out of anti-trust concerns as well. (Tr. 3/49, 6/154; R4, tab 2233) The issue of program cancellation protection was still not resolved at this meeting. As to this issue, P&W took the position that:

"Because of the unique nature of this program and its dependence on USN top management for successful launching, P&W views termination [program cancellation] protection as essential."

(R4, tab 80) Mr. Missimer explained the reason cancellation protection was a "deal breaker" for P&W:

"we were very concerned that a change in leadership at the top of the Navy would lead to a new set of policies, that dual sourcing would fall out of favor, and that we would be left holding the bag on the big up-front expenses."

(Tr. 3/44)

27. Pratt & Whitney submitted its initial proposal for the F404 Second Source Program on 1 March 1985. The proposal stipulated that any contract must contain provisions authorizing 100 percent recoupment of nonrecurring production tooling by the time P&W was a "qualified" producer of the F404 engine, and that P&W must be indemnified against program cancellation. (R4, tab 100) As of 8 March 1985, NAVAIR policy, as articulated by Admiral Busey, was that "[t]here will be no Navy funds provided for program cancellation." Funds for the qualification and pilot production engines were to come out of the F/A-18 Program. (R4, tab 95; tr. 7/19). Navy officials told P&W on 19 March 1985 that "no program cancellation clause would be allowed," and that P&W should "make the investment necessary to gain [the F404 engine] business" because "the risk of cancellation by the Navy was much less than the risks P&W faced in the commercial marketplace" (R4, tab 101).

28. In response to P&W's proposal, the Navy PCO, Paul M. Dawson, wrote in his 18 March 1985 letter:

"2. . . . Your requirement for indemnification equates to an unfunded commitment , is a violation of the Anti-Deficiency Act, and conflicts with the direction of [Secretary Lehman's 19 September 1984 direction] . I cannot commit the Government to an obligation for which no funds exist."

The PCO then set out his proposal for special tooling amortization:

"a. P&W will pay for any special tooling (ST) required to deliver the engines specified . . . and any other ST required by you to produce at least 70% of any FY engine procurement.

b. The costs of the ST can be recovered only after qualification and only as amortized costs over engines delivered under competitive conditions.

c. P&W is guaranteed a certain quantity of each FY requirement during the amortization period.

d. There will be no cancellation guarantees."

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PCO Dawson also furnished P&W a sample "Capital Incentive Investment" clause used in the "Vertical Launch System" and suggested that P&W consider its use if his other proposals were unacceptable. (R4, tab 100)

29. Because of the position the PCO took, another high-level meeting became necessary "to get the program on track." A meeting between Admiral Busey and Mr. Missimer was held on 27 March 1985. The issues to be resolved included program cancellation protection and tooling payback period. (Tr. 3/55-56)

30. At the 27 March 1985 meeting, Admiral Busey rejected as "out of the question" any "explicit unconditional cancellation guarantee," and the idea of allowing P&W a "higher-than-normal" profit rate (tr. 19/157). When P&W took the position that the program could not go forward under those circumstances, Admiral Busey proposed two alternatives. The first alternative involved no cancellation protection but would include in the first as well as subsequent F404 engine contracts with P&W a clause providing a limited or conditional "guarantee . . . [for] at least 30 percent of the annual procurement of F-404 engines," "if Congress appropriates the funds, if the Navy buys any F-404 engines in a given year, if Pratt gets and remains qualified." (Tr. 3/59-60, 18/91-92, 19/162) The second alternative would include in the parties' contract a clause similar to the one used in the "Vertical Launch System," which would offer P&W some measure of cancellation protection (tr. 18/91-92).

31. According to Commander C.D. Thompson (F404 Second Source Program Manager) who took detailed notes at the meeting, at no time did Admiral Busey agree to reimburse P&W all its non-recurring expenses should the F404 Second Source Program be cancelled (tr. 17/137-38; R4, tab 2251). Mr. L.A. Snead, P&W's Vice President of Navy Programs, who took detailed notes at the 27 March 1985 meeting, confirmed this understanding:

. "Busey - Write a clause into the contract. - A minimum of 30% of the 404 production for five years. - Allow you to recoup tooling over five years. - P&W also recoups tooling cost if we don't procure 30%.

. Missimer - Good - I need that.

. O'Connor

- We want to go with that option.

- Better way to do it."

(Emphasis added) (R4, tab 105 at 7) In light of his strong view to the contrary, we find that Admiral Busey would not have offered, much less have agreed to reimburse P&W "what it had spent" (tr. 19/166, Massey) or all its "up front costs" (R4, tab 104, Giesler) in the event of program cancellation, as some witnesses have alleged (tr. 21/96-97).

32. At the 27 March 1985 meeting, P&W acceded to the Navy's insistence on a 5-year tooling recoupment period; but it still wanted recoupment to be front-loaded (tr. 3/68). To incentivize P&W to carry the up-front costs, Admiral Busey proposed awarding P&W an incentive fee if P&W qualified its version of the F404 engine on schedule (tr. 3/67, 17/138-39).

33. The Navy's memorandum of the meeting shows that Admiral Busey stated that the Navy would draft a plan which, among other things, "would contain a clause guaranteeing P&W 30% of the F404 buy for 5 years and allowing recoupment of their tooling investment." (R4, tab 106; tr. 6/119-20) In addition to serving as a recoupment schedule for the Special Tooling, the 5-year period served another purpose. It gave P&W time to come down its learning curve, and thereby gave it a realistic chance to get into the Program and to compete over the long term. (Tr. 20/164-65) We find that it was both parties' expectation that the "real pay-off" of the Second Source Program was "downstream" when there was head-to-head competition between GE and P&W. As of 27 March 1985, P&W had already spent about $2 million on

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the second source initiative. It estimated that by mid-1987, it would have invested $70 million in the F404 Second Source Program. (R4, tab 106) To induce P&W to accept the Navy's proposal, Admiral Busey represented that 2,800 F404 engines remained to be procured after 1989. He told P&W that at 30 percent of the total anticipated buy, the Navy would "guarantee you what should be worth $1 B[billion] worth of business" (R4, tab 105 at 6; tab 106).

34. Mr. Missimer characterized the 27 March 1985 meeting with Admiral Busey as one "in which the deal was struck, that we had finally reached agreement on the basic contract terms and arrangements to proceed with the program" (tr. 3/72). We find that there was a "hand shake" agreement between the principal representatives of the Navy and P&W. We agree with the observation that while "there were still a lot of details that had to be negotiated," the "framework" of the parties' agreement had been struck at "a very high level" for each party (tr. 20/64-65). We find that both principals understood that their respective managements, i.e., the Secretary of the Navy, and higher level P&W or UTC corporate officers could still veto the agreement (tr. 19/161, 20/65). And, as subsequent events showed, neither management disapproved the "hand shake" agreement reached on 27 March 1987.

35. With respect to the issue of market share, Mr. Missimer came out of the 27 March 1985 meeting with the following understanding:

"I understand that he could give me a clause in the contract, the first contract and all subsequent contracts, which would cover the time period I was concerned about having the clause. A clause that would, if certain events took place, guarantee us during the initial -- the first five years of the program while we were learning and becoming competitive, would give us a guaranteed 30 percent marketshare. And he was willing to put that in the contract."

(Tr. 3/65)

36. With respect to the risk P&W was to assume should the F404 Second Source Program be cancelled, Mr. Missimer came out of the 27 March 1985 meeting with the following understanding:

"We bore the risk that if Congress didn't appropriate the money in any given year and/or the Navy for some reason or another didn't buy F-404s in any given year, that we wouldn't get any business. So, the guarantee didn't include that. We bore the risk of being a good contractor, meaning getting qualified, producing an engine which was equal to or better quality than our competitors, and meeting all the military standards for that. But other contingencies, we would be protected against."

(Tr. 3/72)

37. We find that, as it stood at the conclusion of the 27 March 1985 meeting, in exchange for P&W's agreement to accept less than unconditional and total reimbursement of its start-up investments (program cancellation protection), and to shoulder the non-recurring costs except special tooling, [FN5] the Navy agreed to "guarantee" at least 30 percent of the annual engine procurement for 5 years after P&W qualified its engine. We find that, but for the Navy's guarantee, P&W would not have agreed to give up its demand for total and unconditional program cancellation protection. We find that the only exception to the Navy's "guarantee," as it stood on 27 March 1985, would be an event beyond its control. That event was the lack of Congressional funding, which if it occurred, would have prevented the Navy from buying engines from any source in any fiscal year. We find further that the PCO's concern about unfunded contingent liability was resolved at the meeting with the parties' agreement to condition award of the annual contract upon Congressional appropriation of funds for the Program.

38. Commander Thompson's 10 April 1985 program status report summarized the

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agreement reached at the 27 March 1985 meeting:

"Pratt & Whitney indicates they now accept Navy position on cancellation protection. . . . Their condition for accepting this program are (1) award fee(s), . . . (2) front-loaded tooling reimbursement schedule and (3) guaranteed of 30% of F404 business for 5 years."

(R4, tab 2631)

39. Sometime prior to 10 April 1985, the PCO proposed an "Amortization Of Special Tooling" clause. Paragraph 6 of this clause stated:

"6. The Government agrees to award of the total authorized quantities of engines during each of the five (5) years of amortization authorized by this clause, provided that

(a) An RFP is issued by the Government,

(b) The PCO determines that the price proposed by the Contractor for the is fair and reasonable,

(c) The Contractor is a qualified producer of the engine, and

(d) Sufficient funding is authorized and available.

In case any of these provisions cannot be met, the Government reserves the right to solicit an offer and award a contract for of any FY requirement."

(Emphasis added) (R4, tab 115; tr. 5/133-34)

40. Pratt & Whitney found proposed ¶ 6(a) unacceptable. It was concerned about the Navy's discretion to simply "drop Pratt and Whitney from the program." In keeping with what it understood to be the Navy's long-term commitment, P&W sought to limit the Navy's discretion in this regard. While understanding that it could not force the Navy to buy engines if it was not buying engines from any source, P&W wanted to be a part of the program if the Navy was buying engines from any source. [FN6]

41. Pratt & Whitney also found ¶ 6(b) unacceptable. The F404 Second Source Program, having been established at "much higher levels," P&W did not want to leave it to the PCO's subjective determination as to whether engine prices were fair and reasonable. Pratt & Whitney wanted a "more objective standard." (Tr. 5/139)

42. With regard to ¶ 6(c), P&W did not want to be dropped from the Program for any modifications to the basic F404 engine (tr. 5/140). With regard to ¶ 6(d), P&W was again concerned about leaving it to the sole discretion of the Navy to decide whether funds were "authorized and available." Based on its understanding that its contract would not be enforceable anyway without Congressional appropriations, P&W was willing to accept language "that would put this in the hands of Congress." Pratt & Whitney explained that:

"it would be something outside of the Navy. If the Navy [sic] [should be "Congress"] wanted to kill the F-18 program and not have it going forward, that was a risk we were willing to take."

(Tr. 5/141-42)

43. Pratt & Whitney counter-proposed the following for ¶ 6:

"6. The Government agrees to award a minimum of thirty percent (30%) of the total authorized annual F404 engine production requirements to the Contractor for each of the five (5) years set forth in paragraph 4(a), provided that:

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(i) the Government procures F404 engines from any source; and

(ii) the Contractor has been qualified to produce the F404 engine."

(Emphasis added) (R4, tab 117)

44. To avoid any future argument with respect to the Navy's 30 percent/5-year obligation in the event production contracts subsequent to the first one failed to include an "Amortization Of Special Tooling" clause, P&W proposed a "repeater" clause:

"10. The parties agree to include this clause, and the payment schedules defined herein, in any subsequent production contract for F404 engines including the contract covering the last Fiscal year [5th production year: FY92] included in paragraph 4(a)."

(R4, tab 117; tr. 5/155-56)

45. The efforts in drafting a contract clause (for what later become the sole source or the 0144 Contract) setting forth the business arrangements reached gradually over numerous high-level meetings began in March, 1985 (tr. 5/121). Each side was represented by a drafting team. (tr. 5/120). Since the members of the drafting team did not attend all of the meetings, they did not necessarily have first hand knowledge of the agreements reached. NAVAIR's counsel described herself as a "small fish" with "a lot of elephants trampling all over the place" (tr. 6/26) The PCO testified that "we were trying to implement what Secretary Lehman wanted in that clause . . . that's for sure" (tr. 7/156).

46. The Navy would later argue that the written language of the contract alone reflects the intentions of the parties, and oral discussions between the parties' "point men" -- Admiral Busey and Mr. Missimer were irrelevant. In this regard, Admiral Busey testified that the verbal discussions he had with Mr. Missimer "were intended to craft the structure of a program" (tr. 4/151). He also testified that:

". . . , the business arrangements that were discussed in the many meetings and conversations that I had with others including Pratt & Whitney folks, did get . . . crafted into legally binding or legally appropriate contract language."

(Tr. 4/152)

47. With respect to whether it was he or those who worked for him that negotiated the contract terms, he testified:

". . . , it was my practice that whatever agreements and terms were verbalized in meetings I had with Contractors were then crafted by my experts -- my legal experts and my contract experts -- into proper contract language."

(Tr. 4/153)

48. Mr. Missimer described Admiral Busey's and his roles at their numerous meetings:

"Busey and I were in charge of bringing this . . . to a meeting of the minds between the two organizations. . . . we were trying to develop the elements of the deal that we expected to be carried out by the respective teams."

(Tr. 3/216-17)

49. There is no doubt that the F404 Second Source Program was Secretary Lehman's brainchild, and those who worked for him were going to get it done. Commander C.D. Thompson, who later became its Program Manager, and was a member of the Navy

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drafting team described his first encounter with the program:

"Q. What was Admiral Wilkinson 's position at the time?"

A. He was the deputy commander, Admiral Busey's deputy. And I went over and I talked with him. He listened. He understood. And then he told me that I didn't understand, that -- he said that nobody asked me if this was a good idea. What they asked me was could it be done, and if so, how. And that's the way I was to respond. And so, from that point forward that's what I did. After August of "84, I was always working on how to get it done and it didn't really matter much any more how much it was going to cost or whether or not there was a pay back."

(Tr. 6/255)

50. The parties' drafting team met for a 3-day session on 16-18 April 1985 (tr. 5/135). To resolve the issue of pricing engines, the Navy suggested using FAR 15.800 "as the basis for determining fair and reasonable" (tr. 5/149). While FAR 15.800 did not define "fair and reasonable," it did use the term.

51. At the conclusion of the April drafting sessions, the drafting teams had reached agreement on a number of provisions, including ¶ 10, the "repeater" clause. Agreement was reached on ¶ 4(a) relating to the Navy's payment of Special Tooling except with respect to the percentages of annual payment over 5 years. Paragraphs 7 and 8, relating to "the schedule and amount of payment for accelerating the substantiation program" remained "open." (Tr. 5/146; R4, tabs 120, 123)

52. The drafting teams reached agreement on ¶ 6 which was renumbered ¶ 5:

"5. Of the total annual F404 engine production requirements for which Congress has authorized and appropriated sufficient funds, the Government agrees to award a minimum of thirty percent (30%) to Contractor for each of the five (5) years set forth in paragraph 4(a), provided that:

(i) the Government procures F404 engines from any source; and

(ii) the Contractor has been qualified to produce the F404 engine; and

(iii) the price proposed by the Contractor meets the requirements of Federal Acquisition Regulations, Part 15.8."

(Emphasis added) (R4, tabs 120, 123; tr. 19/229) The Navy's Deputy Counsel, Office of the General Counsel, reviewed this version (16 April 1985) of the draft Amortization of Special Tooling clause and opined that "as such [the clause] is not legally objectionable from the perspective of fiscal law" (R4, tab 134).

53. In a meeting held on 18 April 1985 between Admiral Busey and Mr. Missimer, further progress was made. Subject to approval by Secretary Lehman, Admiral Busey agreed that the Navy would award P&W an incentive fee of $5 million if P&W qualified its F404 engine on time. (Tr. 3/77-78, 219-20; R4, tab 125)

54. At the conclusion of the 18 April 1985 meeting, Admiral Busey released to P&W 84 drawings which had been withheld out of concern for GE. The Navy did not want to release these drawings which contained sensitive information until it was certain that the Second Source Program was going forward. (Tr. 3/80-81)

55. As to the 18 April 1985 meeting, Mr. Missimer recorded in an internal P&W memorandum the next day:

"Yesterday marked a major mile stone for the subject program. The U.S. Navy released to us the sensitive GE data permitting the start of definitive contract action and preparations to build " P&W 404s.

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" The real significance of this event is that it signals commitment on USN and PW's part to conduct the program, as evidence by agreement on all major contract terms and conditions."

(R4, tab 126)

56. After the 18 April 1985 NAVAIR/P&W meeting, Admiral Busey met with Secretary Lehman to update him the progress made. While the Secretary reportedly did not disapprove the program Admiral Busey had negotiated since it "substantially followed his guidance," the Secretary wanted alternatives. Secretary Lehman was said to believe that the Government should buy "aircraft, ships, guns and arms -NOT tools," and he believed that P&W should invest in tools to make a "$100M guaranteed profit program . . . happen." (R4, tab 137). After review of the April 1985 Amortization Of Special Tooling clause, NAVAIR counsel advised the PCO by memorandum dated 15 May 1985:

"The clause presently has no language which allows cancellation of the 30% guaranteed award to P&W due to lessened demand for the engine. If purchases of the F404 engine decline significantly, the commitment to award 30% could create a very expensive program. I suggest adding language that releases us from the terms of the amortization clause if our total buy of F404 engines falls below a certain number in any given year."

(R4, tab 133 at 3) Notwithstanding this advice, the Navy failed to negotiate any quantity protection in its business arrangement with P&W (tr. 19/295).

57. In May 1985, P&W began to hear "rumblings" that there might be problems with the agreed upon Amortization Of Special Tooling clause, that Secretary Lehman did not like the idea of the Government buying tools (tr. 5/169; R4, tab 137). In the meantime, P&W finished its initial review of the "Model Contract N00019-85-C-0144," and by letter dated 31 May 1985 to the PCO, requested certain revisions be made prior to execution by the parties (R4, tab 139).

58. The drafting teams met on 10 June 1985. At this meeting, P&W inquired whether there was a problem with the Amortization Of Special Tooling clause as drafted. P&W received "an ambiguous response which left us somewhat uncomfortable as to whether . . . the tooling clause was going to remain the way it had been negotiated" (tr. 5/172).

59. The parties' drafting teams met again on 17-20 June 1985 (tr. 5/173). At one of these sessions, the Navy presented a totally different Amortization Of Special Tooling clause (tr. 5/174). NAVAIR counsel did not like the term "agrees" and the so-called "shopping list" of conditions which, if satisfied, would obligate the Navy to award 30 percent of the annual F404 engine procurement to P&W for 5 years. NAVAIR counsel apparently viewed such commitment as a "contingent liability" possibly in violation of the Anti-Deficiency Act (tr. 5/188; R4, tab 156). She instructed the PCO to re-draft the Amortization Of Special Tooling clause (tr. 5/219).

60. The Navy's new Amortization Of Special Tooling clause included the following as ¶ 4:

"4. (a) The Government intends to permit the Contractor to compete for the production of all F404 engine models being procured by the Navy, including derivatives or growth versions. Moreover, if the Government awards a contract to the Contractor as described in paragraph 3(a), then that contract shall contain a minimum of thirty percent (30%) of the total annual F404 engine requirements including derivatives or growth versions, for which Congress has authorized and appropriated sufficient funds.

(b) In the event that a contract is not awarded to the Contractor in any one year, the Government shall incur no liabilities in that year for ST costs except for those already contracted for or reimbursed by the Government. In the event that a contract is awarded to the Contractor and subsequently terminated as provided under the Termination for Convenience clause of that contract, the Government shall bear

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termination liability only for that ST included as a line item in that contract, in accordance with paragraph 3(d)."

(Emphasis added) (R4, tab 149) In addition to the above changes, the Navy deleted the "repeater" clause (tr. 5/183).

61. The Navy's new clause was not well received (tr. 5/175). Pratt & Whitney flatly rejected it as "unacceptable" (tr. 5/180). It refused even to discuss the new clause (tr. 7/160). According to P&W's counsel, the Navy "had . . . gone back and taken a position that if they chose not to award us the contract, for whatever reason, they would have absolutely no liability to Pratt and Whitney for any of the costs that we had incurred" (tr. 5/190). Also, P&W observed that, by eliminating the "shopping list" conditions for award, the Navy had "broadened" its disclaimer on its liability for special tooling costs (tr. 7/162-64). Pratt & Whitney's drafting team took the position that the issue of program cancellation protection had been resolved in April, 1985, and it would not "move off" its position, and the impasse "had to be resolved at a higher level within the Government [and] Pratt and Whitney" (tr. 5/191).

62. Another meeting between Admiral Busey and Mr. Missimer was held on 28 June 1985 to resolve the impasse reached between the PCO and P&W's representatives. According to Admiral Peter DeMayo, Assistant Commander for Contracts, NAVAIR, and we find that, as of 28 June 1985, the parties' "agreement was already in place . . . [the meeting] . . . was to clarify what was intended by the agreement, in other words, what did the words really mean" (tr. 21/33-34). At this meeting, Admiral Busey informed Mr. Missimer that, notwithstanding Secretary Lehman's earlier objection to buying tools, the Secretary was persuaded that Admiral Busey should "go through" with the "handshake agreement" he reached with Mr. Missimer on 27 March 1985. (Tr. 3/92)

63. According to the detailed notes taken at the 28 June 1985 meeting, P&W expressed its concern over the Navy's use of the word "intends." Pratt & Whitney reiterated that it would be willing to assume the risk "if there was no money appropriate[d] [by Congress] in any given year, to buy any, 404s" (tr. 3/102). Admiral Busey's comments were contemporaneously recorded as follows:

"B - Don't Think we will settle the languageissue

- Deal struck before

- You must have ability to recover tooling or you will have corp. fin. probs

- Then we must get with our lawyers and use word intend strong enough to give assurance"

(R4, tab 160; tr. 3/226, 19/178)

64. At the conclusion of the meeting, a P&W representative explained that one concern P&W had with the word "intend" was the uncertainties that could arise from a change in administration. The Navy assured P&W that since it too would have invested $200 million in the F404 Program, it would not easily abandon the program. (R4, tab 160 at 10; tr. 20/92-93, 177)

65. Mr. Missimer left the 28 June 1985 meeting with the understanding that Admiral Busey:

". . . was going back to the original bedrock of the first agreement. That he was directing his people to take off the table the clause that brought us to the meeting and replace it with one much, much closer, if not identical to the original one we agreed to in the prior meeting."

(Tr. 3/103)

66. Mr. Missimer summarized the business arrangements he struck with the Navy as

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of 28 June 1985 in these words:

"That we had . . . a contract which would cover the first 102 engines, sole source. And in that contract . . . and all subsequent contracts would be a clause that guaranteed us, albeit using the word "intend", a 30 percent marketshare over the first five years . . . provided all four of [the] conditions were met. Namely, [1] that Congress would appropriate the money to buy F- 18s and 404s; (2) that the Navy would buy 404s in any given year; (3) that Pratt gets and remains qualified; (4) that Pratt's prices are fair and reasonable.

Furthermore, that [the] contract would have a clause in it that would set out the schedule for reimbursement of the tooling costs over a five-year period with the first year and the rate . . . per year spelled out in the clause of that contract.

* * *

And that through this arrangement, we would have a break- in period . . . the first 102 engines plus the first five years -- at which to continue to participate in this large volume of engines over a continued period of time, justifying the other investments other than tooling that we made. Meaning that we were in it for the long haul, and that the Navy wanted us in it for the long haul."

(Tr. 3/107-08)

67. Mr. James G. O'Connor, Executive Vice President, a nd later President of P&W's Government Engine Business, was al so at the 28 June 1985 meeting. He remembered Admiral Busey declared at the meeting "a deal is a deal and we have a deal" (tr. 7/67-68). With regard to use of the word "intends" as opposed to "agrees" to award P&W a contract, he remembered the Admiral to have stated that he would instruct the Navy's "contract folks" to "work around the word intends and provide other words that strengthen the agreement and give Pratt the assurance that they'll get 30 percent over the five years" (tr. 7/94). We find that at the 28 June 1985 meeting between Admiral Busey and Mr. Missimer, the Navy agreed to go back to the "Deal struck before," and agreed that its lawyers would find a way to give P&W "assurance" on engine procurement even though it knew that to pass legal scrutiny it would most likely have to use the less definitive word "intends" in crafting contract language. (Tr. 5/192)

68. As a result of the 28 June 1985 meeting, NAVAIR's drafting team was instructed by Admiral Busey to "get back together again and work this out so that we would have a contract by the end of July" (tr. 5/192). The PCO testified that he understood what he was to do was to take the latest version of the Amortization Of Special Tooling clause (R4, tab 149) and revise it so that P&W's concern about writing-off tooling and the Navy's concern about unfunded liability could both be accommodated (tr. 19/257). The parties' drafting teams resumed their work on 2 July 1985 (tr. 19/258).

69. The PCO was apparently unable to "strengthen" the word "intends" as he was instructed to do. He and other Navy officials resorted to get P&W to accept the word "intends" with assurances that what the word really meant was "agrees." Based on the testimony in the record, we find that assurances were given by the PCO, the Navy's F404 Second Source Program Manager, Commander C.D. Thompson (tr. 5/201), as well as NAVAIR's Deputy Command Counsel (tr. 6/62-63), in addition to Admiral Busey. We find that P&W was given no reason to believe that these assurances would not be honored. At hearing, P&W's witness testified that P&W finally acceded to the Navy's insistence only after:

". . . we got assurance from the Government that it did not change the fundamental understanding that we had on the business deal, it was simply a need to change the word to satisfy the legal requirements within the Navy not to use the word "agree" in the contract."

(Tr. 5/200)

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70. Pratt and Whitney's Contract Administrator, a member of its drafting team testified that the PCO told him:

". . . that it was not their [the Navy's] intent not to guarantee Pratt and Whitney a contract, but it was being made for legal reasons and that, as far as I was concerned, I should consider the words to be synonymous, the same. There was a guarantee by the Navy for Pratt and Whitney to get the 30 percent over five years, didn't water it down a bit."

(Tr. 8/161-62)

71. Secretary Lehman explained the business arrangement between the Navy and P&W in these words:

"In order to meet Pratt & Whitney's concerns with the high investment required of them in becoming a second source, the Navy guaranteed to Pratt & Whitney a minimum of 30% of F404 production requirements for five years, beginning with FY-88, as long as its prices were fair and reasonable. This corresponded to the minimum quantity necessary to sustain Pratt & Whitney for this five-year period after which time Pratt & Whitney's prices were expected to fall to levels comparable to General Electric's prices."

(Emphasis added) (R4, tab 453)

72. Based on the evidence in the record, we find that the Navy's insistence in using the word "intends" as opposed to "agrees" in the Investment Incentive clause was based solely on "a legal request to make the change" (tr. 8/161). Based on the evidence in the record, we find that P&W relied on the Navy's assurances that the phrase, "the Government 'intends' to award at least 30 percent of the total annual F404 engine production requirements" as used in what ultimately became the Investment Incentive clause meant that "the Government 'agrees' to award" such requirements. We find that the Navy was aware of and shared P&W's interpretation in this regard prior to entering into the 0144 sole source contract (for 102 engines) with P&W.

73. Discussions in July, 1985, also led to the reinstatement of the "shopping list" -- the preconditions to the Navy's obligations to award 30 percent of its total annual F404 engine procurement for 5 years (tr. 5/245). Reinstatement of the pre-conditions was a compromise between P&W's "need for firm commitment," and the Navy's "inability to grant an absolute guarantee" (tr. 5/195-96). The parties "captured" in the four "shopping list" conditions and Congressional appropriations all of the foreseeable events "that would lead to cancellation" of the Second Source Program (tr. 18/103). Years later at the hearing of this matter, Admiral Busey acknowledged that if these conditions -- which he referred to as "caveats" -- were met, the Navy was obligated to award contracts to P&W (tr. 21/94). Cancellation of the dual source program by a future Secretary of the Navy was not a risk that P&W agreed to accept. That risk belonged to a category of what P&W considered to be "capricious cancellation" that it had "fought from the very start." (Tr. 19/188)

74. Commander Thompson, the F404 Second Source Program Manager and a member of the Navy's drafting team, acknowledged that during drafting of the Investment Incentive clause, both he and the PCO told P&W that if the conditions in the clause were met, the Navy would buy engines from P&W (tr. 6/134).

75. To limit the circumstances under which the Navy could disclaim liability for "any ST costs or other damages," P&W's drafting team managed to limit the possibility of no award of F404 contracts to the 4 "shopping list" pre-conditions and Congressional appropriations ultimately enumerated in ¶ 2 of the Investment Incentive clause. This was accomplished by adding the phrase -- "for any of the above reasons." (R4, tab 182)

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76. Discussions in July 1985, also led the parties to combine the "Production Guarantee" clause [FN7] with the "Amortization Of Special Tooling" clause under a single clause entitled "Investment Incentive" clause" (tr. 6/198; R4, tab 166).

77. The parties' drafting teams reached agreement on the language of the Investment Incentive clause on 12 July 1985 (tr. 4/158, 6/158). Admiral Busey was given a briefing on 22 July 1985. ASN Paisley was given the same briefing the next day (R4, tab 177; tr. 7/123). The following briefing bullet, reflective of the Navy's understanding of its business arrangement it had with P&W, stated:

"NAVY TO AWARD AT LEAST 30% OF F404 BUY TO P&W ANNUALLY FOR 5 YEARS CONTINGENT UPON P&W PROPOSING A FAIR AND REASONABLE PRICE."

(R4, tab 176 at 3) Admiral Busey confirmed at the hearing that this bullet was consistent with his understanding of the Navy's commitment (tr. 4/160).

78. An "Advance Acquisition Contract" is a type of letter contract authorized by law for use in the procurement of long-lead items such as aircraft and engines. Such a contract is awarded a year in advance of the fiscal year in which funds are appropriated and made available for obligation so that delivery of the long-lead items procured can be assured. (Tr. 12/150-51) The parties executed an "Advance Acquisition/Letter Contract" -- Contract No. N00019-85-C-0144 -- on 30 July 1985. The contract required, inter alia, P&W to deliver 2 F404 qualification engines, 10 F404 "installs" (Item 0002 and 0003), and gave the Navy the option to order 90 additional F404 engines (Option Item 0101). By Modification No. P00002 dated 16 December 1985, the Navy exercised its option and ordered the 90 optional F404 production engines under CLIN 0101 (R4, tab 2004). As set out in the Navy's Acquisition Strategy the 90 production engines would be awarded to P&W "to permit [P&W] to ramp up to full production rate in a benign environment" (R4, tab 169). Section I of the contract incorporated by reference certain "checked" Federal Acquisition Regulation (FAR) clauses, among them, the "Termination For Convenience Of The Government (Fixed Price)" (APR 1984), FAR 52.249-2. This clause provided, in part, that "(a) the Government may terminate performance of work under this contract in whole, or . . . in part" (emphasis added). Section H of the contract set out "Special Contract Requirements," i.e., "Clauses Relating Only To This Advance Acquisition/Letter Contract." (R4, tab 2001)

79. Paragraph H-24, "Investment Incentive," provided, in part, as follows:

"1. The Government has determined that it is in the interest of national defense and industrial mobilization to have two manufacturers available for the F404 engine. Therefore, the Contractor may compete for the production of all F404 engine models being procured by the Navy, including derivatives and growth versions[[FN8]] and the Government intends to divide the total F404 procurement in each fiscal year among the qualified sources.

2. As an incentive for the Contractor to invest in this program, the Government intends to award at least 30 percent of the total annual F404 engine production requirements, for which Congress has authorized and appropriated sufficient funds, in each of the contracts awarded to the Contractor as described in para. 5(a) provided that at the time of such award:

(a) the Government procures F404 engines from any source

(b) the Contractor is a qualified producer of the F404

(c) the price proposed by the Contractor meets the requirements of FAR 15.8, and;

(d) NAVAIR has obtained all appropriate approvals required by and the procurement is consistent with applicable laws and regulations[[FN9]]

If no contract is awarded in any one year for any of the above reasons, then the Government shall not be liable for any ST costs or other damages except for ST

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costs already covered by engine contracts contemplated by paragraph 5(a) and awarded to the Contractor."

3. The Contractor shall provide sufficient special tooling to permit the production of at least seventy percent (70%) of any FY F404 engine procurement. Except as provided in this Clause, the Contractor agrees that the cost of this special tooling (ST) is not included in the price of this or any other Government contract and shall not be included in any request for payment under this or any other Government contract.

* * *

5. Reimbursement in accordance with this clause, for the ST described in paragraph 3 shall be as follows:

"(a) The price of the first five fiscal year F404 engine production contracts, excluding advance acquisition contracts, awarded to the Contractor following his qualification as an F404 engine producer in accordance with the provision of this contract, shall include amortized costs for the ST which shall not exceed the following percentages of the total ST costs to be amortized: thirty percent (30%) in the first contract; twenty five percent (25%) in the second contract; twenty percent (20%) in the third contract; fifteen percent (15%) in the fourth contract; and ten percent (10%) in the fifth contract. Reimbursement shall commence with the delivery of engines under the first"

of the five contracts cited above. The Contractor shall invoice the Government in twelve (12) equal monthly installations during each of the five contracts. Reimbursement shall be due thirty days after receipt of invoice.

(b) The total costs, both direct and indirect, to be amortized under this provision shall not exceed fifty million dollars ($50,000,000) [[FN10]]. . . .

* * *

(d) The Government agrees to include in each of the contracts addressed in paragraph 5(a) above a separate line item for ST to permit the Contractor to recover the amortized costs authorized by this clause. . . .

* * *

(f) Title of each lot of tooling shall vest in the Government upon the Contractor's receipt of the final monthly reimbursement in each contract as set forth in paragraph 5(a). The Government shall have a lien on the tooling listed in each contract in the amount of monthly reimbursement made to the Contractor until such times as title vests in the Government. . . .

* * *

8. This clause as modified to reflect then current conditions shall be incorporated in each of the contracts identified in paragraph 5(a) of this clause.

9. Nothing in this clause shall be construed to limit the Government's rights under any other provision of this contract.

(Emphasis added) (R4, tab 2001) Neither the Investment Incentive clause nor the 0144 Contract as a whole included an explicit declaration that there were no other agreements between the parties.

80. The Navy's concern about unfunded liability was taken care of in the Investment Incentive clause by conditioning award of a contract to P&W when "Congress has authorized and appropriated sufficient funds," and when "(a) the Government procures F404 engine from any source" (tr. 17/232)

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81. The Navy and GE did not see eye to eye on the F404 data transfer. Notwithstanding the Navy's position that it owned the data, GE contended that the Navy did not have rights to the processes it developed under other programs. (Tr. 4/105; R4, tab 81) Data transfer went slowly (tr. 3/22). The Navy was unable to provide P&W Level 3 drawings (tr. 5/12). [FN11]

82. To resolve the data transfer problem, the Navy proposed using an "honest broker" approach. This approach entailed using independent professionals to review the data and to decide (1) whether P&W needed the data and, (2) whether the Navy owned the data. Pratt and Whitney and GE accepted this approach (see GE/P&W/NAVAIR Memorandum Of Understanding, R4, tab 168). The Navy ultimately successfully transferred the necessary engine data from GE to P&W. (Tr. 3/106)

83. The Navy delivered to P&W a GE F404 engine it owned as a part of its obligations under the 0052 (data validation) Contract (tr. 3/17, 5/163). Pratt & Whitney disassembled this engine and "reverse engineered" numerous parts as part of its efforts to qualify its F404 engine (tr. 5/12).

84. After it entered into the 0144 Contract in July 1985, P&W put its best government as well as commercial engineering talents to work to get its F404 engine qualified as soon as possible. It invested significant management time and got as many subcontractors as possible involved. It set a goal to qualify its engine 3 months ahead of schedule. (Tr. 5/13, 28-29, 16/117-20)

85. Pratt & Whitney built its qualification engines in its facility in East Hartford, Connecticut (tr. 5/60). Qualification testing took place at the Naval Air Propulsion Center in Trenton, New Jersey (tr. 5/17, 6/170). As planned, P&W qualified its engines in June 1987, 3 months ahead of schedule (R4, tab 349). It thus earned the $5 million in incentive fee as provided in the contract (tr. 3/113, 156).

II. Definitization Of The 0144 Contract

86. The Navy was concerned that in second source programs involving a guaranteed or assured market share, the second source contractor might become satisfied with its share of the market and make no real effort to become more competitive. If P&W became satisfied with its 30 percent market share, the Navy could end up with 2 high-priced "sole source" producers. This eventuality would totally frustrate one of the underlying rationales -- to drive down F404 engine prices through competition -- for launching the F404 Second Source Program in the first place. (Tr. 9/14-15) The notion that P&W must continue to come down its learning curve within the time it was given to become fully competitive with GE was, therefore, an inherent and implied requirement of the Investment Incentive clause.

87. This notion of maintaining competitiveness through improvement in learning was championed, in particular, by ASN Paisley who initially sought to tie P&W's engine prices to GE's (tr. 3/243). To address this issue, sometime prior to 3 January 1986, P&W's President (Mr. Wegner) made a commitment to ASN Paisley at a 26 November 1985 meeting that P&W's F404 engine prices would be within 10 percent of $1.7 million at P&W's 250th F404 engine. Pratt and Whitney considered its 250th F404 engine to be its "learned-out unit" at which cost improvement through learning would reach a plateau (tr. 15/29-31). The $1.7 million figure was what GE had proposed at that time and was "in the public domain," although GE had produced considerably more than 250 F404 engines to reach that price (tr. 3/121; R4, tab 206, tr. 14/212). With the sole source procurement of 102 engines under the 0144 Contract, it was projected that P&W would produce its 250th engine as a part of the FY89 engine procurement [FN12] (tr. 3/121). To achieve this goal, P&W had to begin to come down its learning curve immediately in producing the 90 production engines under the 0144 Contract.

88. The specifics of this commitment were never reduced to writing (tr. 5/45) although it became one of the focuses in attempting to definitize prices under the 0144 contract. The clearest articulation of P&W's commitment was contained in a

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briefing chart for an internal Navy briefing given on 3 January 1986:

. "P&W REPORTEDLY COMMITTED TO ASN (RE&S) ON 26 NOV 1985 TO BE WITHIN 10% OF GE PRICE AFTER ONE YEAR OF COMPETITION.

- ASSUMED GE PRICE WAS $1.7M

- ASSUMED APPROX. 250TH ENGINE"

(R4, tab 210 at 5; tr. 4/114, 124, 6/206)

89. We find P&W committed to becoming competitive with GE i.e., (within 10 percent of the $1.7 million price) by the time it reached its 250th engine even though it was given a five-year period by the Investment Incentive clause to become fully competitive with GE.

90. The task of definitizing the Advance Acquisition Contract for the 102 F404 engines (the 0144 Contract) was assigned to Marcia C. Rutledge (PCO Rutledge). PCO Rutledge's supervisor was Mr. Vincent Stephen Carberry (Mr. Carberry). He arrived at NAVAIR in March, 1986. Contracting under the F404 Second Source Program became his responsibility. (Tr. 10/36-37) He became involved because he was PCO Rutledge's immediate supervisor and because the complexity of the Program required far more experience than the PCO had up to that time (tr. 22/116).

91. Pratt and Whitney submitted a firm fixed price proposal [FN13] to definitize the 0144 Contract on 15 November 1985 (tr. 3/252; 8/16). Since the 0144 Contract was entered into on 30 July 1985, no F404 engine had been built by P&W. Thus, the 0144 Contract definitization process took place "well before . . . [P&W] made . . . [its] first engine" (tr. 3/135). Lacking actual incurred cost data, P&W's prices were based on estimated and projected material and labor costs (tr. 3/253; 8/16). Pratt and Whitney proposed the following prices for the 2 qualification, 10 pilot, and 90 production F404 engines:

"- 2 @ $5.688 [million] EA

- 10 @ $3.632 [million] EA

- 90 @ $2.700 [million] EA"

(R4, tab 210 at 5) The average price per engine for the 102 engines was $2.86 million (tr. 3/132-33). The proposal included a profit margin of 10 to 12 percent (tr. 3/123).

92. Pratt and Whitney's proposal was given a "preliminary analysis" by an interim PCO (L.T. Herway) (PCO Dawson having left and PCO Rutledge not having been appointed). Both a price analysis and a cost analysis were performed. In comparing the price of P&W's first production engine ($3.975M) with GE's first engine ($3.255M), PCO Herway found the difference "not too far apart." He "speculated" that since P&W had the benefits of GE's drawings and improvements, the initial price of P&W's engine should be "around $2.0M." In terms of costs (as built up to the 1987 prices), PCO Herway found P&W was $138,951 higher in direct material and labor unit costs. He found the difference "understandable given that P&WA is just beginning to make F404." He found P&W's 688 percent labor overhead to be the "real problem area," and concluded "P&WA will probably never be competitive if they can't make some major changes in their overhead allocations." (R4, tab 2297) We find that this "preliminary analysis," dated 19 November 1985, would underpin much of the Navy's subsequent negotiation positions.

93. Based on past experience, having submitted its proposal on 15 November 1985, P&W expected to begin negotiations in late March or early April, 1986 (tr. 8/27). On 7 April 1986, P&W's Contract Administrator called PCO Rutledge. He was told that no

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date had yet been established for initiating negotiations to definitize the 0144 Contract (R4, tab 224; tr. 8/28). Although P&W would later contend that the Navy unnecessarily delayed the definitization process, its internal memorandum showed that it believed at the time that the delay was to its advantage:

"8. Negotiations for the 102 engines are expected to begin in earnest by May 5. The delays are somewhat in our favor, because P&W cost will be more clearly defined, which reduces P&W's risk."

(R4, tab 2665; tr. 18/156-57)

94. Pratt and Whitney's Contract Administrator called again on 8 May 1986. He was told that negotiations would take place in early June 1986, and that the PCO wished to definitize the 0144 Contract by August 1986. (Tr. 8/29)

95. In a telephone discussion held on 4 June 1986, PCO Rutledge told P&W's negotiator to make an offer within 1 to 2 weeks that would be "competitive with GE," [FN14] and that an acceptable "bandwidth" would be "$1.5M plus" (R4, tab 236). Pratt and Whitney interpreted the PCO as saying that she wanted P&W to offer a price of $1.5 million per engine (tr. 8/30). The PCO was also said to be willing to drop her other work if P&W would be willing to accept the suggested price which "[w]ill eliminate 'lengthy' negotiations in Wash." Pratt and Whitney was told that it was "[n]ecessary to indicate P&W will be competitive," and that the Navy "[w]ill require Company contribution." (Emphasis added) (R4, tab 236; tr. 8/31-32)

96. Pratt and Whitney's negotiator advised the PCO that the procurement of the 102 engines was made on a sole source basis, that the price must be determined by way of cost analysis pursuant to FAR 15.8, that it was unrealistic and inappropriate to require it to be competitive with GE, and that it had already made significant company contributions (tr. 8/32-33).

97. Further negotiations took place between PCO Rutledge and P&W's Contract Administrator on 14 July 1986. PCO Rutledge took the position that since P&W "will be at $1.3 [at] 250th engine. . . P&W should be at 1.6M for 90 engines." The PCO urged P&W to settle now to avoid lengthy negotiations. The PCO offered to settle for between $1.7 to $1.8 million per engine. Pratt and Whitney countered by offering to settle for $2.7 million per engine "less normal decrement" that would have come about as a result of cost analysis. PCO Rutledge responded with a $2 million per engine or "take me to court" offer (R4, tab 241; tr. 8/38-40). Pratt and Whitney interpreted the "take me to court" remark as the PCO "drawing a line in the sand," i.e., that P&W must agree to "something less than $2 million" (tr. 8/40). The $2 million per engine figure was "based on price analysis, and . . . a learning curve technique." The PCO tried to "run it down" the "Paisley Curve" and she "looked at some of the GE prices." (Tr. 9/226)

98. By mid-July, 1986, P&W realized that its out-year engine prices on the upcoming FY88 procurement might influence the Navy to take a "big decrement" in definitizing the 0144 Contract. Its chief negotiator warned that "It is imperative we start negotiations by the 12th of August," and P&W "[d]oes not want to settle 102 engine after competitive proposal submitted" (emphasis in original). (R4, tab 2672; tr. 18/159)

99. The parties' first face-to-face negotiation took place on 14 August 1986. PCO Rutledge was on travel. Pratt and Whitney's Contract Administrator sat down with the PCO's assistant and "just generally . . . overviewed the cost proposal." (R4, tab 241; tr. 8/41) Because the PCO was not there the first day, on 15 August 1986, the next day, the parties' negotiators "reviewed the whole package again" and "established an agenda for the coming weeks." (Tr. 8/42; R4, tab 241)

100. According to Mr. Carberry, normal shop overhead would be "closer to 200 than it is to 300" percent (tr. 10/61). Pratt and Whitney's overhead, included it its proposal, was over 600 percent (tr. 3/246). This overhead rate, however, had been approved by DCAA (tr. 3/128, 8/129) and agreed to by the cognizant ACO as a part of the parties' Forward Pricing Rate Agreement (FPRA) (see, e.g., R4, tabs 218, 226;

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tr. 8/136, 173). According to P&W, Navy negotiators were "singling out overhead rates as the single biggest contributor to prices that they thought were too high" (tr. 3/246). Mr. Carberry, PCO Rutledge's supervisor, viewed P&W's 600 percent overhead as "a 600 pound gorilla that is carried around with every manager, every decision they make with regard to deciding to spend some labor some place" (tr. 10/57).

101. Pratt and Whitney's high overhead was attributable to its inability to reduce its fixed expenses when its loss of business resulted in excess capacity (tr. 21/167, 177, 22/226). There is no proof that all such excess capacity was necessary to maintain its surge capacity as a dual source F404 engine producer.

102. At the negotiation session held on 20 August 1986, the PCO wanted to "ignore [the] negotiated rates, including shop overhead rates" (tr. 8/44). Pratt and Whitney took the position that the DCAA required P&W to apply FPRA rates "consistently across the board" in all contracts, and to give preferential treatment to the Navy "would unduly increase the cost of Air Force programs" and would be "highly irregular" (tr. 8/44-45).

103. FAR 15.809 pertained to "Forward pricing rate agreements." FAR 15.809(e) provided that:

"(e) Contracting officers will use FPRA rates as bases for pricing all contracts, modifications, and other contractual actions to be performed during the period covered by the agreement, unless the ACO determines that changed conditions have invalidated part or all of the agreement."

(R4, tab 4004) The documentary record shows that P&W's Manufacturing Division in East Hartford, Connecticut, and the United States Air Force Plant Representative Office, P&W, East Hartford, Connecticut, entered into a FPRA for that division in March, 1986. The agreement applied to contractor fiscal years (also calendar years) 1986 to 1988. The negotiated "'Input' Factory Overhead" was 598 percent for 1986, 640 percent for 1987 and 640 percent for 1988. (R4, tab 218) There was a separate FPRA applicable to contractor fiscal years (also calendar years) 1986 and 1987, for P&W's Government Products Division, in West Palm Beach, Florida (R4, tab 226).

104. There is no evidence that the cognizant ACOs had invalidated all or a part of these FPRAs at the times definitization of the 0144 Contract was being discussed. Because of the existence of these FPRAs, we find that, in negotiating to definitize the 0144 Contract, the Navy was bound by the agreed upon rates in the FPRAs.

105. In the afternoon of 20 August 1986, PCO Rutledge made a written offer to settle the 0144 Contract for $152,590,368. The average price per engine for the 102 engines was $1,495,984. The PCO derived her price by assuming a P&W per engine price of $1.3 million at the 250th engine. She arrived at her price for the 102 engines by "back[ing"] up" a 95 percent learning curve. (R4, tabs 241, 252; tr. 8/47, 9/228-29) The PCO obtained the $1.3 million at 250th engine figure not from her own analysis but from a secondary source (tr. 9/99). There was no adequate explanation for the $1.3 million amount except that it was what GE was allegedly charging per engine in 1986 (tr. 9/229).

106. Pratt & Whitney protested that the Navy offer was "not substantiated by cost & pricing data" (R4, tab 241; tr. 8/48). Pratt and Whitney again took the position that the Advance Acquisition Contract (the 0144 Contract) was a sole source procurement and that the PCO "needed to use FAR 15.8 . . . for sole source negotiations" (tr. 8/48-49).

107. On 21 August 1986, PCO Rutledge advised P&W that she had been instructed by her superior to "suspend" further negotiations (tr. 8/50; R4, tab 241). Pratt and Whitney was told to submit its best and final offer (BAFO) as soon as possible. The PCO also advised P&W that, as a result of aircraft reduction, fewer engines might be needed, and the Navy was "re-evaluating the situation, asking the question is it economical to keep Pratt and Whitney in the program." (Tr. 8/50-51)

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108. PCO Rutledge testified that she was instructed to put negotiations on hold because Mr. Carberry wanted to see what prices P&W would propose in connection with the upcoming (FY88) competitive buy (tr. 4/204, 9/94-95). Mr. Carberry explained that since P&W had itself established the benchmark of becoming competitive with GE at its 250th engine (see tr. 21/181), he would "back up" P&W's own learning curve to unilaterally establish a "fair and reasonable" price for the 102 engines. He explained that using P&W's own numbers would add a measure of "credibility" in the event P&W chose to "dispute" the Navy's determination. (Tr. 21/195-97)

109. As requested, P&W submitted its BAFO by letter dated 12 September 1986. It offered the following prices:

Line Item	ENGINE	UNIT PRICE	TOTAL
0002	2	$4,315,000	$8,630,000
0003	10	2,760,000	27,600,000
0101	90	2,300,000	207,000,000
		TOTAL	$243,230,000

(R4, tab 2340) We find that P&W's BAFO reduced its initial proposal price for the qualification engines by 24 percent, the pilot engines by 24 percent, and the production engines by 15 percent. According to P&W, its BAFO prices were based on "disclosed cost and pricing data including downward adjustments in purchased material, labor variations, EAPS, proposed G/A rates, and other cost elements." Pratt and Whitney stated that "Additional cost reductions are provided as a management task coupled with a substantial reduction in profit on all contract line items" (R4, tab 2340).

110. Running down a learning curve based on P&W's 12 September 1986 engine prices, the Navy extrapolated that P&W's 250th engine would come in at $1.86 million (R4, tab 2340; tr. 21/143). Unaware that this degree of learning was already within the bandwidth (plus or minus 10 percent of $1.7 million) of the Paisley Curve, Navy negotiators apparently believed P&W still had room to improve its prices (tr. 22/151).

111. At negotiations on 12 September 1986, the Navy did not accept P&W's BAFO prices and "appeared ready to make another price offer under $2M if P&W would be willing to discuss such a price." Pratt and Whitney maintained that its BAFO was "fully supported with cost and pricing data," and had "accepted a cost risk beyond available data and reduced profit drastically." The Navy maintained the BAFO prices were not competitive and its 640 percent shop overhead was unacceptable. Discussions ended without agreement. (R4, tab 2342; tr. 8/60)

112. According to the hand-written notes of one of the P&W negotiators, the Navy indicated that P&W's BAFO prices were "way above SECNAV expectations and would cause World War III," and asked whether P&W's BAFO was "negotiable." Pratt and Whitney's competitiveness was discussed in the context that the Navy had "[p]roduced [a] learning curve [that] demonstrated that [P&W] could not be competitive." And, as far as ending negotiations, P&W was the one that took the position that "Navy can accept now or review and accept later. Ball is in Navy's court." (R4, tab 258; 8/194-96)

113. The next negotiation took place on 7 November 1986. At this meeting, P&W reiterated its investments in the program. The PCO responded that in view of "$1.5 billion business out there," P&W needed to invest even more money in the program. Pratt and Whitney was told that the then current GE engine price was $1.2 million an engine and the Navy would not pay double what it paid GE. The PCO proposed that, based on GE's 1982 production lot 3 escalated to 1986, $1.732 million an engine would be a fair and reasonable price. The PCO was asked whether she had any problems with P&W's costs. The PCO responded that she had not looked at P&W's cost data and

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complained once again about P&W's overhead rates. Pratt and Whitney refused to compromise on its overhead rates. Its negotiator asked -- "Does Navy want agreements pulled? If so tell us & we will do that. Otherwise they stand." Pratt and Whitney then took the position that its "BAFO at $2.3 [million] stands," but that it would be willing to go below $2.2 million per engine if the Navy was willing to share costs. At this point, P&W negotiators were told to "go home," and P&W negotiators left advising the PCO that "offer is on table . . . your move." (R4, tab 269)

114. The parties' negotiators met again on 20 November 1986. At this meeting, P&W submitted a fixed price incentive proposal. This proposal offered 12 engines at BAFO prices, i.e., 2 qualification engines at $4.3 million each and 10 pilot engines at $2.8 million each. As for the 90 production engines, P&W offered a ceiling price of $2.3 million for each engine with a target price of $2 million and target profit of $0.250 million each. The parties were to share costs over $1.75 million on a 67/33 ratio. (R4, tab 277) The Navy rejected this offer and wanted a $1.95 million price each for all 102 engines. When P&W protested that this would be below its cost, the Navy suggested that P&W could make the engine price appear higher by spreading the $5 million incentive award P&W would receive for qualifying its 2 engines over the 102 engines. [FN15] (R4, tab 241; tr. 8/72-75)

115. Negotiations became more intense. According to the notes taken by a P&W negotiator, PCO Rutledge stated at the 20 November 1986 meeting that P&W's "Prices are no where near competitive," that "Navy has done everything in its power to bring P&W on . . . . It's time for P&W to stand up and be counted." PCO Rutledge was also said to have said that the "Navy will cancel program towards year end and not suffer repercussions because competition has served the Navy's purpose." (R4, tab 278)

116. The record shows that PCO Rutledge told P&W's Washington, D.C., representative that P&W should settle for $1.999 million per engine "before year end," and that "Carberry wants 'management contribution"' (R4, tab 285; tr. 10/90). Mr. Carberry acknowledged that from time to time he told P&W that it "may" have to make a "management contribution" (tr. 10/66). He explained what he meant as follows:

"Q. And the last line says, "Carberry wants management contribution." And that's a theme we've heard before?

A. That's the same one. They either had to justify their price or reduce their price. And if they couldn't do it to be competitive, they had to make a management contribution."

(Tr. 10/90-91) Pratt and Whitney understood the Navy's demand for management contribution as wanting to be assured that P&W was "going to hit our target down the learning curve as we had committed [through the Paisley Curve]" (tr. 14/238).

117. The next negotiations meeting occurred on 16 December 1986. A fixed price incentive target price of $1.95 million (as opposed to $2 million) was mentioned by a P&W negotiator but drew no reaction from the Navy. PCO Rutledge wanted a per engine fixed price in the $1.98 to $1.99 million range, and mentioned that because of P&W's high prices on the 102 engines she might have to curtail spending on an existing program to support P&W's TF-30 and J-52 engines in the field. Pratt and Whitney took the remarks as a threat. The PCO again took the position that what made P&W's prices not fair and reasonable was its high shop overhead rates. Pratt and Whitney argued that its participation in the F404 Second Source Program would help lower the Navy's spare parts costs. The PCO's reaction was spare parts costs "never helped [sic] her out." No agreement was reached at this meeting. (R4, tab 241; tr. 8/78-79, 82-87)

118. By December 1986, over a year after P&W first submitted its proposal on the 102 engines, it became obvious that negotiations at the working level had reached an impasse. Negotiations escalated to the senior management level both at NAVAIR and P&W. [FN16] (Tr. 5/34-37, 95) We find that Admiral DeMayo, NAVAIR Assistant

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Commander for Contracts, took over from PCO Rutledge at this point, and become the de facto PCO for definitizing the 0144 contract.

119. On 23 December 1986, Admiral Peter DeMayo, Assistant Commander for Contracts, NAVAIR, and supervisor of Mr. Carberry and PCO Rutledge sent the following letter to Mr. Wegner, President of Pratt and Whitney Aircraft:

"The Naval Air Systems Command and Pratt and Whitney have been in negotiations on the F404 second source engine program since August 1986. There have been several unsuccessful exchanges of offers, involving all levels of the Naval Air Systems Command Management. I have gone through an extensive review of your latest offer and found that it is not acceptable.

It is in the best interest of both parties to reach a settlement on this procurement before "best and finals" are due on the FY 1988 F404 engine competition. In light of this, the final Navy settlement offer is a firm fixed price incentive contract for 102 F404 engines as follows:

Target cost $1.7M
Target price 1.9M
Ceiling price 2.1M with a share ratio of 50/50

In order to preclude any misunderstanding and to avoid further lengthy discussions, this offer should be considered as non- negotiable. I believe the offer is one that neither of us would find to be totally satisfactory but yet is fair to both the Navy and Pratt and Whitney."

(R4, tab 287)

120. Despite this tone of finality, negotiations continued (tr. 5/106). Notes in the record shows intense negotiations took place between Admiral DeMayo and Mr. Wegner between 5 and 22 January 1987 (R4, tab 289). While the notes shows many options were explored and "posturing" on both sides, on the whole, we do not get the impression that the Navy went beyond the norm in negotiating the settlement of a difficult contract in a difficult environment involving disputes. Nor do we get the impression that P&W was being forced into any position even though it now wishes it could have done better. Both sides were fully aware of the issues which led to the impasse. As reflected in P&W's 27 January 1987 confirmation letter, the parties reached the following agreement on 22 January 1987:

ENGINES	CLIN	UNIT PRICE	TOTAL FPP
2	0002	$4,315,000 (BAFO)	$ 8,630,000
10	0003	2,760,000 (BAFO)	27,600,000
		TOTAL	$36,230,000

90 (CLIN) 0101)		TOTAL FPI
Target Cost	$1,700,000	$153,000,000
Target Profit	200,000	18,000,000
Target Price	1,900,000	$171,000,000
Ceiling Price	2,097,444	$188,770,000 (123.4% of target)
Share % 50/50		
Total FFP plus FPI ceiling	$225,000,000	

In addition, the parties also agreed to modify the special tooling recoupment

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schedule as follows:

CY	'87	'88	'89	'90	'91	'92
Revision:	30%	30%	25%	10%	5%	-
Contract:		30	25	20	15	10

(R4, tab 293)

121. Throughout negotiations, the Navy had steadfastly insisted that the average price for the 102 engines be "below two million dollars." According to Admiral DeMayo, the $2 million amount was based upon the Navy's review of "[a]ll the cost data we had, not only from Pratt and Whitney, but . . . we looked at some of the other data we had accumulated on the F404 engine" (tr. 9/61-62). According to Mr. Missimer, in the end, the parties definitized the 0144 Contract on the basis of "a give-and-take between DeMayo and Wegner," and "There was no science to it . . . . There was no rationale that arrived at those specific numbers on any bottoms-up type of rational or review" (tr. 3/254). Admiral DeMayo testified that the settlement was "a trade-off" between the parties' positions. The "major factor" leading to the settlement was the Navy's willingness to accelerate the special tooling recoupment schedule. While P&W's overhead was still a problem for the Navy, it was satisfied that P&W would choose to reduce either its overhead or its profit. (Tr. 21/11-13, 212) We find that in reaching a settlement to definitize the 0144 Contract, the parties reached a meeting of the minds that all disputes related to definitization would be resolved.

122. Pratt and Whitney's Contract Administrator testified that, based on his experience in negotiating other engine contracts, once negotiations began, working 4 to 5 days a week, "it would take anywhere from four, five, six weeks to conclude negotiations, depending upon . . . the circumstances" (tr. 8/35). In this case, negotiations began on 4 June, 1986 (finding 95). They were suspended on 21 August, 1986 (finding 107), and resumed on 12 September 1986 (finding 111). No further negotiations took place until 7 November 1986 (finding 113), and no agreement was reached until 22 January, 1987 (finding 120). The entire negotiation process took over 7 months after it began, and over 14 months after P&W submitted its proposal in November 1985 (finding 91). Pratt and Whitney contends that, based on past experience, contracts were typically definitized 1 to 3 weeks after agreement (tr. 8/88). In this case, the 0144 Contract was definitized bilaterally without any reservation of claims on P&W's part on 4 June 1987 (R4, tab 2010) over 4 months after agreement.

123. Pratt and Whitney now contends that it was forced to settle because it had to pay "an entry fee to a much larger program" (tr. 3/255). Its President testified:

> Q. . . . You thought this price was unfair and inconsistent with the understanding. Why did you agree to it?
>
> A. I'd have to say in all honesty we agreed to it because the Navy literally had a gun at our head. They had got us to invest considerable time, effort, dollars, reputation into this program under one set of agreements, and all of a sudden they're now coming back and, having sat and negotiated . . . for almost a year and giving us a unilateral price.
>
> And we caved in and agreed to this because we thought that this was going to be a long-term program for us and that it was really our only opportunity to participate in future Navy business. And so rather than take the short-term, we went with the longer-term deal.

(Tr. 5/41)

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124. The parties held different views as to what constituted "fair and reasonable " prices for the 102 engines ordered under the 0144 Contract. Pratt and Whitney believed "fair and reasonable" prices should be determined by application of FAR 15.8 referred to in the Investment Incentive clause. Its constant focus on its cost and pricing data indicated that it believed that it should be paid its supportable projected costs plus a reasonable profit. Thus, even though its shop overhead of 600 plus percent was high, it took the position that "there's nothing we can do about" (tr. 10/58) it because it was agreed to by the ACO in the FPRAs and required to be used by the DCAA. Pratt and Whitney also took the position that even if it could rearrange the elements of its overhead, it would have no impact on its bottom-line engine prices (tr. 21/173).

125. The Navy acknowledged that until P&W became fully competitive with GE, P&W's F404 prices would be higher than GE's, and that, in the meantime, P&W was entitled to make a profit. (Tr. 4/138-39, 7/150) The Navy's focus was not on P&W's cost or pricing data. Its focus was on whether P&W could ultimately "become" fully competitive with GE to justify the F404 Second Source Program. To attain this end, the Navy sought to apply pressure to alter P&W's cost structure, in particular, its 600% plus shop overhead. The Navy's approach to determining what it considered to be "fair and reasonable" prices for the 102 engines was to "back up" a learning curve.

126. Admiral DeMayo gave the following testimony which we find credible:

"A. I think the primary motivator that we had in all these long discussions was that we wanted Pratt and Whitney to be successful in this program, because if they were successful, we would be successful and this dual source program would have been successful.

What we saw all along in trying to negotiate prices, not just in this contract, but in establishing the first competitive contract, was that we saw a cost base in Pratt [and] Whitney that we quite honestly could not afford. . . .

* * *

. . . The message was plain and simple. If you don't take the action to cut those costs significantly, you are not going to be competitive. This is not going to be a competitive contract, this first contract and the first one after that. You are not going to ever be competitive in this program. That was really what this whole debate was with them over probably a year and a half."

(Tr. 9/32-33, 20/186)

127. Mr. Carberry, to whom P&W attributed much of its negotiation woes, testified that he did not demand P&W be in head-to-head competition with GE on the 102 engines (tr. 10/56), but that he did press hard for "some reasonable explanation . . . that they were ever going to get there" (tr. 10/64). And when P&W repeatedly said there was nothing it could do to lower its overhead, Carberry asked "if there's nothing you can do about, how are you ever going to be competitive with GE?" (tr. 10/58). He acknowledged he told P&W the only alternative then, would be for P&W to make a "corporate contribution" in the nature of "further investment . . . in the program" (tr. 10/67). Asking for "corporate contribution" was an expression of frustration. As Mr. Carberry explained, what he meant was, "I didn't care how you got there, but in order to stay competitive in the program, you've got to get there some way or another" (tr. 21/192, 22/91-92). He also acknowledged that, at the time of price negotiation of the 102 engine, he did consider ending the F404 Second Source Program (tr. 10/66) if it appeared that "the taxpayer wouldn't get any recovery" from the Navy's investment (tr. 10/51).

128. In definitizing the 0144 Contract, Pratt and Whitney argues that definitization should be governed by FAR 15.8, as provided by § 2.(c) of the Investment Incentive clause. [FN17]

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129. Paragraph H-1A 3, of the 0144 Advance Acquisition Contract (0144) "Establishment of Prices under this contract" (AUG 1984)(NAVAIR 52.216-9505) provided in part:

"(a) The prices for Item(s) 0001, 0003 through 0012 and Option Items 0101 and 0102 of this contract will be established on a fixed-price type basis. . . .

* * *

(c) If agreement for definitization of this advance acquisition contract is not reached by the target date st [sic] forth in paragraph 4(a) above or any extension thereof by the Contracting Officer, the Contracting Officer may, with the approval of the head of the Procuring Activity, determine a reasonable price or fee in accordance with DAR Section III, Part B, and Section XV, subject to appeal by the Contractor as provided in the "Disputes" clause of this contract."

(R4, tab 2001 at 7-2)

130. In addition, ¶ H-1B 3., of the Advance Acquisition Contract (0144) "Contract Definitization" (APR 1984)(FAR 52.216-25) provided in part:

"(c) If agreement on a definitive contract to supersede this letter contract is not reached by the target date in paragraph (b) above, or within any extension of it granted by the Contracting Officer, the Contracting Officer may, with the approval of the head of the contracting activity, determine a reasonable price or fee in accordance with Subpart 15.8 and Part 31 of the FAR, subject to Contractor appeal as provided in the Disputes clause."

(R4, tab 2001 at 7-8)

131. We find that the Navy complied with the definitization procedure specified by ¶ ¶ H-1A 3 and H-1B 3 of the -144 Advance Acquisition Contract when Admiral DeMayo issued his 23 December 1986 "non-negotiable" offer (finding 119).

132. We find that ¶ 2.(c) of the Investment Incentive clause ("the price proposed by the Contractor meets the requirements of FAR 15.8") pertained to the award of future (i.e., FY 88 - FY 92) F404 contracts and did not pertain to the definitization of the 0144 Contract.

133. We find that P&W did not avail itself of the "appeal" process provided by ¶ ¶ H-1A 3 and H-1B 3.

III. The FY88 and FY89 Engine Procurements

A. Contract Interpretation

134. By its terms, the Investment Incentive clause in the 0144 Contract applied also to "the first five fiscal year F404 engine production contracts" (see ¶ 5(a), R4, tab 2001 at 7-48). The first five fiscal year F404 engine production contracts referred to those contracts expected to be awarded to GE, P&W or both for FY 88 through FY92. Provided P&W's engine prices met "the requirements of FAR 15.8," and other so-called "shopping list" conditions, P&W would be awarded "at least 30 percent of the total annual F404 engine production requirements" for each of the 5 fiscal years beginning in FY88.

135. Because of the need to commit funds in advance for long-lead items such as the F404 engines, a contract for FY88 engines to be delivered in 1989 must be awarded by the Spring of 1987 (R4, tab 248). The first competitive split procurement (between GE and P&W) for the engines was the one for FY88. Ms. Sandra G. Haberlin (PCO Haberlin) was the PCO for this and subsequent (FYs 89 and 90) procurements (tr.

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11/14). To support the FY88 procurement, a "Class Justification And Approval For Procurement Other Than Full And Open Competition" or a "CJ&A" had to be approved. The CJ&A for NAVAIR's FY 88 buy, signed by the contracting officer, approved as legally sufficient by NAVAIR counsel, and approved by ASN Pyatt, contained the following statement of the Navy's interpretation of its contractual obligations:

"5. . . . In fiscal year 1988 Pratt & Whitney is guaranteed a minimum of 30% of the acquisition quantity as long as the four conditions set forth in contract N00019-85-C-0144 are met (i.e., engine past [sic] qualification tests, price is deemed fair and reasonable, appropriate approvals are received and the U.S. Government is buying F404 engines.)"

(Emphasis added) (R4, tab 227; tr. 9/41, 10/11)

136. NAVAIR's Acquisition Plan, signed off in June 1986 by PCO Haberlin and the Commander of NAVAIR, Admiral J.B. Wilkinson, contained the following statement of the Navy's interpretation of its contractual obligations:

"The business arrangements with P&W includes commitment by the Navy to allow P&W to compete for production of all F404 engine models being procured by the Navy, including derivative and growth versions. The intent is to divide the total F404 procurement in each fiscal year among the qualified sources, but as an investment incentive, P&W has been assured of at least thirty percent of the total annual F404 procurement, for which Congress has authorized and appropriated funds, for each of the first five years of competition upon:

1. The Government procuring F404's from any source.

2. P&W becoming a qualified source.

3. P&W proposing a fair and reasonable price.

4. NAVAIR obtaining appropriate approvals consistent with applicable laws and regulations."

(Emphasis added) (R4, tab 245)

B. The Source Selection Process [FN18]

137. The 0144 Contract for the 102 engines was not awarded pursuant to any source selection process (tr. 11/56). The competitive split procurements subsequent to the 0144 Contract were required to be conducted in accordance with procedures and criteria set out in a Source Selection Plan (tr. 11/8). "The [S]ource [S]election [P]lan is the document that reflects how we [NAVAIR] will conduct the source selection." "It indicates who is on the Source Selection Advisory Council [SSAC], who the Source Selection Authority [SSA] is, who the Source Selection Evaluation Board [SSEB] is, what the criteria is that we [NAVAIR] will use to do the evaluation, and what the schedule is . . . we would be following." (Tr. 11/12)

138. The source selection procedure for the F404 engine competitive split procurements operated in a 3-tier fashion (tr. 11/21). Contractor proposals went first to the SSEB. The SSEB was composed of "members . . . involved in various aspects of the procurement." (Tr. 11/19) Each member, in turn, had "a group of people . . . that are working the details, looking at the proposals, going through every page of the proposal, running calculations, doing whatever is necessary to evaluate these proposals" (tr. 11/20).

139. Based on the evaluation and results put together for them, the SSEB would brief and recommend procurement actions to be taken by the SSAC. The SSAC would deliberate and make recommendations to the Source Selection Authority who "will be the final decision-maker on the particular procurement." (Tr. 11/20-21)

140. For the F404 engine competitive split procurements beginning in FY88, Mr. Patrick C. Malone chaired the SSEB (tr. 11/8). PCO Haberlin was a member of the

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SSEB. Admiral Richard D. Friichtenicht chaired the SSAC. By memorandum dated 9 June 1986, Secretary Lehman designated the Commander of NAVAIR as the SSA. At the time pertinent to the FY88 buy, Admiral Wilkinson had replaced Admiral Busey as the Commander of NAVAIR and thus became NAVAIR's SSA on the F404 engines. (R4, tab 248; tr. 11/12, 18)

141. A plan entitled "SOURCE SELECTION PLAN FOR THE PRODUCTION ENGINE COMPETITION FOR F404 ENGINES FOR THE F/A-18 AND A-6F AIRCRAFT" dated 8 August 1986 (the "Source Selection Plan") was prepared by the Propulsion and Power Division in conjunction with the F/A-18 Program Manager, the A-6 Program Manager and the F404 engine PCO, NAVAIR. (R4, tab 248)

142. The Source Selection Plan was submitted to the SSA on 15 August 1986, and it was approved by him the same day. The cover memorandum forwarding the plan summarized the key features of the plan:

(1) Solicitation covers 5 years of options. New solicitations each year. Outyear options can be adjusted downward on a yearly basis.

(2) P&W will get 30% of buy each year providing their price is fair and reasonable. This results in P&W's share each year will range from 0 to 100%, wherein [sic] GE will range from 0 to 70%.

* * *

(4) First contract to P&W will be let for long lead in Apr '87 before P&W engine is qualified (May 88) . . . .

We are asking for prices for a range of quantities each year to cover contingencies. This will make for and [sic] interesting challenge in comparing prices particularly since we can expect P&W to be higher first year but they plan to catch up via better learning curve in outyears. . . .

Evaluation criteria has only two factors-

Price and production requirements

Price has two factors:

Total 5 year buy.

First year buy.

(R4, tab 248)

143. The "Approval" page of the Source Selection Plan instructed:

"This Source Selection Plan (SSP) is hereby approved as the governing document for evaluation of proposals for the F404 production engine competition. All personnel participating in or associated with this F404 PRODUCTION COMPETITION source selection shall be made aware of the contents of this plan, and shall abide by its requirements and procedures."

(R4, tab 248)

144. Section 9 of the Source Selection Plan (SSP) pertained to "Negotiations And Contract Award." Paragraph 9.2.2. provided:

"A common cutoff date for the receipt of final revisions to the proposal submittals (termed a "best and final offer" (BFO)) will be established and offerors will be so notified in writing. After receipt of any revised submittals, the proposals will be evaluated based on the offeror's total proposal.

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If necessary, negotiations may be reopened, at the conclusion of which all offerors must again be solicited for new BFO's. However, such reopening of negotiations gives the appearance of "auctioning", therefore, multiple BFO's shall be avoided if at all possible."

(R4, tab 248 at 9-2)

145. Appendix D of the F404 Source Selection Plan pertained to "Evaluation Criteria." It stated that "Proposal received . . . will be evaluated by the Naval Air Systems Command using formal source selection procedures as required by the Federal Acquisition Regulations (FAR)." It further stated that "a proposal meeting solicitation requirements with the lowest price may not receive the larger share of production if award to the higher priced proposal affords the Government a greater overall benefit." (R4, tab 248)

146. The criteria for "price" evaluation were stated as follows:

"i. The total program cost to the Government of all priced line items, including options, but excluding production tooling.

ii. The price of the primary award year line items."

In addition, the "Production Requirements" criteria required an evaluation of "[t]he degree to which each offeror contributes to meeting the Navy's F404 mobilization requirement." The mobilization requirement was defined to mean "insuring that multiple production sources, adequately dispersed are maintained to assure availability of alternate production capability in the event of a national or local disaster." (R4, tab 248 at D-1)

147. The Source Selection Plan explained:

"For the first evaluation , the primary award year will be for the first year (FY-88). For the annual evaluations conducted prior to award of each option, the primary award year is defined as the respective option year. The option portion of this solicitation will be part of the evaluation; however, the evaluation of the option(s) will not obligate the government to exercise an option or options."

(R4, tab 248 at D-1) Thus, the FY88 engine procurement covered a 5-year period from FY88 to FY92. FY88 would be the primary award year, and FYs 89, 90, 91, and 92 would be option years. The Navy was not required to award a contract other than for the primary award year -- FY88. For the engine procurement for FY89, FY89 would become the primary award year, and FYs 90, 91, and 92 would be the option years. (Tr. 11/32-33, 36) Contractors would be permitted to improve (lower) their prices in response to subsequent year RFPs (tr. 9/65-66, 11/35, 23/49, 55-56). Raising engine prices in subsequent years would be ineffective, since the Navy could simply exercise its existing contract options (tr. 11/36).

148. We find that, in terms of determining whether engine prices were fair and reasonable, it was appropriate not only to look at the prices for the primary award year but also for the option years. Since contractors were not obligated to lower prices each year, the Navy could be stuck with unreasonably high prices for the option years. For this reason, the evaluation criteria required evaluation of option year prices. (Tr. 24/302)

149. This approach of receiving GE and P&W engine prices not only for the instant FY buy but also for the outyears was designed to enable the Navy to assess whether, and how quickly, P&W was becoming fully competitive with GE over the long term -- a primary goal of the F404 Second Source Program (tr. 9/66).

150. The SSEB briefed the SSAC on 14 August 1986. As a result of this briefing, the SSAC approved the F404 Source Selection Plan. It also approved the RFP for the upcoming procurement of F404 engines for FY88. (R4, tab 2332; tab 11/46) One of the

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issues the SSEB discussed with the SSAC was what constituted "fair and reasonable" prices. Inasmuch as "GE was further down the learning curve [with] more production already under its belt" (tr. 14/77-78), the SSEB did not believe it would be appropriate to compare GE's then current engine prices with those of P&W's. The SSEB decided that it should compare P&W's cost experience with the Navy's cost estimate, and compare P&W's initial production prices with GE's prices on similar initial production units (tr. 14/77-78).

151. The approved Source Selection Plan described NAVAIR's business arrangement with P&W as follows:

". . . The existing business arrangements with P&W include a commitment by the Navy to allow P&W to compete for production of all F404 engine models being procured by the Navy, including derivative or growth versions. The intent of this procurement is to divide the total F404 procurement for each fiscal year between the two qualified sources. As an investment incentive, P&W has been assured of at least thirty percent of the total annual procurement, for which Congress has authorized and appropriated funds in each of their first five years of competition contingent upon:

a. The Government procuring F404's from any source.

b. P&W becoming a qualified source.

c. P&W proposing a fair and reasonable price.

d. NAVAIR obtaining appropriate approvals consistent with applicable laws and regulations. Subsequent to this five year period, the production buy of F404's will be on an open competition basis with no minimum guarantees to either producer."

(Emphasis added)(R4, tab 248 at 1-1; tr. 13/126-27)

C. The FY88 Engine Procurement

152. In response to the Navy's RFP issued in August 1986 (R4, tab 2185), P&W submitted its proposal for the FY88 engine procurement in October 1986 (R4, tab 349). Its proposal was for a minimum of 30 percent to a maximum of 70 percent of all of the engines for 5 years (tr. 3/155).

153. On 25 November 1986, the SSEB, having evaluated the proposals from both GE and P&W, briefed the SSAC. The SSAC was told that P&W's engine prices for FYs 89 through 90 were at or below the Government's estimate (R4, tab 280; tr. 14/80), that comparing P&W's first production engine with GE's initial production (Lot III), P&W's prices were below GE's historical prices for comparable units (R4, tab 280; tr. 14/81), and that P&W's prices at 30 percent, 50 percent, 70 percent and 100 percent of the FY88 procurement "meet Mr. Paisley's goal of being within 10% of the GE engine price for Lot X at 250th engine in CY87 dollars." (R4, tab 280; tr. 14/83, 85) The SSAC decided that "[b]oth General Electric and Pratt are considered to be in the competitive range" (R4, tabs 279, 2375). Being in the competitive range did not mean P&W's prices were automatically "fair and reasonable" (tr. 11/40-42); it simply meant that P&W's proposal "could be corrected to be awardable" (tr. 13/139, 21/236, 23/81).

154. Both parties interpreted the condition of ¶ 2.(c). of the Investment Incentive clause (i.e., "the price proposed by the Contractor meets the requirements of FAR 15.8") for award of at least 30 percent of the first five fiscal year F404 engine procurements synonymously with what would be considered a "fair and reasonable" price.

155. The SSEB Chairman testified that the Paisley Curve "became accepted as the way to determine fair and reasonableness. Right or wrong, that's what we used" (tr. 11/55). He also testified that the Paisley Curve "was subsequently accepted by the SSEB, the SSAC and the SSA," and that if Pratt & Whitney's price was within 10 percent of the GE . . . price for Lot 10, at 250th engine," the Navy would consider

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the price "fair and reasonable" (tr. 11/54-55). Admiral Richard D. Friichtenicht, Chairman of the SSAC testified that one of the evaluation criteria used in determining whether P&W's engine prices were fair and reasonable was the Paisley Curve (tr. 13/145). We find that the parties by their conduct adopted the Paisley Curve as one of the standards for determining what constituted fair and reasonable engine prices at particular points along the engine procurement cycle.

156. Subsequent to the 25 November 1986 competitive range determination, the Navy asked for P&W's best and final offer (BAFO). Pratt and Whitney submitted its BAFO in February, 1987. (Tr. 5/46, 8/95 and 11/65)

157. On 26 February 1987, a GE representative met with Secretary Lehman and asked if the Navy would consider a one-time special buyout offer for 100 percent of the F404 engines for 5 years. The Secretary indicated his willingness to examine such an offer. The GE representative then asked PCO Haberlin as to the "the best way to handle a 5 year offer." He was told to "show us in the BAFO good prices." The PCO indicated that the "87 [engine requirement] should also be considered." (R4, tab 301; tr. 3/165, 12/76-77) On 26 February 1987, the PCO advised GE as well as P&W that she was reopening discussions with another round of BAFOs (R4, tab 2190). A revised RFP seeking a second BAFO was issued on 4 March 1987 (R4, tab 2188). Pratt and Whitney submitted another BAFO (BAFO No. 2) on 11 March 1987 (R4, tab 2402; tr. 11/68). While it was not "unusual" to ask for a second BAFO, Navy policy was to resort to such a measure only in cases where existing proposals were not "awardable" (tr. 11/72-73).

158. As of 16 December 1985, over a year earlier, the Navy had exercised its option under the 0144 Contract for P&W to manufacture 90 production engines to meet the FY87 requirement (see finding 78; tr. 10/101). As of February or March, 1987, however, P&W had not yet qualified its F404 engines (see finding 85).

159. In March 1987, GE submitted its Special Offer designed to end the F404 Second Source Program and thus eliminate P&W as its competitor (R4, tab 307). The offer proposed to give the Navy "a five year fixed price commitment at a price that . . . was roughly half of what G.E. was charging before the idea of competition was brought in." (Tr. 4/28-29, 9/36, 63) As requested by PCO Haberlin, GE's Special Offer covered not only the 5 FY buys prospectively, but reached back to include the 90 engines for FY87 the Navy awarded to P&W in 1985 (tr. 5/55). General Electric's offer for the 90 FY87 engines however, was contingent upon the Navy accepting its Special Offer (tr. 12/90-91).

160. Since the ground rules of the program were "to have two contractors building the 404 engine on a mobilization basis," the Navy acknowledged that GE's buy-out offer -- which would eliminate dual --sourcing -- had to be cleared with Secretary Lehman (tr. 13/164). The Navy's dual source strategy was reviewed with Secretary Lehman on 18 March 1987. Among those at the meeting were Admiral Wilkinson, Commander of NAVAIR, ASN Pyatt and ASN Paisley (R4, tab 314). At this meeting, there were strong advocates for continuing the Second Source Program. NAVAIR argued that with the GE price drop, the program had paid for itself, and recommended it was time to end the program, take the upfront savings and apply them to other programs (tr. 4/29, 80, 12/112).

161. It was recognized at this meeting that even though P&W's engine prices were substantially higher than those proposed by GE for the first 5 years, P&W's prices were in line with expectations and within a range that could be considered fair and reasonable. This permitted Secretary Lehman to proceed with a policy decision as to whether to split the FY88 engine requirement. (R4, tab 454; tr. 4/52)

162. In the end, Secretary Lehman rejected NAVAIR's recommendation to accept GE's Special Offer. He observed that GE's offer addressed only the F-18 production engines but did not address the ATA [which later became the A-12 aircraft] engine or spare and support costs. He was concerned that while GE dropped its prices on the F404 engines, it could, in the future, raise prices on the ATA or the A-12 engines. He considered NAVAIR's approach to be short-sighted. (Tr. 4/84) The Secretary then made the policy decision to continue the F404 Second Source Program. Recognizing

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that some within the Navy considered P&W's prices to be at the high end of the range, he authorized NAVAIR representatives to further negotiate with P&W for more favorable prices. The task of implementing his decision was left in the hands of ASN Pyatt and the NAVAIR contracting officials. (R4, tab 454; tr. 4/47-48, 52)

163. Referring to GE's special buy-out offer as a "very attractive offer that had a very real, tangible, short term benefits [sic]," the Secretary testified that he nonetheless decided to "stick with" dual sourcing because of "the need to have a second source for the long term, for a program that would . . . out weigh [sic] the short term budgetary relief that the G.E. buy . . . would give us" (tr. 4/30).

164. Admiral George H. Strohsahl, Jr., Program Manager of the F/A-18 Program testified that Secretary Lehman's 18 March 1987 decision was to put to rest "several years of uncertainty as to whether or not we should proceed with a continuing second source for the engine" (tr. 10/19-20), and that "[t]here was an intent to continue that with the minimum amount until the agreed-upon period, which is five years, had been completed" (tr. 10/21).

165. On 19 March 1987, Secretary Lehman approved the following decision memorandum issued on his behalf:

"On 18 March 1987 the F-404 engine procurement strategy for A-6F and follow-on Navy requirements was reviewed by the Secretary of the Navy. . . .

* * *

An offer to pursue a sole source purchase of the F-404 engine for the A-6F vice bringing on a second source was reviewed by NAVAIR. The Secretary provided the following decisions and guidelines:

. The fundamental policy of establishing dual source procurement and competition for the F-404 and major long term engine programs is sound. Developing a second source for the F-404 engine assures reasonable control of out year costs including those associated with growth and development for follow on aircraft such as the ATA. While potential short term savings associated with sole source procurement are recognized, these are outweighed by experience of out year cost growths when competition is lacking over 20-30 years of major program procurement and parts support.

. ASN (RE&S), in conjunction with NAVAIR, prepare statement justifying continued dual source procurement and competition for F-404 engines associated with FA-18, A-6F and ATA Programs."

(R4, tab 2409)

166. To follow up on Secretary Lehman's decision, ASN Pyatt issued the following direction to the Commander of NAVAIR:

"On 20 September 1984, the Secretary of the Navy directed the Navy to develop a competitive second production source for the F- 404 engine. The stated rationale was "the extensive use of the F-404 engine in current tactical aircraft and the potential for its use in future aircraft dictate the need to establish a second source for mobilization base and competitive acquisition strategy." Two and on [sic]-half years later, our goals have not changed.

* * *

As stated in your request for source selection, "the majority of the F-404 engine production will go to the offeror with the lowest price under a split-award formula, provided the other offeror's price is judged fair and reasonable." During our 18 March 1987 review with the Secretary, we considered the prices offered by both competitors indicating that a split award was comparable to sole source prices

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expected before competition. Moreover, with large future production potential providing the basis for additional reductions in engine, spares and support costs over the life of the engine procurement, the need to assure early competition in the production of the ATA variant F-404 engine and the need to maintain a long-term engine mobilization base, we concluded that dual production make sense and a decision to split the FY 1988 award was prudent.

Accordingly, you are directed to conclude negotiations on a fair and reasonable price basis and make a split award for FY 1988 F-404 engine production."

(R4, tab 322) In April, 1987, Secretary Lehman left office as the Secretary of the Navy. Mr. James H. Webb, Jr., succeeded him. [FN19]

167. In a letter dated 8 July 1987 to GE's Vice Chairman of the Board, Secretary Webb explained the Navy's decision to reject GE's Special Offer and to split the FY88 engine procurement:

"We take this step for three reasons. First, to ensure at the earliest possible time a dual production base for a family of engines which will be used by the Navy well into the next century. This mobilization base will protect the United States against a wide range of contingencies in the event of war or labor and production problems. Second, the competitive market place is the best way to ensure low engine prices in the future. By bringing Pratt and Whitney on now as a full partner in F404 engine production, we will ensure a highly competitive program for future engine procurements. Third, we expect to operate these engines for many years. A competitive spares production is very likely to result in substantial savings compared to sole source production."

(Exh. 4002)

168. With Secretary Lehman's decision already made to reject GE's Special Offer and to further negotiate with P&W for a split award for FY88 (tr. 11/94-96), the SSEB briefed the SSAC on 3 April 1987. SSEB's briefing chart showed P&W's BAFO No. 2 prices to be below GE's historical negotiated prices for comparable units (R4, tab 320; tr. 11/75-77). It also showed, in 1987 dollars, P&W's engine price was under $2.1 million whereas GE engine prices, at comparable quantity but manufactured in FYs 79 and 80, were between $2.6 to $2.8 million (R4, tab 320). SSEB's briefing chart showed further that for certain quantities, the criteria of the Paisley Curve were met -- At its 250th engine, P&W's projected engine price was approximately $1.8 million as compared with GE's actual engine price of approximately $2.3 million at the same quantity level. (R4, tab 320; tr. 11/89) In addition, P&W's prices for FYs 88-90 were below NAVAIR's own estimate, although the prices for FYs 91-92 were higher (tr. 11/91).

169. The SSEB, of which the PCO was a member, stopped short of recommending that P&W's BAFO No. 2 prices were "fair and reasonable" for award. According to its Chairman, the SSEB knew there were high-level discussions and it decided to give the SSAC the flexibility to make the decision whether the Pratt & Whitney offer was fair and reasonable, and not "to tie anybody's hands" (tr. 11/98).

170. Even though the SSAC and its Chairman felt that P&W's prices were fair and reasonable [FN20] (tr. 13/166), Admiral Wilkinson, the Source Selection Authority, was unwilling to concur unless and until the PCO had first made a determination that P&W's BAFO No. 2 prices were indeed fair and reasonable (tr. 15/173, 178). On 9 April 1987, Admiral Wilkinson decided that GE would be awarded 70 percent of the FY88 production engines, and 100 percent of the spare modules. He decided also that P&W would be awarded 30 percent of the production engines "contingent upon [his] determination that P&W has provided a fair and reasonable price." Should P&W fail to provide such a price, Admiral Wilkinson wanted the SSAC to "review its recommendation not to accept GE's special offer" (R4, tab 2416; tr. 12/127).

171. On 17 April 1987, the Navy awarded 70 percent of the FY88 engines to GE after determining its BAFO No. 2 engine prices were fair and reasonable. Award of the remaining 30 percent to P&W was deferred pending further negotiations. (Tr. 3/145,

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8/95, 10/115; R4, tab 4501; tr. 23/116)

172. At a meeting held on 21 April 1987, P&W was told that there was a faction within the Navy that wanted to accept the GE Special Offer, and there were those who wanted to keep P&W in for at least FY88 and reevaluate the situation. Pratt and Whitney was told its out-year engine prices were too high and failed to reflect learning beyond its 250th engine (tr. 12/144). [FN21] The Navy reiterated that P&W's overhead was the problem. No cost analysis, however, was performed by the PCO. [FN22] Pratt and Whitney was told that it could have until 28 April 1987 to revise its prices, or the Navy was going to make an award decision based on P&W's BAFO No. 2. (R4, tab 326; tr. 8/96; R4, tab 2421) Contrary to P&W's contention, we find that the Navy left it up to P&W as to whether to revise its prices; P&W was not coerced into submitting another BAFO. There is no evidence that the Navy conducted a price comparison between GE's Special Offer and P&W's FY 88 engine prices in evaluating whether P&W's proposed FY 88 engine price was fair and reasonable.

173. In response to the Navy's request, P&W by letter dated 28 April 1987, submitted what it considered to be BAFO No. 3:

"In the . . . [21 April 1987] meeting, P&W was requested to further review F404 engine prices for the five (5) year competitive program. Both the engine prices and learning rate and period of learning have been thoroughly reviewed. The result of these reviews was a management decision to respond to the Navy's requirement and assume a greater business risk on all fiscal year F404 buys. Engine prices have been reduced to meet the Navy's fair and reasonable criteria and learning rate objectives. These reduced prices surpass P&W's previous commitment with the Navy to be within the competitive range at P&W's 250th engine. It is evident that considerable cost reduction effort will be required at all P&W facilities to successfully reduce the inherent business risk associated with the revised prices. P&W accepts this challenge and is committed to remain a competitive supplier of Navy engines."

According to P&W, it reduced prices for all lots by an average of nearly 7 percent, and prices in the fifth year had been reduced by 8-10 percent depending on market share "to meet the Navy's emphasis on continued out-year learning." (R4, tab 330; tr. 8/102) Inasmuch as P&W took care of his earlier concerns on learning in the out-years, the Navy's cost team leader, a member of the SSEB, acknowledged that he personally would consider P&W's prices fair and reasonable at this point (tr. 14/92-93).

174. Pratt and Whitney would later charge that the Navy engaged in auctioning to ratchet its FY88 engine prices down. FAR 15.610(d) provided:

"(d) The contracting officer and other Government personnel involved shall not engage in-

* * *

(3) Auction techniques such as-

(i) Indicating to an offeror a cost or price that it must meet to obtain further consideration;

(ii) Advising an offeror of its price standing relative to another offeror; and

(iii) Otherwise furnishing information about other offerors' prices."

There is no evidence that the Navy engaged in any of the above activities.

175. At the end of April, 1987, the Navy decided to continue to negotiate with P&W. It was decided that high-level Navy officials would "take lead" in that effort (R4, tab 2191 (4/30/87); tr. 12/204). ASN Pyatt and Admiral DeMayo scheduled a

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meeting with P&W's President, Mr. Wegner, in East Hartford, Connecticut, on 20 May 1987. At this meeting P&W submitted to the Navy a "match offer" which provided, in part:

"P&W hereby amends that proposal to provide to the U.S. Navy sequential options for 50% of Navy's quantity requirements for F404 engine deliveries in Lots XIV, XV and XVI at Lot unit prices equal to the lowest price (at 50% volume) offered by General Electric Co. as of record this date, in constant year 1987 dollars."

(R4, tab 355)

176. According to P&W, there was a "distinct possibility" at that time the Navy might accept GE's Special Offer (tr. 3/262). It feared that the ASN Pyatt/Admiral DeMayo visit was to "terminate" P&W as a second source (tr. 5/62). Pratt and Whitney alleged that for this reason it devised a "match offer" strategy to forestall this eventuality (tr. 5/61-62). Admiral DeMayo testified that he and ASN Pyatt went to East Hartford because there was Secretarial-level interest in the Program, and he considered it to be his responsibility to make sure P&W's engine prices were fair and reasonable so that the Program could go forward (tr. 21/17-18).

177. The Navy had voiced concern over how to justify to Congress the premium it had to pay P&W for engines that could have been procured less expensively from GE. There was also evidence that the "match offer" was actually submitted to help the Navy to explain the F404 Second Source Program to Congress. In this regard, Pratt and Whitney's witness testified:

"It was an attempt on our part to neutralize GE's special offer which was 100 percent, versus a Pratt & Whitney proposal which was being evaluated 30 percent Pratt, 70 percent General Electric. So, it was our attempt to give the Navy negotiators some ammunition to take to whoever these reviewers were, reportedly Congress, a story that said at equal volumes, there's no premium after the first two years."

(Tr. 3/263-64) Other evidence supports a finding that the match offer was designed for the twin purpose of warding off what P&W feared would be an effort on the part of GE to price its engines predatorily, and to meeting what P&W perceived as the Navy's pricing objectives (tr. 18/191-92).

178. Other than what P&W later claimed to be its fears, there is no credible evidence that the 20 May 1987 ASN Pyatt/Admiral DeMayo trip was taken for the purpose of terminating P&W as a second source. ASN Pyatt and Admiral DeMayo testified as P&W's witnesses. Pratt and Whitney asked no questions of these witnesses concerning this important meeting. In light of Secretary Lehman's decision to continue with the program and in light of his direction to conclude negotiations, we find that the purpose of the trip was to attempt to reach a resolution with P&W on the FY88 engine procurement. Based on the evidence in the record, we find that the "match offer" was neither coerced nor asked for by the Navy. There was another round of negotiations after 20 May 1987 before agreement on the FY88 engine prices was reached (tr. 3/266).

179. As a result of negotiations, P&W agreed to lower its engine prices for FYs 88 and 89 as well as the out-years (FY90-92). The Navy negotiators were finally persuaded that P&W was not going to be satisfied with just 30 percent of the annual engine procurement and that its engine prices were fair and reasonable. (Tr. 23/155, 160) The parties entered into Advance Acquisition Contract No. N00019-87-C-0045 (the "0045 Contract") for 30 percent of the FY88 engine on 4 June 1987. The contract called for 48 F404 engines and 12 spare engines. The Investment Incentive clause, which appeared as Clause H-24 in the 0144 Contract appeared as Clause H-31 in the FY88 contract. Section I of the 0045 Contract incorporated by reference certain "checked" FAR clauses, among them the "Disputes" clause (APR 1984), FAR 52.233-1, and the "Termination for Convenience of the Government (Fixed-Price)" clause (APR 1984), FAR 52.249-2. The latter clause provided "(a) The Government may terminate performance of work under this contract in whole, or . . . in part" (emphasis added). (R4, tab 2101) The Navy took Pratt and Whitney's "match offer" and

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structured it as an option in the 0045 Contract. [FN23] The contract was ultimately definitized bilaterally by Modification No. 00002. The modification was signed by P&W's Director of Contract Management on 29 January 1988, and by the PCO on 19 February 1988. Pratt and Whitney reserved no claims prior to definitization. (R4, tab 2103; tr. 23/57)

180. Pratt and Whitney alleges that the prices it received for the 0045 Contract were not fair and reasonable because it was not able to recover all of its costs plus a reasonable profit. From this standpoint, it considered the 0045 Contract to be a loss contract. From the standpoint of "marginal pricing," i.e., lowering the general overhead on existing programs with new business, P&W concedes that it "ended up with a slight profit." (Tr. 5/64-65, 7/77-79) Pratt and Whitney contends that it agreed to the prices in the 0045 Contract because it did not want to lose its sizeable investment in the Second Source Program, and that "the Navy was plainly ready to pull the plug." (Tr. 3/181)

D. The FY89 Engine Procurement

181. For the FY89 F404 engine procurement, GE's proposal for 100 percent of the engines was the lowest (tr. 11/118). Pratt and Whitney's proposal for 100 percent of the engines was the second lowest (R4, tab 376). The next lowest was a split award of "70-percent GE engines, 100-percent GE modules and 30-percent Pratt & Whitney engines, zero percent modules" (tr. 11/120). The SSEB found P&W's FY89 unit price of $1.82 million to be lower than its FY88 unit price of $1.83 million despite a 23 percent reduction in engine quantity. (R4, tab 2473) At the 30 October 1987 SSAC briefing, the SSEB found P&W's FY89 30 percent share engine prices fair and reasonable, and recommended a split award of "GE 70% engines, 100% modules; P&W 30% engines, 0% modules." The minutes of the 30 October 1987 briefing indicated that "[t]he SSAC agreed in principle with the SSEB recommendations." (R4, tab 2473; tr. 24/233) On 16 December 1987, Admiral Wilkinson, as the Source Selection Authority, approved the split award recommendation, thus clearing the way for award of the FY89 F404 engine contracts (R4, tab 2474). By bilateral Modification No. P00022 to the 0045 Contract, signed by a P&W representative on 16 February 1989, and by the PCO on 28 February 1989, the Navy awarded 50 F404 engines and 3 spare engines for FY89 (R4, tab 2124; tr. 23/57).

182. In recognition that a 100 percent award to GE would be inconsistent with its contractual obligation to award at least 30 percent of the FY89 engines to P&W, the Navy's 30 October 1987 briefing chart made the point that P&W's 100 percent offer would be the "lowest contractually acceptable offer" for FY89 [FN24] (emphasis added) (R4, tab 376; tr. 13/173-77).

IV. The FY90 Engine Procurement

A. New Procurement Strategy

183. H. Lawrence Garrett, III, became Under Secretary of the Navy in August 1987 (tr. 24/6). In November, 1987, he was directed by the then Deputy Secretary of Defense to remove $12.6 billion from the then existing FY89 Navy departmental budget. Pursuant to this direction, the Navy "started chopping" and "took $12.6 [billion] out of the FYDP [Five-Year Defense Plan]." (Tr. 24/7)

184. On 16 December 1988, a senior GE official met with then Under Secretary Garrett and outlined a scenario that had the potential of saving the Navy approximately $240 million by awarding to GE 100 percent of the F404 engines to be procured through FY97. (R4, tab 2529; tr. 3/183)

185. Following up on this discussion with the Under Secretary, GE by letter dated 21 December 1988 made another buy-out offer "for a 100% award to GE . . . [of] all remaining USN engine requirements . . . to include FY93-FY97 (Lots 17-21)." The letter stated:

"2. This extended offer is consistent with our FY90-92 (Lots 14- 16) proposal

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where in we offered to reduce the contract prices by 7%. For FY93-97, (Lots 17- 21), GEAE offers a continuation of the above Lots 14-16 price offer at the prices and quantities shown on Exhibit A. These prices were developed utilizing an 89% Cost Improvement Curve (CIC) and 12% profit. . . ."

In addition, GE offered to share 50/50 with the Navy any profit in excess of 14 percent. (R4, tab 2529; tr. 11/126)

186. NAVAIR briefed Under Secretary Garrett on GE's Special Offer on 23 January 1989. He was told that a split award of 70% GE/30% P&W was made for the FY88 and FY89 engine procurements and that the Navy's FY90 engine procurement was pending. He was told that the F404 engine requirement had by then declined 30 percent. In light of the Special Offer, NAVAIR recommended issuing "BAFO on current solicitation for program 'buy out' to level playing field." Anticipating GE would make the same Special Offer, NAVAIR recommended that GE's offer be accepted. According to NAVAIR:

"Special offer provides net savings to Government of 157.1M in CY$ and 267.3M in TY$ through FY95."

(R4, tab 2533)

187. At a meeting held on 25 January 1989, ASN Pyatt advised P&W that the Navy's procurement needs had changed -- The A-12 Program had been cut back, [FN25] and the A-6F (re-engine) Program had been cancelled. Pratt and Whitney was told there were divided camps within the Navy: "One camp was for continuing the competition for its long-term benefits . . . But there was another camp that was opposed to continuing the competition." And, "now that Lehman is gone, it's a new situation . . . it's going to get tougher before we get this thing settled." (R4, tab 405; tr. 3/188)

188. Pratt and Whitney representatives made a "courtesy call" on Under Secretary Garrett on 25 January 1989. The Under Secretary was told that P&W was "progressing down a normal learning curve on schedule and projects to be within 10 percent of G.E.'s costs at their 250th engine as originally promised in earlier discussions with the Navy." The Under Secretary commented on the difficult times ahead for the Navy and industry and noted "Previous decisions, made at the time for good reasons, may have to change. Decisions need to be made on what's best for the Navy today, with concern for everyone involved." (R4, tab 2535; tr. 3/194) Pratt and Whitney took the Under Secretary's remark to mean that "because there was new leadership, because there was a new climate in the defense industry . . . it was very likely that the Navy would eliminate the program" (tr. 3/194).

189. As a result of GE's special buy-out offer, NAVAIR (its Contracts Directorate as opposed to its source selection entities) developed a new engine procurement strategy in January 1989. This strategy would permit a 100 percent buy out through FY95 and included the procurement of the so-called "Enhanced Performance Engines" (the "EPE engines") [FN26] (R4, tab 406; tr. 11/126-27).

190. In preparation for the upcoming SSAC briefing, the SSEB Chairman called a meeting on 16 February 1989. He told the SSEB members that he planned to express certain concerns he had with respect to the Navy's new procurement strategy at the SSAC briefing. Even though PCO Haberlin, a member of the SSEB, held the view that P&W's contract did not "guarantee" P&W an award of the FY90 engines under certain conditions, and that the Navy "could go" with its new "Winner- Take-All" strategy (R4, tab 407; tr. 11/134), we find that her view grew more out of expediency of the moment than out of conviction. Prior to the controversial FY90 procurement, PCO Haberlin penned or concurred in numerous "internal planning documents" stating that if the Investment Incentive clause conditions were satisfied, P&W was "guaranteed" or "assured" of an award for 5 years (R4, tab 4009; tr. 24/195). Inasmuch as PCO Haberlin's first involvement with the F404 Second Source Program was in connection with the FY88 -- the first competitive split -- procurement in 1986 (tr. 23/25), we find that she lacked the insight of those who were involved in structuring the dual source program from the beginning.

191. At the SSAC briefing on 21 February 1989, the assembled group was told that

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GE had submitted a Special Offer to buy-out the F/A-18 engine program, and that the offer could not be accepted "without reopening the FY-90 competition, restructuring the contract requirements." The SSAC was told that Under Secretary Garrett had "authorized NAVAIR to proceed in reopening competition and restructuring the contract requirements." (R4, tab 2548) The SSEB Chairman expressed his concerns "about not living up to our agreement (tr. 11/134)." He advised the SSAC that as long as P&W's prices were fair and reasonable, P&W should get 30 percent of the FY90 engines, and the "Winner-Take-All" strategy would be inconsistent with the Navy's business arrangement with P&W (tr. 11/129). He warned that if P&W should win 100 percent of the FY90 engines, it might have the unintended consequence of eliminating GE as the F404 design agent. That, in turn, could impact GE's ongoing "component improvement program" and the EPE development program. (Tr. 11/129-30) The SSEB Chairman's warning went unheeded. NAVAIR's Contracts Directorate continued with its new strategy. (Tr. 11/140)

B. Revised Source Selection Plan

192. On 22 February 1989, the SSAC through its Chairman, Admiral Friichtenicht, submitted to the Source Selection Authority for approval certain revisions to NAVAIR's original (8 August 1986) Source Selection Plan. The revised "Evaluation Criteria" of the Source Selection Plan, dated 21 February 1989, modified the original "General" statement by providing for 100 percent buy-out:

"The Government also reserves the right to award the total FY90 through FY95 requirement to one source if it is most advantageous to the Government."

(R4, tab 2541; tr. 15/254)

193. The "Price" evaluation criteria were revised to state:

"For the first evaluation under this solicitation, the primary award year will be for the first year (FY-90). For the annual evaluations conducted prior to award of each succeeding year (FY- 91 - FY-95) option, the primary award year is defined as the respective option year. The option portion of this solicitation will be part of the evaluation; however, the evaluation of the option(s) will not obligate the Government to exercise an option or options."

(R4, tab 2541; tr. 11/147)

194. The "Production Requirements" evaluation criteria remained unchanged. The need for mobilization was justified on the basis that there was a requirement for "multiple production sources, adequately dispersed . . . to assure availability of alternate production capability in the event of a national or local disaster." (R4, tab 2541; tr. 11/148, 15/257; compare with finding 146) This point would become important when the Navy eventually eliminated the mobilization requirement as the reason for not awarding P&W any FY90 engines.

195. NAVAIR's revised 1989 Source Selection Plan added the following criteria:

"3. The Government will evaluate FYs 90 through 95 requirements based on both then year prices and constant GFY 89 prices. The Government reserves the right to make award based on either then year prices or on constant GFY 89 prices.

4. The prices or ceiling price delta percentages proposed for the F404-GE-402 engines and modules will not be used in the evaluation."

(R4, tab 2541) The 402 version of the F404 engine was also referred to as the EPE engine (tr. 13/16). We find ¶ 4 above was designed to deal with the uncertainties created as a result of the strategy to include in the FY90 procurement the yet undefined EPE engines.

196. NAVAIR failed to revise ¶ 1.2, "Requirements," of Section 1, "Program

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Description," of the originally approved Source Selection Plan. That paragraph, stated:

"The Secretary of the Navy has established a requirement for a second source for mobilization base and competitive acquisition considerations. The existing business arrangements with P&W include a commitment by the Navy to allow P&W to compete for production of all F404 engine models being procured by the Navy, including derivative or growth versions. The intent of this procurement is to divide the total F404 procurement for each fiscal year between the two qualified sources. As an investment incentive, P&W has been assured of at least thirty percent of the total annual procurement, for which Congress has authorized and appropriated funds, in each of their first five years of competition contingent upon:

a. The Government procuring F404's from any source.

b. P&W becoming a qualified source.

c. P&W proposing a fair and reasonable price.

d. NAVAIR obtaining appropriate approvals consistent with applicable laws and regulations.

Subsequent to this five year period, the production buy of F404's will be on an open competition basis with no minimum guarantees to either producer."

(R4, tab 248; tr. 15/256)

197. Admiral Wilkinson, as the Source Selection Authority, approved NAVAIR's revised evaluation criteria on 22 February 1989 (R4, tab 2541).

198. On 7 March 1989, ASN Pyatt approved an extension of the existing CJ&A to procure F404 engines by other than full and open competition through FY95. The 1989 CJ&A continued to rely on industrial mobilization (10 U.S.C. 2304(c)(3) and FAR 6.302-3) as justification. The Navy's new procurement strategy was reflected in the 1989 CJ&A as follows:

". . . Due to the decrease in F404 requirements, NAVAIR plans to request fixed prices for the F404 engine for FY90-FY95, including requirements for the foreign military sales of the F404-GE-402 enhanced performance engine (EPE), which is a derivative of the F404- GE-400 engine . . . NAVAIR reserves the right to purchase the total quantity for all years from one source if it is more advantageous to the Government, as determined by the evaluation of proposals according to the established evaluation criteria."

(R4. tab 406, ¶ 5.b.)

C. Pratt and Whitney's Proposal

199. In April 1989, NAVAIR revised its RFP for the FY90 engines to expand the procurement options to include FY95, and to add the requirement for the EPE engines. The revised RFP was issued on 5 May 1989. (R4, tab 413; tr. 3/196, 11/152) The "Investment Incentive" clause, H-31, of the 0045 (FY88) Contract was retained and remained unchanged in the 5 May 1989 RFP (see R4, tab 2556).

200. In response to the RFP, P&W submitted its proposal by letter dated 18 May 1989. Concerned about the Navy's new strategy, P&W made sure that the Navy was aware of its obligations under the Investment Incentive clause:

We submit our proposal with the understanding that Clause H-31 "Investment Incentive" remains viable in all respects including Pratt & Whitney's right to "compete for the production of all F-404 engine models being procured by the Navy,

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including derivatives or growth versions" and the right to a minimum award of 30% of the F404 engine requirement at fair and reasonable prices."

Recognizing its obligation to propose prices in line with the Paisley Curve, P&W advised the PCO that "These prices track a normal learning curve and reflect continued learning." (R4, tab 413)

201. Then-Year Prices (TY$) included a factor to account for inflation whereas Constant-Year Prices (CY$) did not. [FN27] On the FY90 procurement, the Navy had the right to award a contract based on either TY$ or CY$. Proposals from GE and P&W were submitted in both TY$ and CY$. In the case of CY$ proposals, the Navy converted them into TY$ using an Economic Price Adjustment clause normally included in such contracts for "apples-to-apples" comparisons. (R4, tab 2566 at 5; tr. 11/166, 12/281-82, 13/33-34)

202. For FY90 through FY95 (6 years), GE's proposal for 100 percent of the engines in TY$ ($1.763 billion) was the lowest. Pratt and Whitney's proposal for 100 percent of the engine in TY$ ($1.832 billion) was the next lowest. There was a $68.74 million or 3.9 percent difference. (R4, tab 2559 at 7; tr. 13/33)

203. When the offerors' CY$ proposals were converted into TY$, Pratt and Whitney's proposal for 100 percent of the engines for the 6 years was the lowest ($1.796 billion). General Electric's proposal for 100 percent of the engine for the same period was the next lowest ($1.868 billion). There was a $72.1 million or 4 percent difference. (R4, tab 2559 at 8; tr. 13/35)

204. For FY90 only, GE's proposal for 100 percent of the engines in TY $ ($279.636 million) was the lowest. Pratt and Whitney's proposal for 100 percent of the engines in TY$ ($290.441 million) was the next lowest. General Electric's proposal was lower than P&W's proposal by $10.805 million or 3.8 percent. (R4, tab 2559 at 7; tr. 13/33)

205. For FY90 only, P&W's proposal for 100 percent of the engines in CY $, converted into TY$ ($292.602 million) was the lowest. General Electric's proposal was the next lowest ($295.408 million). Pratt and Whitney's proposal was lower than GE's proposal by $2.806 million or less than 1 percent. (R4, tab 2559 at 8; tr. 13/35)

206. The lowest split award was determined to be 70 P&W/30 GE in TY$. This split would cost the Navy $1.939 billion over 6 years (R4, tab 2559 at 7). This amount exceeded the GE TY$ proposal for 100 percent of the engines over the same 6 years by $176.38 million ($1.939 billion - $1.763 billion). (Tr. 13/37) If only FY90 was considered, the 70 P&W/30 GE split award would exceed a 100 percent GE award by $25.137 million ($304.773 million - $279.636 million).

207. Based on the foregoing evaluation, the Navy considered that the premium it would have to pay in maintaining P&W as a second source over "singling up" with just GE to be $176.4 million (tr. 13/38). This number would later be relied upon as justification for ending the F404 Second Source Program.

D. The "Winner-Take-All" vs. The Dual-Sourcing Alternatives

208. In analyzing P&W's proposal, the PCO found that P&W had reduced its prices from its "previously offered 87/88 prices . . . so that they are close to or even lower that [sic] GE's prices at various splits." The PCO concluded that P&W's prices in its "89 proposal" were fair and reasonable. (R4, tab 2559 at 15) As to P&W's FY90 engine prices, even Mr. Carberry, the PCO's superior in NAVAIR's Contracts Directorate and its most ardent critic of P&W's cost structure, acknowledged that P&W's prices were competitive with GE's, and that his earlier prediction that P&W's would never become competitive was wrong (R4, tab 416; tr. 10/132).

209. With the question of fair and reasonable prices from P&W out of the way, the PCO's analysis focused on whether NAVAIR should "single up" or maintain dual sourcing. Based upon her analyses of various pricing alternatives, she concluded

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that (1) if NAVAIR decided to "single up," GE's 100 percent proposal for FYs 90-95 in TY$ ($1.763 billion) was the best alternative, and (2) if NAVAIR decided to continue to split award, a 70 P&W/30 GE split in TY $ ($1.939 billion) was the best alternative. (R4, tab 2559 at 15)

210. On 30 May 1989, the PCO recommended a 100 percent award to GE notwithstanding her conclusion that P&W's proposal prices were fair and reasonable. Her recommendation was based on the following reasons:

"2. Difficult to support maintaining two sources for industrial mobilization purposes based on the reduced quantities of F404 engines forecasted now compared to when the dual sourcing decision was made. (Approximately 40% decrease).

3. Although the Gov't "intended" to provide P&W at least 30% of the engine quantity, the Gov't did not guarantee it as indicated by a revision of the evaluation criteria to include a 100% buyout.

4. It is estimated that the Gov't could save $176M for production engines (approximately 10% of the FYS90-95 engine costs) by making a 100% award to GE. Additional savings could be realized for eliminating related costs."

(R4, tab 2559 at 15; tr. 13/48)

211. As reflected in her analysis, notwithstanding her interpretation of the Investment Incentive clause, the PCO fully recognized that a 100 percent award to GE "may send bad signal to industry" in the light of her conclusion that "prices proposed by P&W appear to meet the req'ts of FAR 15.8 (fair and reasonable)." She also recognized, on the other hand, maintaining two sources had the advantage that "sends signal to industry that Government stands behind commitment to dual sourcing." (R4, tab 2559 at 9; tr. 13/38)

212. Sensing that the FY90 engine procurement appeared to have been proceeding outside the established source selection process (tr. 11/157-58), the SSEB Chairman sent the following memorandum to the SSAC Chairman (Admiral Friichtenicht) on 31 May 1989:

"1. I don't know if there is a hidden agenda, but there seems to be a push to making a decision outside of the formal source selection process. Per your direction, it was decided to go with the formal process and that was the way I was proceeding until pre-empted by the AIR-02 initiative.

* * *

2. . . . Since the formal process was started I believe it should run to its conclusion.

* * *

4. . . . It is quite apparent the P&W prices are very competitive to G.E. and would therefore conclude they are "fair and reasonable." Per our agreement with P&W, if their prices were judged "fair and reasonable" they would receive at least 30% of the FY buy. This clause is in effect thru FY92 after which 100% could be awarded to G.E. even though P&W prices were considered "fair and reasonable." Therefore, for FY90 100% to GE is not a decision alternative."

(R4, tab 414; tr. 11/153-56)

213. In connection with this memorandum, the SSEB Chairman testified:

"Q. . . . Now, would you tell us what this hidden agenda was about? You were concerned about?

A. If I knew, I would tell you. All I know is, there was things happening,

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briefings going on, information being passed at higher level, which I wasn't sure why or what was going on.

Q. This was within the [C]ontracts [D]irectorate?

A. Yes, it was.

Q. And it was viewed by [you] as a circumventing of the SSEB-SSAC process?

A. That's the way I looked at it.

Q. And you felt that 02 [NAVAIR's Contracts Directorate] was pushing to take over the process?

A. That, but I didn't know why."

(Tr. 11/156-57) We find that under the F404 Second Source Program, the SSEB-SSAC-SSA process, conducted in accordance with the approved Source Selection Plan, was the only authorized or "properly constituted" (tr. 15/82) process for selecting and awarding F404 engine contracts. While the PCO and the NAVAIR Contracts Directorate played a role in the Second Source Program, they were not authorized to make source selection decisions (tr. 23/67-68).

214. The SSEB evaluated the proposals, and on 6 June 1989, briefed the SSAC. On the issue of whether NAVAIR should award 100 percent of the engines for all years to one contractor or retain dual sourcing, the SSEB came down on the side of retaining dual sourcing. The SSEB concluded that:

. "GE & P&W prices are fair and reasonable.

. 100% award to GE or P&W not in best interest of the Navy.

. Price delta between 100% split award may lessen in future competitive years.

. Benefits of retaining two sources for another year outweigh benefits of 100% award."

(R4, tab 416 at 12)

215. The SSEB Chairman explained that a "100-percent award to GE went against the [I]nvestment [I]ncentive clause that we had with Pratt & Whitney . . . [and] one hundred percent to Pratt & Whitney meant that it would eliminate GE and their design support for that engine" (tr. 11/169).

216. The SSEB recommended the following split-award for FY90:

"a. Award FY90 F404 based on the new proposal.

b. Award Total F404 (-400/-402) Engine Split (TY$) for FY90: 30%GE/70 &W.

c. Award -400 Module Split (TY$) for FY90: All LPT modules (P&W)/all other modules (GE). [FN28]

d. Award -402 Engine Split for FY90: 50%GE/50 &W."

The minutes of the SSEB/SSAC meeting reflected that "[t]he SSAC deliberated on the . . . recommendations of the SSEB and agreed to present them to the SSA for approval." (R4, tab 415)

217. In a document entitled "Award Determination For FY90 F404 Engine/Module Competition," the SSAC "unanimously" recommended the above procurement action to the Source Selection Authority, Admiral Wilkinson, on 6 June 1989. The recommendation

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was said to have been made "After thorough deliberations and in compliance with the RFP evaluation and award criteria." Admiral Wilkinson concurred in the SSAC recommendation on 7 June 1989, thus clearing the way for NAVAIR to split-award the FY90 engine procurement between GE and P&W. (R4, tab 417) Based on FAR 15.612(d), [FN29] we find that Admiral Wilkinson's concurrence was the final decision required to split award (70 &W/30%GE) the FY90 engine procurement. Pratt and Whitney did not become aware of this Award Determination until litigation commenced some years later (tr. 3/197). Although the PCO originally recommended a 100 percent award to GE, she testified that, as a member of the SSEB, she could "support that recommendation" (tr. 13/62, 24/154). She testified that, at that point, she "could have awarded the contract" with no additional approval (tr. 24/155).

218. Subsequent to the 7 June 1989 Award Determination, the PCO began to prepare the split award contracts for execution. She was then told "to hold off and not to do anything. Just wait." (Tr. 13/69-70, 24/153) No reason was given for this direction (tr. 24/154).

219. On 26 July 1989, NAVAIR briefed now Secretary Garrett on the 7 June 1989 Award Determination. There was a discussion about whether to single up or to continue with dual sourcing. Those who advocated for "singling up" wanted to save money in the short term. Those who advocated for continuing with dual sourcing argued there was still a major procurement for the A-12 aircraft. (Tr. 10/160-61)

220. Two days after the Garrett briefing, Admiral Wilkinson dispatched the following instructions, dated 28 July 1989, to the SSAC Chairman, Admiral Friichtenicht:

"1. Subsequent to your [SSAC Award Recommendation of 6 June 89] review and recommendation, several program and acquisition policy issues have come to my attention that I would like the Council to consider consistent with the source selection criteria. These issues are:

a. In the context of the entire solicitation including the buy-out alternative, a close review needs to be conducted of what offers may be considered "fair and reasonable."

b. Although the approved acquisition plan for the F404 engine provides for a dual source acquisition strategy, this strategy can be revised if it is in the best interests of the government. The Council should not feel constrained by the approved strategy.

c. Is the interest in maintaining a defense mobilization base, worth the price to the [G]overnment to maintain it, given alternative offers?"

2. I would like the Council to review these and any other relevant issues and report back with a recommendation as soon as practical.

(R4, tab 422) The SSEB Chairman and the PCO received this instruction from Admiral Friichtenicht (tr. 11/175, 13/70).

221. Admiral Wilkinson acted on the basis of what he believed Secretary Garrett wanted:

". . . we got the word somehow, and the Secretary was willing to lift the mobilization base requirement, and with that, we went back to the SSAC with another letter of direction to look at the benefits of continuing on a mobilization base."

(Tr. 15/207)

222. When the SSEB members were told to review their earlier recommendation, they assumed Secretary Garrett wanted to accept GE's buyout offer (tr. 14/102). The SSEB did not change its mind with regard to whether P&W's engine prices were fair and

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reasonable. According to its Chairman, the SSEB was not told to reevaluate the proposals and no reevaluation was performed. Instead, the SSEB looked into "the contractual wording of the [I]nvestment [I]ncentive clause and to see how binding that clause was." In the end, the SSEB did not change its original split award recommendation. (Tr. 11/203, 14/103)

223. The SSEB briefed the SSAC on 4 August 1989. At this briefing, the SSAC was told that a 100 percent award to GE had certain risks: If P&W protested the award to the General Accounting Office, the Navy would likely prevail because its change in requirements justified a change in the RFP, and because the Navy properly evaluated the proposals. On the other hand, if P&W were to sue for breach of contract, the Navy would encounter a higher litigation risk. This was so because a favorable finding that P&W's prices were fair and reasonable had already been made, and that the Navy's own documents and personnel had construed the Investment Incentive clause to have "guarantee [d]" P&W at 30 percent share of the annual engine procurement for 5 years. The SSEB Chairman testified these Navy personnel included people "working the program" and SSEB members. The SSAC was told that failure to award to P&W would present a negative "image of Government 'breaking' its promise after enticing P&W to invest in program." (R4, tab 423 at 11; tr. 11/194- 96) Contrary to the requirements of the Source Selection Plan, no minutes were kept of this SSAC briefing (tr. 11/201, 13/211).

224. In an undated memorandum written sometime after the 4 August 1989 SSEB/SSAC briefing, Admiral Friichtenicht, Chairman of the SSAC, advised Admiral Wilkinson, the Source Selection Authority:

"the SSAC now recommends a 100% award to General Electric with the full intent to also award 100% of the out year options to G.E. as well."

The memorandum made the point that in 1984 there were an estimated 5,000 F404 engines and their derivatives to be procured. That number was said to have been reduced to 3,000. This was said to have "mollified" the mobilization requirement. The memorandum stated that "The Department of the Navy will be paying up to a $176.4M premium over the next 6 years to maintain a defense mobilization base," and concluded:

"5. The SSAC, after reviewing all factors related to the mobilization issue, concluded that the $176.4M additional procurement funds required to maintain two F404 producers is no longer warranted. This is driven primarily by the reduced quantity of engines now being procured on an annual and total basis; . . ."

The memorandum mentioned that "P&W has interpreted this [the Investment Incentive] clause as a government 'guarantee' to award at least 30% of the total engine buy to P&W if their prices are fair and reasonable," but did not mention that Navy personnel also interpreted the clause the same way. The memorandum acknowledged that "The SSAC has determined that P&W's" prices are fair and reasonable" (R4, tab 429; 11/217-18).

225. ASN Pyatt left his position with the Navy in July, 1989. He testified that nothing in what he saw when he left would lead him to conclude that dual sourcing would not work in a 3,000-engine environment. (Tr. 15/82) He testified "no analysis was ever made of the impact of running the program on a 3,000 engine level. They just grabbed it out of the air as a reason" (tr. 15/84).

226. By memorandum dated 11 August 1989, Admiral Wilkinson recommended that Secretary Garrett remove the mobilization base requirement:

"2. The projected requirements for the F404-GE-400 engine and derivatives have declined significantly. The initial second source decision has created a substantial number of new vendors. Prime manufacturer delivery capabilities are not limited by in-house production or assembly constraints but rather by specialized vendors on critical items such as bearing and nozzles. Thus, the continuation of two prime producers essentially does not increase mobilization capabilities. Accordingly, I recommend removal of the mobilization base requirement."

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Secretary Garrett signed the memorandum indicating his concurrence with Admiral Wilkinson's recommendation. (R4, tab 430)

227. On 16 August 1989, Admiral Wilkinson issued the following Decision Memorandum:

"1. I have reviewed the findings of the Source Selection Advisory Council (SSAC). . . . I concur that a 100% award to General Electric (GE) with the full intent to also award 100% of the out year options to GE as well best meets the needs of the Navy, all factors considered.

2. After reviewing the issues associated with mobilization, I have concluded that the $176.4M in additional procurement funds to maintain two F404 producers is no longer warranted. This along with GE's capability to meet all foreseeable F404 engine quantities, allows the selection of GE as the lowest priced offer for FY90 engines and FY91 through FY95 engine options in accordance with the source selection criteria."

(R4, tab 431)

228. Based on the evidence in the record, we find that both Admiral Wilkinson (SSA) and Admiral Friichtenicht (Chairman, SSAC) believed that the Navy was obligated to award P&W at least 30 percent of the F404 engines and their derivatives so long as the mobilization base requirement was in place and so long as P&W's prices were fair and reasonable (tr. 13/190-91, 15/168-69). With declining engine requirements, and with GE's ability to manufacture all the Navy's projected engine requirements, they believed the F404 mobilization base requirement was no longer necessary. They also believed that once the Secretary of the Navy lifted the mobilization base requirement, the Navy would be free to end dual sourcing the F404 engine. (Tr. 13/197)

229. In a letter dated 10 November 1987 to Senator John F. Kerry of Massachusetts, Under Secretary Garrett gave the following explanations for dual-sourcing the F404 engine:

"We decided to dual-source the F404 for several reasons. First, we wanted to ensure a dual production base, as early as possible, for a family of engines which will be used well into the next century. The resulting mobilization base will protect us against a wide variety of contingencies in the event of war or labor and production problems. Secondly, we believe the competitive market place will ensure low engine prices in the future. With Pratt & Whitney as a full partner in F404 production, we are ensured of a highly competitive program for future engine procurements. Finally, we expect to operate these engines for many years and competitive spares production will very likely result in substantial long-term savings compared to sole source production. Thus, our decision to dual source F404 requirements was based on broad national interests, including anticipated long-term cost reductions and enhanced production capability, rather than mere anticipated short-term savings."

(R4, tab 378)

230. We find the reasons articulated by the Navy in this 1987 correspondence to be consistent with the reasons Secretary Lehman gave in 1984 for establishing the F404 Second Source Program: surge and dispersed production capability and competitive acquisition considerations (finding 4; tr. 11/31, 13/182). These considerations had not changed and still existed in 1989 when the Navy decided to end the Second Source Program.

231. The premium Admiral Wilkinson believed would be required to maintain P&W as a second source was the "up to . . . $176.4M" amount set out in the undated SSAC recommendation (see finding 224) reversing its initial split award recommendation. We find that this amount was the difference in TY$ over 6 years (FY90 through FY95), between the lowest split award --70 &W/30%GE -- and 100 percent award to GE (finding

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191).

232. The F404 Second Source Program was conceived on the premise that the savings accrued through competition between GE and P&W would pay for or offset the premium required to be paid to P&W to maintain it as a second source for 5 years (through FY92) (tr. 15/238, 17/137, 18/86). In this connection, the PCO found, in a 25 September 1987 analysis entitled "Competitive Savings From Dual Source Contracting":

"a. It has been estimated that the Navy has saved $213.6M for an eight year period (FYs 85-92) by dual sourcing the F404-GE-400 engine. This number was derived by comparing the projected price of the engine based on the assumption that we had continued to negotiate sole source with GE to the prices (actual for FYS85-88, forecast for (FYS89-92) that have been obtained after the decision to develop a second source was made. . . .

b. The Navy also benefits from being able to compete the procurement of spare parts (estimated to be $239M in constant FY86$ for FYs 86-92)"

(R4, tab 373) The record shows that as of September 1989, the PCO, in comparing "the expenses, both non-recurring and recurring, incurred by the Navy for developing a second source with the recurring cost projections if the engine had continued to be procured sole source," found that "[t]he dual source procurement strategy for the F404-GE-400 engine resulted in estimated savings of $210.7 million." (Emphasis in original) (R4, tab 435; tr. 22/132)

233. The Navy acknowledged that in arriving at the $176.4 million premium, it failed to consider the spare parts savings accrued and to be accrued in maintaining a second source. Nor did it account for the potential savings to be accrued through continuing competition. (Tr. 13/232-33, 258) In this regard, ASN Pyatt testified "Future competition . . . alone would have changed that [$176.4 million]. That calculation changes annually" (tr. 15/68). Winning 70 percent of the FY90 engines would have "driven [P&W] down the learning curve" sooner, and would have put it in a better position to compete in subsequent years (tr. 16/154, 14/146). While acknowledging that the $176.4 million amount should be decremented, the Navy did not know by how much, contending that "it's awfully hard to project what the additional savings or what decrement would occur," and maintained that its "up to" qualifier was the best it could do (tr. 13/224-25). We find that the $176.4 million premium the Navy alleged it would have to pay over 6 years (FY90-95) to be seriously flawed and misleading. Furthermore, if the PCO's 1987 estimate of $213.6 million savings had any validity, it called into serious question the $176.4 million premium without even considering the savings to be to be obtained ($239M in constant FY86$ for FYs86-92) from spare parts competition. As for spare parts, ASN Pyatt testified that "spares alone could wipe this [$176.4 million] out" (tr. 15/71).

234. The decision to end the F404 dual source Program came ultimately from Secretary Garrett. To him, it was a matter of "affordability." He testified, "[a]ffordability was driving everything. It was driving quantity buy, program buy, whether . . . a program lived or died." (Tr. 24/65) He testified that while it was Secretary Lehman's task to build a 600-ship Navy, it was his task to "shrink it," and, in that context, the Navy simply could not afford to "facilitize" and implement some of the dual source programs conceived and put into place prior to his "watch" (tr. 24/14-15). While acknowledging that in 1989, Congress did appropriate funds for the procurement of F/A-18s and hence their engines (tr. 24/15), Secretary Garrett maintained that he was trying to "match Navy's program to the realities of the budget" (tr. 24/33, 80).

235. The realities of the F404 Second Source Program received only perfunctory review at the Secretarial level. At the time he decided to "single up" with GE, Secretary Garrett was under the impression that P&W still had not qualified its F404 engine (tr. 24/23), that "singling up" with GE would save the Navy $500 million (tr. 24/24). He was not made aware that P&W's 70 percent proposal was lower than GE's 70 percent proposal, and that the contractors' 100 percent proposals were competitive (tr. 24/84). Nor was he totally familiar with the details of the business arrangement the Navy had entered into with P&W (tr. 24/68-69).

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236. On 17 August 1989, the entire FY90 requirement for the F404 engine was awarded to GE. The GE contract awarded contained annual options for FYs 91 through 95. This arrangement essentially bought-out the then known Navy requirements for the engine, and ended the F404 Engine Second Source Program. Award to GE of the FY90 quantities was made pursuant to GE's proposal in response to NAVAIR's revised RFP issued in May 1989. The award was not made pursuant to exercise of the Navy's out-year option for FY90 that was a part of its FY88 split award contract with GE. (Tr. 25/132) Apparently treating the FY90 procurement as a separate and distinct procurement action, the Navy would later argue that P&W should have protested the FY90 100 percent award to GE to the General Accounting Office, and P&W's failure to do so gave rise to the Navy's defenses of laches and failure to mitigate (Eighth defense), estoppel (Ninth defense), and implied waiver (Tenth defense). Notwithstanding this litigation position, the PCO acknowledged that the FY90 award "was [based] on the existing [GE] contract," and the award was processed as "an advance acquisition modification to that contract" (tr. 25/132).

237. In her 5 September 1989 memorandum providing an economic analysis of the dual source program, the PCO gave the following explanations for ending the program:

"The primary basis for the decision to break the dual source is that the General Electric offer saves the [G]overnment approximately $167 million from FY90 through FY95 over the most attractive dual source split alternatives. The payment of the differential could not be justified in the face of reduced budgets, declining requirements and adequate coverage for mobilization at the subcontractor level."

(R4, tab 435) PCO Haberlin maintained that the 100 percent award to GE was justified because "[u]ltimately, the decision should be made on what's the best for the Government, and ultimately best for the taxpayers who are actually paying for these items" (tr. 24/165).

238. The Navy would later raise the defenses of latches (8th defense), estoppel (9th defense) and implied waiver (10th defense). This and other findings below are pertinent to those defenses. The PCO debriefed P&W personnel on 26 September 1989. Pratt and Whitney was told that even though the Navy wanted to keep two sources, declining engine requirements coupled with a $150 million price differential between 100 percent award to GE and the best split was "too costly to justify [two sources] to the taxpayer." The PCO admitted that she did not consider whether P&W's proposed prices were within the range of the Paisley Curve. Pratt and Whitney was told that the Navy evaluated the proposals without regard to the Investment Incentive clause since it was not a part of the evaluation criteria. As for that clause, the Navy took the position that it "always allowed for the possibility of a 100% award." The PCO advised P&W that the Navy intended to honor its payment obligations for the Special Tooling. (R4, tabs 616, 2582)

239. During the debriefing, the PCO acknowledged that P&W's performance was not a factor in the Navy's decision, that P&W's prices for the FY90 procurement were fair and reasonable and "FAR 15.8 was not an issue," and that obtaining the appropriate approvals required by laws and regulations as provided by ¶ 2. (d) of the Investment Incentive clause "was not a problem." At the conclusion of the debriefing, P&W said that it would continue to perform, and that in doing so, it was not waiving any rights it might otherwise have under its contracts with the Navy. (R4, tabs 616, 2582)

240. Following the debriefing, P&W put what it told the PCO in a letter dated 12 October 1989:

". . . Pratt & Whitney believes that the Navy has failed to honor its contractual commitments to Pratt & Whitney -- commitments on which Pratt & Whitney relied when it agreed to participate in the F404 dual sourcing program and on which it has continued to rely. As a result, Pratt & Whitney believes it is entitled to be made whole in all respects for both its investments in and performance under the F404 program.

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It is Pratt & Whitney's desire that we continue to work cooperatively on this program and we hope that our current differences will be settled amicably and promptly. For our part, we will continue to perform diligently Contracts N00019-85-C-0144 and N00019-87-C- 0045, pending resolution of these issues. Pratt & Whitney continued performance, as we expressed at the debriefing, is without waiver of any legal and equitable remedies Pratt & Whitney has available to it."

(R4, tab 703)

241. On 17 October 1989, Mr. Wegner, P&W's President met with Secretary Garrett. Secretary Garrett was put on notice that P&W considered the Navy to have breached its contract with P&W, and that it was P&W's position that the Navy should compensate P&W for its losses. Pratt and Whitney's financial losses were said to include costs incurred for (1) tooling, (2) qualification, (3) unique F404 capital equipment and (4) obligations incurred for Lots XIV and beyond in the nature of purchased parts and materials and vendor obligations (R4, tab 704). The record shows that Mr. Missimer met with other high level NAVAIR officials on 15 November 1989 (R4, tab 705).

242. Pratt and Whitney met with NAVAIR's Head of Contracts (Admiral William R. Morris) on 30 November 1989. It gave notice that as a result of the Navy's decision to end the F404 dual source program, P&W had incurred out-of-pocket costs of between $90 to $100 million. Such costs were said to include its unreimbursed costs of qualifying its engines, costs of terminating its long-term arrangements with its suppliers, tooling costs above and beyond the $50 million limit imposed by its contracts (estimated to be $17 million). Pratt and Whitney stated that it would also claim lost profits. The Navy was told that if litigation ensued, "the damages sought could be a lot higher." Admiral Morris advised that the Navy would "try to find a fair and equitable solution." He told P&W that it had to submit a certified Contract Disputes Act claim without which the Navy could not "work the issues." (R4, tab 706)

243. Six months after they entered into the 0045 Contract, the parties mutually agreed to modify the Investment Incentive clause to provide for reimbursement of the F404 Special Tooling in 3 installments. Modification No. P00001 to the 0045 Contract was executed in January 1988 to formalize that agreement. (R4, tab 2101; tr. 23/171) The record shows that the Navy has paid the $50 million not-to-exceed amount specified in the Investment Incentive clause (R4, tab 2586, tr. 23/172). The third and last installment was paid through bilateral Modification No. P00037 (R4, tab 2139). This modification contained no releases of any kind (tr. 25/68-69).

244. Based on the testimony of the PCO (Patrick McLaughlin) who took over the dual source program in August 1989, we find that, for FYs90 through at least 93, the Navy continued to procure F404 engines, and procured them sole-source by way of exercising its options under its contract with GE (tr. 25/111-16).

V. The Navy's Defenses

A. Background

245. In its Second Amended Answer/Affirmative And Other Defenses, the Navy raised 12 separate defenses. The First through Eleventh Defenses set forth the Navy's affirmative and other defenses. The Twelfth Defense responds to each paragraph of P&W's complaint.

246. The Navy's Second (Collateral Estoppel), Third (Fraud During Performance), Fourth (Fraud In The Inducement), Fifth (Misrepresentation), part of the Sixth (Unclean Hands) and the Seventh (Prior Breach) defenses pertained to what was the subject of the "Illwind" investigations. These defenses all pertained to the Navy's general defense of contract avoidance by reason of UTC/P&W's conviction for fraud in the United District Court for the Eastern District of Virginia. See United States v. United Technologies Corporation, Case No. 92- 0350-A, Judgment In A Criminal Case,

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August 28, 1992 (E.D., Va.) The parties filed cross-motions for summary judgment on the contract avoidance for fraud issue. By decision issued on 7 March 1995, the Board granted UTC/P&W's motion for summary judgment and denied the Navy's cross-motion. United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Propulsion, ASBCA Nos. 46880 et al., 95-1 BCA ¶ 27,538.

247. A part of the Navy's Sixth (Unclean Hands) and Seventh (Prior Breach) defenses pertained to alleged conflict of interest violations by a retired Admiral who went to work for UTC/P&W. The Navy contends that the F404 contracts are unenforceable by reason of the Admiral's conflict of interest violations. Pratt and Whitney moved for summary judgment on this issue. In a decision issued on 24 April 1995, the Board denied UTC/P&W's motion and held we had jurisdiction to decide the merits of the Navy's Defenses to UTC/P&W's claim. United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Propulsion, ASBCA Nos. 46880 et al., 95-2 BCA ¶ 27,644.

248. Shortly before the conclusion of the May/June 1995 hearing, the Navy withdrew, with prejudice, its defenses based on "allegations of statutory and regulatory conflict of interest violation on the part of any and all P&W employees who were retired Regular Navy officers and who were involved in the F404 dual source program" raised in the Navy's Sixth (Unclean Hands) and Seventh (Prior Breach) defenses, and to the extent raised in the Navy's Third (Fraud During Performance) and Fourth (Fraud In The Inducement) defenses. A part of the Navy's Fifth (Misrepresentation) and Seventh (Prior Breach) defenses made allegations "unrelated" to the "Illwind" matter. The Navy also withdrew, with prejudice, these defenses. The Navy's defenses of misrepresentation and prior breach "related" to "Illwind" were the subject of the Board's decision in United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Pro pulsion, ASBCA Nos. 46880 et al., 95-1 BCA ¶ 27,538.

249. Pursuant to the parties' "Stipulation Of Partial Dismissal" filed with the Board on 20 June 1995, the Board issued an "Order Of Partial Dismissal" on 27 June 1995, dismissing with prejudice, the withdrawn defenses. As a result of the foregoing action, the Board is left with the Navy's Eighth (Laches/Failure to Mitigate), Ninth (Estoppel), Tenth (Implied Waiver) and Eleventh (Accord and Satisfaction/Release) defenses.

B. The Navy's Defenses Of Accord and Satisfaction and Re lease

250. In connection with its affirmative defenses of accord and satisfaction and release, the Navy called no witnesses. With respect to its defense of accord and satisfaction, there is no proof that the parties reached a meeting of the minds that P&W would accept any substituted performance on the part of the Navy in full satisfaction of P&W's claim for breach when the Navy awarded 100 percent of the FYs 90-92 F404 engines to GE.

251. With respect to its defense of release, the Navy relied solely on a bilateral modification (not numbered but designated as "various") that pertained to both the 0144 and 0045 Contracts (tr. 25/71). This modification was signed by a P&W Contract Administration Manager on 17 October 1991, and by the PCO on 21 October 1991, over two years after the Navy ended the F404 dual source program in August 1989. (R4, tab 2594)

252. This bilateral modification provided:

"In order to execute Final Acceptance, the following changes are made to the captioned contracts:

1. All conditions set forth in P00037 to N00019-85-C-0144 and P00027 to N00019- 87-C-0045 for final acceptance have been met and all funds which are being held as a result of P00037 and P00048 to N00019-85-C-0144 and P00027 and P00067 to N00019-87-C-0045, and any letters implementing said modifications, are hereby released.

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2. All Pratt & Whitney produced F404-GE-400 engines which have been conditionally accepted under the modifications listed above are hereby fully accepted.

* * *

4. In consideration of the modification agreed to herein, Pratt & Whitney hereby releases the Government from any and all liability under the captioned contracts for equitable adjustments attributable for such f acts or circumstances giving rise to this modification and/or the modifications listed in paragraph 1. above."

(Emphasis added) (R4, tab 2594)

253. Pratt and Whitney explained that during performance of the 0144 and 0045 Contracts, the Navy had conditionally accepted the F404 engines delivered because of a problem associated with a "McHaffie" bolt. Pratt and Whitney's F404 Contract Administrator testified that the modification represented "our final agreement with the Navy regarding the release from conditional acceptance of engines delivered and the government's final acceptance of those engines" (tr. 25/73) Unrebutted testimony shows, and we find, that the modification the Navy relies upon had nothing whatsoever to do with P&W's claim for breach of the Investment Incentive clause. Rather, the modification pertained "to the settlement of the McHaffie bolt and final acceptance of engines" (tr. 25/73).

254. In rebuttal to the Navy's general allegation of release, P&W offered evidence that it repeatedly declined to execute documents which could later be construed to have provided the Navy a general release of its rights under the F404 contracts. Modification No. P00047 to the 0144 Contract was signed by a P&W representative on 13 March 1991 and by a NAVAIR PCO on 18 March 1991 (R4, tab 752). CLIN 101 of the 0144 contract pertained to the 90 F404 engines ordered from P&W on a sole-source basis in 1985. As reflected elsewhere in our fact-findings, after intense negotiations, the parties in 1987 agreed to definitize the 0144 Contract on the basis of a firm fixed price plus a fixed price incentive formula subject to a certain established ceiling.

255. Inasmuch as P&W incurred costs which it felt it was entitled to collect up to the ceiling price (tr. 25/76-77), it "submitted a request that the billing price for the [0144] contract be increased" (tr. 25/76). Modification No. P00047 reflected the parties' agreement "regarding an adjustment of the billing price of the [0144] contract for line item 101 to the ceiling price established for CLIN 101" (tr. 25/75). The modification increased the total amount of funds obligated under the 0144 Contract by $17,770,000 (R4, tab 752 at ¶ 4). Based on the additional funds made available through Modification No. P00047, the final contract price would be redetermined by way of another modification (tr. 25/77). Pratt and Whitney contends that even though the Navy had repeatedly attempted to obtain a broad release from P&W, P&W had "never accepted language that could be construed as a broad release." (95-1 BCA at 137,482)

256. The record shows that on 21 January 1992, NAVAIR "faxed" its proposed final price modification to P&W (R4, tab 754; tr. 25/78). This proposed modification contained the following provisions:

"In order to establish the total final price in accordance with the clause "Incentive Price Revision - Firm Target (APR 1984) (FAR 52.21 6-16)," the above [0144] contract is hereby modified as follows:

1. In Section B, "Supplies or Services and Prices," the total final price for CLIN 0101 is increased by $17,770,000.00.

2. It is understood and agreed that the total contract price of $188,770,000.00 constitutes the full and complete price to which the Contractor is

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entitled for all obligations performed under this contract. By execution of this modification the Contractor waives any and all claims for equitable adjustment in price for any change orders or constructive changes issued or received prior to the execution of this modification for which no equitable adjustment has been provided."

(R4, tab 754) Pratt and Whitney did not agree to this modification because the total contract price amount was incorrect; it failed to take into account several "Engineering Change Proposals" or "ECP"s which affected the price of the engines (tr. 25/79).

257. On 29 January 1992, NAVAIR "faxed" to P&W another proposed final price modification correcting the total contract price to $189,483,100.52. Paragraph 2. of the initial proposed modification was revised (underscored) to read:

"2. It is understood and agreed that the total contract price of $189,483,100.52 constitutes the full and complete price to which the Contractor is entitled for all obligations performed under CLIN 0101 of this contract. By execution of this modification, the Contractor waives any and all claims for equitable adjustment in price for any change orders or constructive changes issued or received prior to the execution of this modification for which no equitable adjustment has been provided."

(R4, tab 755) Pratt and Whitney declined to execute this version of the proposed final price modification because Paragraph 2 "was extremely broad in that it . . . [constituted] . . . full and complete price . . . [for] all claims" (tr. 25/80).

258. Pratt and Whitney advised NAVAIR that Paragraph 2 was unacceptable. As a result, NAVAIR agreed to "look at other contract modifications and attempt to come up with more acceptable language" (tr. 25/81).

259. On 12 February 1992, NAVAIR "faxed" yet another version of the final price modification to P&W. NAVAIR added the following sentence to Paragraph 2:

"The Government and the Contractor both reserve the right to negotiate and settle any defective pricing offsets relating to audit no. 1481- 0A420021/SE."

(R4, tab 756) No change was made to the rejected portion of the paragraph. Pratt and Whitney advised NAVAIR that this modification was unacceptable because "it still contains the language that was there in the earlier contract modifications" (tr. 25/82).

260. On 12 May 1992, NAVAIR "faxed" a fourth version of the final price modification to P&W. Paragraph 2 was revised to state:

"2. It is understood and agreed that the total CLIN 0101 price of $189,483,100.52 constitutes the full and complete price to which the Contractor is entitled for all obligations performed under CLIN 0101 of this contract."

(R4, tab 757)

261. Pratt and Whitney advised NAVAIR that this latest revision was still unacceptable (tr. 25/83). After this round, NAVAIR refused to make further changes. Thereafter, P&W went ahead and billed the Navy for the $189 million amount (tr. 25/83). Pratt and Whitney never executed a final price modification on the 0144 Contract (tr. 25/84).

262. During the course of performance, Pratt and Whitney invoiced the engines delivered by submitting DD Form 250s (R4, tab 751; tr. 25/85). None of the DD Form 250s for the F404 contracts in the record contain releases of any kind. Nor has the Navy identified any others in support of its defense of release. Contract releases were not normally handled through these forms (tr. 25/86). Based on unrebutted testimony in the record, we find that there was never an understanding between the parties that submission by P&W of the DD Form 250s would constitute release or

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satisfaction of any claims P&W might have against the Navy (tr. 25/86). There is no support in the record to reach a finding that P&W had generally released the Navy for its claims of multiple breaches of the F404 contracts.

VI. Pratt and Whitney's Appeals

263. On 5 March 1993, P&W delivered to the NAVAIR contracting officer a 78-page document entitled "Claim for Breaches of Contract under F404 Second Source Program." A contract claim certificate, dated 5 March 1993, signed by the Executive Vice President, Operations, United Technologies Corporation, Pratt & Whitney, accompanied the 5 March 1993 submission. [FN30]

264. Pratt and Whitney's 5 March 1993 submission set out three alternative theories of damages. Pratt and Whitney contended that, as the injured party, it has "a right to damages based on [its] expectation interest" (Claim at 65). It contended that, alternatively, it "may recover its damages for breach of contract measured by restitution or quantum meruit" (Claim at 66). Finally, citing the Constitutional requirement for just compensation, P&W contended that it is entitled to "Damages for Taking" because the Navy "appropriated its F404 contract rights" (Claim at 75). [FN31]

265. Under its Expectation Interest theory of recovery, the textual summary of P&W's claim measured damages in the approximate amount of $274,000,000 (Claim at 69). For its Restitutionary Interest theory of recovery, the textual summary of P&W's claim measured damages in the approximate amount of $389,000,000 (Claim at 74). Pratt and Whitney also claimed that "An appropriate amount of taking damages is approximately $275,000,000" plus interest and incidental damages.

266. By letter dated 3 December 1993, P&W appealed "from the deemed denial by the Navy of its March 5, 1993 claim." The contracting officer had notified P&W by letter dated 13 April 1993 that, "Considering the claims review process requirements at NAVAIR, I do not anticipate being able to render a decision on the merits of this claim before October 1993; i.e., approximately six months from now." Pratt and Whitney contended that "the open-ended nature" of the contracting officer's promise was "insufficient to satisfy section . . .605(c)(2) [of the CDA]." The Board docketed the appeal as ASBCA No. 46880. Notwithstanding the Board's subsequent direction, the contracting officer chose not to issue a decision on P&W's claim.

267. Subsequent to submission of its 5 March 1993 claim, P&W submitted several rounds of "protective claims" due to what it considered to be "the current state of uncertainty in the case law as to when a claim comes into being" (see, e.g., complaint ¶ 9, ASBCA No. 47166). Separate appeals were taken from these "protective claims." By decision issued on 29 February 1996, we held that P&W's 5 March 1993 claim presented no jurisdictional impediment. United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Propulsion, ASBCA Nos. 46880, et al., 96-1 BCA ¶ 28,226. Our decision rendered P&W's protective claims moot since they involved the same claims for multiple breaches of the F404 contracts. Rather than dismissing P&W's protective claims without prejudice, we retained them under the umbrella of ASBCA No. 46881.

268. Prior to the commencement of hearing on 9 May 1995, numerous motions were filed by each party. All such motions were disposed of prior to, or during the hearing save one. This last jurisdictional motion was disposed of on 29 February 1996. See, United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Propulsion, ASBCA Nos. 46880 et al., 95-1 BCA ¶ 27,456 (Board has no jurisdiction over contractor claim founded upon the Constitution); United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Propulsion% u, ASBCA Nos. 46880, et al., 95-1 BCA ¶ 27,538 (Having waived its right to assert that the contracts were unenforceable by reason of the contractor's criminal conviction, the Government was precluded from raising a legal defense based on such a right), mot. for recon. denied, 95-2 BCA ¶ 27,698; United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Propulsion, ASBCA Nos. 46880, et al., 95-1 BCA ¶ 27,592 (Contractor motion for summary judgment on

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various Navy defenses denied); United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Pro pulsion, ASBCA Nos. 46880, et al., 95-2 BCA ¶ 27,644 (Board has jurisdiction to decide the merits of the Navy's conflict of interest defense to contractor's breach claims); United Technologies Corporation, Pratt and Whitney Group, Government Engines and Space Propulsion, ASBCA Nos. 46880, et al., 96-1 BCA ¶ 28,226 (Board has jurisdiction because a specific amount for each damages theory for breach of contracts could be determined from the submitted claim).

DECISION

I.

WHETHER PRATT AND WHITNEY'S CLAIM FOR BREACH OF THE INVESTMENT INCENTIVE CLAUSE ARISING OUT OF THE FYs 90-92 ENGINE PROCUREMENTS IS BARRED BY THE NAVY'S REMAINING AFFIRMATIVE AND OTHER DEFENSES

We address first the Navy's affirmative and other defenses -- those that were not disposed of by our summary judgment decision, United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Propulsion, ASBCA No. 46880, et al., 95-1 BCA ¶ 27,592, and not withdrawn pursuant to the parties' stipulation (see findings 245-249).

Laches/Failure to Mitigate

As its Eighth Defense, the Navy contends that P&W's claim for breach of contract (i.e., the agreement embodied in the Investment Incentive clause) arising out of the FY90 engine procurement is barred by the equitable doctrine of laches. In connection with its allegation of "failure to mitigate," the Navy charges that, had P&W protested the award to the General Accounting Office (GAO), "the Navy could have acted to avoid injury to [P&W], the Navy, and GE while the protest was litigated" (see decision on summary judgment, 95-1 BCA at 137,479).

A defense based on laches requires proof of: "(1) lack of diligence by the party against whom the defense is asserted [P&W], and (2) prejudice to the party asserting the defense [the Navy]." S.E.R Jobs for Progress, Inc. v. United States, 759 F.2d 1, 5 (Fed. Cir. 1985). The passage of time alone does not constitute laches. Cornetta v. United States, 851 F.2d 1375 (Fed. Cir. 1988). The delay must be "unreasonable and unexcused." Barrow Utilities & Electric Cooperative, Inc. v. United States, 20 Cl. Ct. 113 (1990).

In this case, the Navy awarded 100 percent of the FY90 engines to GE in August 1989 (finding 236). The PCO debriefed P&W on 26 September 1989 (finding 238). Pratt and Whitney did not submit its certified Contract Disputes Act (CDA) claim until March 1993 (finding 263), over 3 years later.

The facts do not support a case of lack of diligence on P&W's part. At the September 1989 debriefing, the PCO was told that while P&W would continue to perform its then existing obligations under the 0144 and 0045 Contracts, it was not waiving any rights it might otherwise have (finding 239). Pratt and Whitney subsequently confirmed what it conveyed to the PCO at the debriefing -- "Pratt & Whitney believes it is entitled to be made whole in all respects for both its investments in and performance under the F404 program . . . without waiver of any legal and equitable remedies Pratt & Whitney has available to it" -- by letter dated 12 October 1989 (finding 240). This was followed by meetings with senior Navy officials including Secretary Garrett at which P&W reiterated the same theme (findings 241, 242).

Judging from the content of its 78-page claim with its numerous computer computations included under Tab 34, and from the factual complexity of the case as presented through the numerous witnesses and thousands of documents during the course of the 26-day hearing, assembling the claim would have taken a fair amount of time. On the basis of the evidence before us, we cannot conclude that P&W unreasonably and inexcusably delayed the submission of its claim.

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Nor has the Navy demonstrated that its defense of P&W's claim was or could have been prejudiced. Even before the decision to award GE 100 percent of the FY90 engines, the Navy discussed internally the possibility that P&W might sue for breach (finding 223). As mentioned, P&W's repeated reservations of its rights left the Navy officials with no reason to conclude that a CDA claim would not be forthcoming.

The Navy's "failure to mitigate" defense was based on the notion that its FY90 engine procurement was a completely separate and independent undertaking in 1989. What it fails to recognize is that P&W's breach claim is based on the Navy's alleged failure to live up to an existing business agreement. That agreement is embodied in the Investment Incentive clause. Under the CDA, the Board and the United States Court of Federal Claims are proper forums for resolving "contract" disputes. 41 U.S.C. § § 607(d)(2), 609.

In any event, as we said before, P&W's alleged "failure to mitigate," even if proven, would at best diminish P&W's ultimate recovery, and would not bar P&W from asserting its breach claim. See United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Propulsion, ASBCA No. 46880, et al., 95-1 BCA at 137,480, citing International Fidelity Ins. Co. v. United States, 25 Cl. Ct. 469, 479-80 (1992); Bank One, Texas, N.A. v. Taylor, 970 F.2d 16, 29 (5th Cir. 1992), cert. denied, 113 S. Ct. 2331 (1993) ("One who claims a failure to mitigate damages has the burden to prove not only lack of diligence on the part of the injured party, but also the amount by which damages were increased by such failure to mitigate").

Because the Navy has failed to prove that P&W did not diligently pursue its breach claim, and because the Navy's has failed to show that its defense of that claim has been prejudiced, we hold that P&W is not barred by laches from asserting its breach of contract claim in connection with the FYs 90-92 F404 engine procurements.

Because P&W's breach claim involved a dispute of an existing contract arrangement -- the business agreement embodied in the Investment Incentive clause -- we hold that the Navy's so-called "mitigation of damages" defense asserting that a protest should have been filed with the GAO is without merit.

Estoppel

As its Ninth Defense, the Navy contends that P&W should now be estopped from challenging the FY90 award to GE. The Navy argues that P&W was no more than a "disappointed bidder" on the FY90 procurement and should have protested the award to the GAO. Because it did not do so, the Navy says that P&W "acted in a manner wholly inconsistent with enforcement of any contract rights."

We do not agree with the Navy's premise that P&W was merely a "disappointed bidder." Here again, the Navy treats the FY90 engine procurement as an isolated event. This is not correct. The FY90 engine procurement, like the FY88 and FY89 procurements before it, was a part of a multi-year (for the first 5 fiscal years after engine qualification) business arrangement the Navy entered into with P&W in 1985. In was in the context of this overarching agreement or contract P&W now alleges the Navy breached its promise in awarding all of the FY90 engines to GE. Thus, P&W was more than a mere "disappointed bidder" in the FY90 procurement. It had a dispute relating to an existing contract with the Navy. As a contractor, it had a right to file a CDA claim and appeal.

Four elements must be present to establish estoppel: "(1) The party to be estopped [P&W] must know the facts; (2) he [P&W] must intend that his conduct shall be acted on or must so act that the party asserting the estoppel [the Navy] has a right to believe it is so intended; (3) the latter [the Navy] must be ignorant of the true facts; and (4) he [the Navy] must rely on the former's [P&W] conduct to his injury." Emeco Industries, Inc. v. United States, 485 F.2d 652, 657, 202 Ct. Cl. 1006, 1015 (1973).

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There is no evidence that P&W in any way led the Navy to believe that a claim would not be filed. To the contrary, it had on numerous occasions reserved its legal options. Nor was the Navy misled. It assessed the risk P&W might sue for breach in 1989 before it decided to award all of the FY90 engines to GE (finding 223). NAVAIR's Head of Contracts told P&W in 1989 that it had to submit a certified CDA claim so that he could "work the issues" (finding 242). Thus, none of the elements for estoppel against P&W have been proved.

Because the Navy has proved none of the elements required for estoppel, we hold that P&W's claim for breach, as it relates to the FYs 90-92 engine procurements, is not barred by that defense.

Implied Waiver

The Navy's Tenth Defense of "Implied Waiver" is based on the same theme. It alleges that "[k]nowing of the Navy's acquisition of engines from GE, UTC [P&W] impliedly waived any right to a share of those acquisitions by its failure to act for 42 months" 95-1 BCA at 137,482.

Waiver is defined as an intentional relinquishment of a known right. Shearson Hayden Stone, Inc. v. Leach, 583 F.2d 367, 370 (7th Cir. 1978); see generally 5 S. Williston, A Treatise on the Law of Contracts § 678 (3d ed. 1961).

Once again, the Navy's contention is not supported by the evidence in the record. The record shows that in submitting its proposal in response to the Navy's newly developed "Winner-Take-All" RFP, P&W advised the Navy in May 1989, that it did so "with the understanding that clause H-31 "Investment Incentive" remains viable in all respects" (finding 200). The record also shows that, after the Navy awarded all of the FY90 F404 engines to GE, P&W immediately and repeatedly put every level of the Navy organization, from the PCO to the Secretary of the Navy, on notice of its demand to be made whole for its losses (findings 240-242).

We have already decided that in view of the nature and complexity of the case, it was not unreasonable and inexcusable for P&W to take from August 1989 to March 1993 to submit its claim.

Because there is no evidence of any intention on the part of P&W to relinquish its rights to be made whole when the Navy unilaterally implemented its "Winner-Take-All" strategy, we hold that P&W's breach claim, as it related to the FYs 90-92 procurements, is not barred by the defense of implied waiver.

Accord and Satisfaction/Release

As its Eleventh Defense, the Navy contends that P&W's breach claim, as it relates to the FYs 90-92 procurements, is barred by accord and satisfaction and release.

Discharge of a claim by accord and satisfaction occurs when some performance different from that which was claimed as due is rendered and such substituted performance is accepted by the claimant as full satisfaction of the claim. The essential elements of an effective accord and satisfaction are proper subject matter, competent parties, meeting of the minds and consideration. Brock & Blevins Co. v. United States, 343 F.2d 951, 955 (Ct. Cl. 1965).

There is no proof that the parties reached a meeting of the minds that P&W would accept any substituted performance on the part of the Navy in full satisfaction of P&W's claim for breach (finding 250). Lacking any such proof, we hold that P&W's claim for breach of the Investment Incentive clause, as it related to the FYs 90-92 engine procurements, is not barred by the defense of accord and satisfaction.

As a general proposition, the execution of a general release by a contractor would bar claims based upon events occurring prior to the execution of the release. H.L.C. Associates Construction Co. v. United States, 176 Ct. Cl. 285, 367 F.2d 586 (1966).

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With respect to its defense of release, the Navy relies solely on a bilateral modification (not numbered but designated as "various") that pertained to both the 0144 and the 0045 Contracts (finding 251). We have found that the modification the Navy relies upon had nothing whatsoever to do with P&W's claim for breach of the Investment Incentive clause. Rather, the modification pertained "to the settlement of the McHaffie bolt and final acceptance of engines" conditionally accepted previously (finding 253). The evidence further shows that between March 1991, and May 1992, P&W steadfastly refused to execute a final price modification under the 0144 Contract containing language that could be construed as releasing the Navy from any and all equitable adjustment claims and other contractual obligations (findings 254-261). There is also no evidence that P&W released the Navy from its breach claim by virtue of any payment invoices (DD Form 250s) it submitted (finding 262).

Because the Navy has failed to show that it obtained any release from P&W in connection with their dispute under the Investment Incentive clause as it relates to the FYs 90-92 engine procurements, we hold that P&W's breach claim under that clause is not barred by the defense of release.

II.

WHETHER THE NAVY BREACHED THE PARTIES' AGREEMENT AS EMBODIED IN THE INVESTMENT INCENTIVE CLAUSE AS IT RELATED TO THE FYs 90-92 ENGINE PROCUREMENTS

For its FY90 F404 engines, the Navy awarded 100 percent of its requirement to GE (finding 236). This procurement decision essentially ended the F404 Second Source Program established by Secretary Lehman in 1984 (finding 10), and discontinued P&W as an F404 second source producer. Pratt and Whitney contends that, in doing so, the Navy has breached the Investment Incentive clause which embodied the parties' agreement in connection with P&W's participation as a second-source F404 producer.

The Navy's contractual obligation to award or not to award P&W F404 engines is set out in the Investment Incentive clause of the contracts. Paragraph 2 of the clause provided that:

"As an incentive for the Contractor to invest in this program, the Government intends to award at least 30 percent of the total annual F404 engine production requirements, for which Congress has authorized and appropriated sufficient funds, in each of the contracts awarded to the Contractor as described in para. 5(a) provided that at the time of such award:

(a) the Government procures F404 engines from any source

(b) the Contractor is a qualified producer of the F404

(c) the price proposed by the Contractor meets the requirements of FAR 15.8, and;

(d) NAVAIR has obtained all appropriate approvals by and the procurement is consistent with applicable laws and regulations."

(Finding 79)

As for condition (a), at the time of award of the FY90 F404 engines in August 1989, Congress had appropriated funds for the procurement of F/A-18 aircraft and their engines (findings 40 at n.6 and 234). As evidenced by its award of the entire FY90 engine requirement to GE, the Navy was procuring F404 engines from a source. That source, as it turned out by choice on the part of the Navy, was one other than P&W (finding 236).

As for condition (b), P&W had become a qualified F404 producer in June 1987, over a year prior to the FY90 procurement (finding 85).

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As for condition (c), the Investment Incentive clause required engine prices -- in this case P&W's prices for the FY90 engines -- to meet the requirements of FAR 15.8. Both parties' considered this requirement to be a "fair and reasonable" standard. As for the FY90 procurement, the PCO found P&W's proposed prices fair and reasonable (finding 208). The SSEB also found P&W's prices fair and reasonable (finding 214). The SSAC unanimously recommended awarding P&W 70 percent of the FY90 engines to the Source Selection Authority who authorized the FY90 award be split between P&W (70%) and GE (30%) (finding 217).

As for condition (d), the Navy acknowledged that this condition would be met "as long as an award to Pratt & Whitney was not prohibited by, or inconsistent with[,] law or regulation" (finding 79, n. 9). We have found that the source selection process conducted in accordance with the Source Selection Plan approved for the F404 Second Source Program, was the only authorized or "properly constituted" process for selecting and awarding F404 engine contracts (finding 213). We have also found, that based on FAR 15.612(d), the Source Selection Authority's (Admiral Wilkinson's) concurrence was the final decision required to award P&W 70 percent of the FY90 engines (finding 217). There is no evidence that the Navy could or would not have obtained any routine approvals had it decided to follow through with the FY90 split award. Nor is there evidence that award to P&W of 70 percent of the FY90 engines would be "prohibited by, or inconsistent with[,] law or regulation." At the September 1989 debriefing, after the Navy ended the Second Source Program, the PCO acknowledged that "obtaining the appropriate approvals required by laws and regulations as provided by ¶ 2.(d) of the Investment Incentive clause 'was not a problem"' (findings 238, 239). We conclude that condition (d) of the Investment Incentive clause for award of 70 percent of the FY90 engines to P&W was met.

The Navy's Antideficiency Act Defense

Throughout proceedings before the Board, the Navy appeared to be building a case on the theory that the agreed upon Investment Incentive clause would create an "unfunded contingent liability" in violation of the Antideficiency Act, 31 U.S.C. § 1341. The Antideficiency Act prohibits the incurring of any obligation for the future payment of money in advance of or in excess of appropriations adequate to cover it. Because P&W's right to engine awards was expressly contingent on Congress first appropriating sufficient funds, and not in advance of them, we conclude that the procurement scheme contemplated by the Investment Incentive clause is not in violation of the Antideficiency Act. Compare 82-1 CPD ¶ 406 (1982), aff'd on reconsideration, 62 Comp. Gen. 361 (1983) (insurance clause violated fiscal law because the Government agreed in advance of funding to compensate contractors for their liability to third parties, but GAO recommended clause providing indemnity limited to amounts available in agency appropriations at the time the liability arises held not an overt violation of the Antideficiency Act); 42 Comp. Gen. 272 (1962) (Air Force's 3-year requirements contract for services and supplies incident to landing of aircraft at the base funded by an annual appropriation for operation and maintenance violated fiscal law because the services were furnished "automatically" and were not truly dependent on the issuance of an order).

The Navy's Parol Evidence Rule Defense

As its first defense for breach of contract, the Navy contends that "[b]ecause Contract -0144 is a completely integrated agreement, the parol evidence rule dictates that all prior agreements, oral or written, within the scope of Contract -0144 be discharged, particularly those matters addressed in the Investment Incentive clause" (Navy br. at 253).

The parol evidence rule is a rule of substantive law. It defines the subject matter of interpretation. It renders inoperative prior written and oral agreements. RESTATEMENT (SECOND) OF CONTRACTS, § 213, comment a. The effect of the rule is stated as follows:

"(1) A binding integrated agreement discharges prior agreements to the extent that it is inconsistent with them.

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(2) A binding completely integrated agreement discharges prior agreements to the extent that they are within its scope."

"An integrated agreement is a writing or writings constituting a final expression of one or more terms of an agreement." RESTATEMENT (SECOND) OF CONTRACTS § 209. "An integrated agreement supersedes contrary prior statements, and a completely integrated agreement supersedes even consistent additional terms." Id. § 209, comment a. The Court of Claims explained the difference between a completely integrated agreement and a partially integrated agreement this way:

"Where the parties intend that their written agreement shall not only be final, but be also the exclusive statement of all their agreement, even a consistent prior oral agreement is superseded and overridden by the written agreement, termed a completely integrated agreement. Where there is no such intention, the agreement is only partly integrated and a consistent, oral collateral agreement is effective to supplement a written agreement."

Sylvania Electric Products, Inc. v. United States, 458 F.2d 994, 1006 (1972).

No particular form is required for an integrated agreement. A contract may include an explicit declaration that there are no other agreements between the parties. Id. § 209, comment b. In David Nassif Associates v. United States, 214 Ct. Cl. 407, 420, 557 F.2d 249, 256 (1977), the Court of Claims observed:

". . . , it is not the writing alone which attests to its own finality and completeness but the circumstances surrounding its execution, including the negotiations which produced it. This observation, while true for all cases, is especially pertinent in instances where, as here, the writing itself contains no recitals or other evidence testifying to its intended completeness and finality. The surrounding circumstance are what plaintiff's argument ignores."

Whether there was an integrated agreement must be determined prior to determination of a question of interpretation and prior to application of the parol evidence rule. Id. § 209 (2).

The Navy's sole support that there was a completely integrated agreement is its allegation that "There is no evidence in the record which suggests that, at least with respect to the scope of the matters addressed in the Investment Incentive clause, Contract -0144 was not intended to be the complete and final expression of the parties" (Navy br. at 252).

The Investment Incentive clause contains no recital or explicit declaration that there were no other agreements between the parties. The Navy has pointed to no other agreements declaring they constituted the total and final expression of the parties' agreements. (Finding 79) Circumstances surrounding the negotiations of the Investment Incentive clause support a contrary intention with respect to the finality of the written words. Pratt and Whitney was assured by the Navy that use of the term "the Government intends to award" in the Investment Incentive clause did not mean that the Navy was retreating from its "guarantee" to purchase engines from P&W if certain conditions specified in the clause were satisfied (findings 70, 74).

Because the Navy has failed to establish that there was a completely integrated or even a partially integrated agreement with respect to the use of the term "the Government intends to award," we hold that agreements pertaining to that term reached prior to execution of the 0144 Contract were not rendered inoperative by the parol evidence rule.

The Navy's Contract Interpretation Defense

After invoking the parol evidence rule, the Navy proceeded to give us a paragraph-by-paragraph, sentence-by-sentence, analysis of ¶ 1 and ¶ 2 of the Investment Incentive clause, applying the "plain and ordinary meaning" rule of contract interpretation.

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The first sentence of ¶ 2 of the Investment Incentive clause provided:

2. As an incentive for the Contractor to invest in this program, the Government intends to award at least 30 percent of the total annual F404 engine production requirements, for which Congress has authorized and appropriated sufficient funds, in each of the contracts awarded to the Contractor as described in para. 5(a) provided . . . [emphasis added].

Focusing on the term "intends to award," the Navy maintains that the "plain and ordinary" meaning of the word "intends" gives no promise or contractually binding commitment to award P&W future engine production contracts. The Navy agrees that award of future production contracts was subject to funding and other conditions but argues that by virtue of the plain and ordinary meaning of the word "intends," even if all of the conditions were satisfied, it still had no obligation to award P&W any contracts. (Navy br. 255-258)

Secondarily, the Navy focuses on the first paragraph of the Investment Incentive clause. This paragraph stated:

"The Government has determined that it is in the interest of national defense and industrial mobilization to have two manufacturers available for the F404 engine. Therefore, the Contractor may compete for the production of all F404 engine models being procured by the Navy, including derivatives or growth versions, and the Government intends to divide the total F404 procurement in each fiscal year among the qualified sources."

The Navy argues that the common or prevailing meaning of the underscored words above conferred no contract rights and imposed no contract obligations upon P&W or the Navy (Navy br. at 260).

The Navy agrees nonetheless that the intention of the parties of a contract must be gathered from the whole instrument. It has been said that "an interpretation which gives a reasonable meaning to all parts of an instrument will be preferred to one which leaves a portion of it useless, inexplicable, inoperative, void, insignificant, meaningless or superfluous; nor should any provision be construed as being in conflict with another unless no other reasonable interpretation is possible." Hol-Gar Manufacturing Corp. v. United States, 169 Ct. Cl. 384, 395, 351 F.2d 972, 979 (1965).

The Navy's narrow focus of the plain meaning of the words "may" and "intends" leaves other provisions of the Investment Incentive clause useless, inexplicable, meaningless and superfluous. If the Navy had unfettered discretion to withhold award of F404 engines from P&W, what was the incentive for P&W to invest in the Program as the title of the Investment Incentive clause suggested? If the Navy had unfettered discretion to withhold award form P&W, it would render the conditions set forth in ¶ 2 of the Investment Incentive clause useless and superfluous. If the Navy had unfettered discretion to withhold award of the FY90 engine contract, it renders inexplicable and superfluous that provision of the Investment Incentive clause to award P&W F404 engines in the "first five fiscal year . . . following his qualification as an F404 engine producer."

The Navy's isolated reading must give way to the "whole instrument" rule of contract interpretation. In James Mason v. United States, 222 Ct. Cl. 436, 615 F.2d 1343 at 1347 (1980), the Court of Claims applied this rule:

"On its face, and viewing it in isolation from the remainder of Section 3, Special Conditions, the Purpose of Contract clause is susceptible to either interpretation. If we were to interpret it without reference to the remainder of the contract, since the defendant drafted these contracts, we would have to resolve the ambiguity in plaintiff's favor. However, in interpreting this clause, we do not look at it in isolation from the remainder of the clause in Section 3, Special Conditions. In giving meaning to the Purpose of Contract clause, all the component clauses making up Section 3, Special Conditions, are to be interpreted as a whole. Bishop Engineering Co. v. United States, 180 Ct. Cl. 411, 415 (1967); Hol- Gar

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Manufacturing Corp. v. United States, 169 Ct. Cl. 384, 351 F.2d 972 (1965)."

The interpretation that, provided Congress authorized and appropriated sufficient funds, and provided the other four conditions of ¶ 2 of the Investment Incentive clause were satisfied, the Navy would be obligated to award P&W "at least 30 percent of the total annual F404 engine production requirements" advanced by P&W, harmonizes and gives meaning to all provisions of the clause. This interpretation explains P&W's incentive in investing in the Second Source Program, i.e., to use the 5 years to become a viable competitor to GE for long term business. It explains and gives purpose to the conditions set forth in ¶ 2 of the clause.

Pre-award exchanges between the parties' duly appointed point-men -- Admiral Busey and Mr. Missimer -- particularly on 27 March and 28 June 1985 support P&W's interpretation. Thus, unless precluded by the parol evidence rule, which we have already held not to be the case, we are not barred from considering the oral statements and expressions of the parties during negotiations as an aid in interpreting the Investment Incentive clause.

The F404 Second Source Program was the brainchild of Secretary Lehman (finding 49). Since establishing the Program was not planned for in the Navy's budget (finding 24), P&W had to make a sizeable start-up investment to participate in the Program (findings 8, 25). Pratt and Whitney recognized from the beginning that dual sourcing might fall out of favor with a change in leadership in the Navy (finding 26). It therefore insisted upon "program cancellation protection" as a "deal breaker" condition for agreeing to become a F404 second-source producer (findings 17, 18, 23 & 26). Because of its inability to obligate funds without Congress first appropriating such funds (finding 25), the Navy was equally adamant from the beginning that it could not offer P&W any "explicit unconditional [program] cancellation guarantees" (findings 24, 25, 27 & 30).

As discussions progressed, both parties recognized that whether the Navy could buy F/A-18s, and hence its engines, ultimately depended upon the will of Congress each year (findings 30, 42). At a high-level meeting held on 27 March 1985, the parties' principal representatives reached a "hand shake" agreement. In exchange for P&W's agreement to accept less than unconditional and total reimbursement of its start-up investments, the Navy agreed to "guarantee" to buy at least 30 percent of the annual engine procurement for 5 years after P&W qualified its engines (finding 37). Pratt and Whitney was willing to assume the risk of lack of Congressional funding which, in the unlikely event that it occurred, would have prevented the Navy from buying any engine from any source for any year (findings 37, 42, 63).

Although working-level Navy officials attempted subsequently to dilute this "hand shake" agreement on the belief that the agreement created a "contingent liability" possibly in violation of the Antideficiency Act (finding 59), Admiral Busey, the NAVAIR Commander, reinstated the "[d]eal struck before" (finding 63), and instructed his staff to find a way to give P&W "assurance" on engine procurement (finding 67). Unable to strengthen the word "intends" in the draft contract clause, the PCO and other Navy officials resorted to having P&W accept the language with assurances that the term "intends to award" really meant "agrees to award" (finding 69).

Additionally, during the drafting stage of the Investment Incentive clause, the Navy proposed an "if" clause: "if the Government awards a contract to the Contractor . . . then that contract shall contain a minimum of thirty percent (30%) of the total annual F404 engine requirements." This "if" clause was flatly rejected as unacceptable by P&W. (Finding 61) The parties subsequently agreed to reinstate the 4 conditions in the final Investment Incentive clause the Navy also sought to eliminate. These 4 conditions, together with the funding condition, captured all of the foreseeable events "that could lead to cancellation" of the F404 second Source Program for which P&W agreed to assume the risk (finding 73). Thus, the Navy's interpretation in this regard merely seeks to resurrect a previously rejected position which did not find its way into the parties' contract.

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Based on the foregoing evidence, we conclude that, notwithstanding the use of the word "intends," the true intent of the parties at the time the 0144 Contract was signed, was that the Navy "agrees" to award P&W the specified (at least 30% for 5 years) F404 engines if the conditions specified in the Investment Incentive clause were met.

Furthermore, the interpretation the Navy now advances is at odds with its own interpretation before the advent of the present controversy. It has long been a rule of contract interpretation that contemporaneous, pre-dispute interpretation should be "deemed of great, if not controlling, influence." Old Colony Trust Co. v. Omaha, 230 U.S. 100, 118 (1913). The Court of Claims said in Macke Co. v. United States, 199 Ct. Cl. 552, 556, 467 F.2d 1323, 1325 (1972):

"In this inquiry, the greatest help comes, not from the bare text of the original contract, but from external indications of the parties' joint understanding, contemporaneously and later, of what the contract imported. The case is an excellent specimen of the truism that how the parties act under the arrangement, before the advent of controversy, is often more revealing than the dry language of the written agreement by itself. We are, of course, entirely justified in relying on this material to discover the parties' underlying intention."

In this case, prior to the advent of the controversy before us, the Navy itself considered that P&W was "guaranteed" or "assured" of at least 30 percent of the engines for 5 years provided the Investment Incentive clause conditions were met. When the Navy undertook the first split engine procurement for FY88, its CJ & A stated "In fiscal year 1988 Pratt & Whitney is guaranteed a minimum of 30% of the acquisition quantity as long as the four conditions set forth in [the 0144 Contract] are met" (emphasis added). This CJ & A was signed by the PCO, and approved by NAVAIR counsel and the Assistant Secretary of the Navy. (Finding 135) The Navy's FY88 Acquisition Plan declared "P&W has been assured of at least thirty percent of the total annual F404 procurement . . . for each of the first five years of competition" (emphasis added) (finding 136). The Navy's approved Source Selection Plan described its business arrangement with P&W in these words: "As an investment incentive, P&W has been assured of at least thirty percent of the total annual procurement, for which Congress has authorized and appropriated funds in each of their first five years of competition contingent upon [four conditions]" (emphasis added) (finding 151).

Moreover, for the second competitive split procurement (for FY89), even though GE's proposal for 100 percent of the engines was the lowest in price, the Navy acknowledged that a 100 percent award to GE would be inconsistent with the Navy's contractual commitment to P&W, and that P&W's 100 percent offer was the "lowest contractually acceptable offer" (emphasis added) (finding 182). And, when NAVAIR's Contracts Directorate decided to pursue the "Winner-Take-All" strategy for the FY90 procurement, all except one of those involved with source selection objected and took the position that this new strategy was inconsistent with the Navy's contract with P&W and "not a decision alternative" (findings 189, 191 & 212), and continued to recommend a split award scenario (findings 216-217).

Also for application here is the rule that "If one party to a contract knows the meaning that the other intended to convey by his words, then he is bound by that meaning." Cresswell v. United States, 146 Ct. Cl. 119, 127, 173 F. Supp. 805, 811 (1959); Perry and Willis, Inc. v. United States, 192 Ct. Cl. 310, 315, 427 F.2d 722, 725 (1970); Chromalloy American Corporation, ASBCA Nos. 22119, 22120, 80-2 BCA ¶ 14,566 at 71,824. In this case, responsible Navy personnel including Admiral Busey, the F404 Program Manager, the PCO, and even NAVAIR's Deputy Command Counsel assured P&W that use of the word "intends" was purely for the purpose of overcoming an internal legal objection and was not meant to diminish the Navy's guarantee that P&W would be awarded 30 percent of the F404 engine procurement for 5 years if funding and certain other conditions were met. (Finding 70)

In any event, the Navy is estopped from contending that upon fulfillment of the

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Investment Incentive clause conditions, it still had no obligation to award P&W any FY90 engines. Burnside-Ott Aviation Training Center, Inc. v. United States, 985 F.2d 1574 (Fed. Cir. 1993) (equitable estoppel claims based on contract can lie against the Government); Bell-Boeing Joint Venture, ASBCA No. 39681, 94-1 BCA ¶ 26,383. In this case, P&W has established the four elements required for estoppel: (1) The Navy knew that use of the word "intends" in the contract was intended to provide the same commitment as use of the word "agrees" (findings 59, 72); (2) the Navy's assurances that these words should be treated synonymously were given for the purpose of inducing P&W to accept the word "intends" in the contract (findings 69, 70); (3) Pratt and Whitney was given no reason to believe that the Navy did not mean what it promised (finding 70); and (4) but for the Navy's guarantee, P&W would not have agreed to give up its demand for total and unconditional protection against program cancellation and participate in the F404 Second Source Program (finding 37). Emeco Industries, Inc. v. United States, 202 Ct. Cl. 1006, 1015, 485 F.2d 652, 657 (1973).

It has been said that bilateral contracts should not be construed "to put one side at the mere will or mercy of the other." Padbloc Company v. United States, 161 Ct. Cl. 369, 376-377 (1963); Peloro Smelting & Refining Co. v. United States, 161 Ct. Cl. 489, 496-97, 317 F.2d 382, 387 (1963); Contra Costa County Flood Control and Water Conservation Dist. v. United States, 206 Ct. Cl. 413, 421, 512 F.2d 1094, 1098 (1975). To construe the Investment Incentive clause to permit the Navy to withhold award to P&W at will after P&W invested substantial amounts of start-up costs (i.e., nonrecurring costs other than Special Tooling, see finding 37, n. 5) would indeed put P&W at the mere will or mercy of the Navy.

The Navy's Mobilization Defense

Another issue requires discussion. The Navy justified its decision to end the F404 Second Source Program on the basis that, by 1989, mobilization was no longer necessary because the projected requirements for the F404 engines and its derivatives had significantly declined (findings 220, 224 and 226). We have found dispersion of production capability in the event of local or national disaster, strike or sabortage, to have been the one of the reason for mobilization. While mobilization was a reason the Navy initially established the F404 Second Source Program, we do not read the Investment Incentive clause to require mobilization as a condition that must be satisfied before P&W was entitled to engine awards. We note that during drafting of what ultimately became the Investment Incentive clause, NAVAIR counsel warned the PCO that the draft did not protect the Navy from "lessened demand for the engine," and that if the requirements for engine were to significantly decline, "the commitment to award 30% could create a very expensive program." Notwithstanding this advice, the PCO failed to negotiate any quantity protection in the business arrangements that ultimately found their way into the Investment Incentive clause (finding 56).

The Navy's "Affordability" Defense

Hence, the question before us boils down to whether the Navy could be held to have breached the Investment Incentive clause due to what appears to be its self-imposed budget constraints (finding 183, 234). In this regard, the Supreme Court of the United States stated many years ago:

"To abrogate contracts, in the attempt to lessen government expenditure, would be not the practice of economy, but an act of repudiation. "The United States are as much bound by their contracts as are individuals. If they repudiate their obligations, it is as much repudiation, with all the wrong and reproach that term implies, as it would be if the repudiator had been a State or a municipality or a citizen.""

Lynch v. United States, 292 U.S. 571, 580 (1933); see also Perry v. United States, 294 U.S. 330, 351-53 (1934) ("This Court has given no sanction to such a conception of the obligations of our Government"); Larionoff v. United States, 533 F.2d 1167, 1179-80, 1191 n.8 (D.C. Cir. 1976), aff'd, 431 U.S. 864 (1977) ("abrogation of contract rights for the sole purpose of reducing government expenditures is not constitutionally sanctioned"). In Winstar Corp. v. United States, 64 F.3d 1531,

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1544-46, 1550 (Fed. Cir. 1995), aff'd, United States v. Winstar Corporation et al., 116 S. Ct. 2432 (1996), the Federal Circuit wrote "When the plaintiffs satisfied the conditions imposed on them by the contracts, the government's contractual obligation became effective," and failure to perform, even though stemming from Congressional enactment, was "a breach of the contract."

Failure to perform a contractual duty when it is due is a breach of the contract. RESTATEMENT (SECOND) OF CONTRACTS § 235(2) (1981). Because Congress had appropriated sufficient funds to procure FY90 F/A-18 aircraft, and hence their engines, and because the other four conditions set forth in ¶ 2 (a) through (d) of the Investment Incentive clause had been satisfied, we hold that the Navy's decision not to award P&W any FY90 engines was a breach of the contractual agreement embodied in that clause.

The Navy's Constructive Termination For Convenience Defense

The Navy argues that "assuming the Government breached its contract with P&W, the breach constitutes a constructive termination for convenience, which does not entitle appellant to anticipated/losts profits" (Navy br. at 285). Paragraph 9 of the Investment Incentive clause provided that "Nothing in this clause shall be construed to limit the Government's rights under any other provision of this contract" (finding 79). Characterizing this clause as "a subordination clause," the Navy argues that it was "designed to preserve the Government's rights under . . . the Termination for Convenience clause" (Navy br. at 286).

The Court of Claims articulated the doctrine of constructive termination for convenience in G.C. Casebolt Co. v. United States, 190 Ct. Cl. 783, 786, 421 F.2d 110, 112 (1970):

"The rule we have followed is that, where the contract embodies a convenience-termination provision as this one would, a Government directive to end performance of the work will not be considered a breach but rather a convenience termination - if it could lawfully come under that clause - even though the contracting officer wrongly calls it a cancellation, mistakenly deems the contract illegal, or erroneously thinks that he can terminate the work on some other ground (emphasis added)."

In order for the constructive termination for convenience theory to operate, the contract in question must contain a termination for convenience clause. Id. at 786-788, 421 F.2d at 712. An improper termination was held to constitute a common law breach of contract where "[t]he contract did not contain a clause allowing termination for the convenience of the [G]overnment and none was required to be inserted under any applicable federal regulation." North Star Aviation Corp. v. United States, 198 Ct. Cl. 178, 180, 458 F.2d 64, 65 (1972).

The FAR in effect in 1985 required inclusion of prescribed termination for convenience clauses in fixed-price and cost-reimbursement contracts. Both the 0144 and the 0045 Contracts contained the "Termination For Convenience of The Government (Fixed Price)" (APR 1984) clause prescribed by FAR 52.249-2 (findings 78, 179). By its clear language however, the Termination for Convenience of the Government clause in the 0144 and 0045 Contracts applies to existing contracts and not to future contracts. The clause states that "the Government may terminate performance of work under this contract in whole or . . . in part." (Emphasis added) Pratt and Whitney's breach claim is based on the Navy's failure to award future contracts -FY90 through FY92. Since no F404 engine contract was awarded to P&W for these FYs, no performance of any work was called for. Consequently, there is no basis upon which the Navy could have terminated the performance of non-existent work for convenience either directly or constructively.

While ¶ 9 of the Investment Incentive clause can be read to mean that it could not limit the Navy's termination for convenience rights under an existing contract -- such as the 0144 or 0045 Contracts -- we cannot apply it to the FYs90-92 procurements where no engine contracts between P&W and the Navy came into being.

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Accordingly, absent a termination for convenience clause applicable to the business arrangements embodied in the Investment Incentive clause, we hold that the Navy's breach of its obligations under that clause must be treated as a common law breach.

The evidence show that the Navy continued to procure F404 engines from GE in FYs91 and 92 (finding 244). In doing so, the Navy breached its obligation under the Investment Incentive clause to award at least 30 percent of the total annual F404 engine production requirements to P&W for those FYs provided certain conditions were satisfied. In this case, Congress obviously appropriated funds for the procurement of engines because Navy procured FYs 91- 92 engines from GE. Pratt and Whitney had qualified its F404 engine since June 1987 (condition ¶ 2. (b)) (finding 85), and, ending the dual source program in 1989 rendered it moot for P&W to comply with conditions ¶ ¶ 2(c) and (d) of the Investment Incentive clause.

For the foregoing reasons, we hold that the Navy breached the Investment Incentive clause not only for FY90 but also for FYs 91 and 92.

III.

WHETHER P&W'S BREACH CLAIM IN CONNECTION WITH THE 0144 CONTRACT IS BARRED BY DEFINITIZATION AND DISCHARGED BY ACCORD AND SATISFACTION

The 0144 Contract was first entered into in 1985 in the nature of an "Advance Acquisition Contract." It required P&W to deliver 2 F404 demonstrator and 10 pilot engines. It gave the Navy the option to purchase 90 production engines. The Navy exercised that option in December, 1985. (Finding 78)

Pratt and Whitney claims that the Navy breached the 0144 Contract by (1) refusing to definitize the contract price in accordance with ¶ 2.(c) of the Investment Incentive clause (i.e., "the price proposed by the Contractor meets the requirements of FAR 15.8"), (2) repeatedly attempting to "ratchet" its engine prices down by ignoring the overhead rates established by the FPRAs, pressuring P&W to be competitive with prevailing GE engine prices, and threatening to end the Second Source Program, and (3) unnecessarily prolonging negotiations in definitizing the 0144 Contract. (P&W br. at 128-155)

All of the facts which support P&W's claim for breach in connection with definitizing the 0144 Contract predated and were known to P&W when senior officers of the parties negotiated a settlement on 22 January 1987 (findings 120, 121). Pratt and Whitney accepted the negotiated price (FFP plus FPI Ceiling of $225,000,000) and an accelerated tooling recoupment schedule, and subsequently signed a definitized contract without any reservation of claims (finding 122).

We agree with the Navy that under the circumstances, P&W had waived its breach claims arising out of the definitization of the 0144 Contract. We spoke on this issue recently in Belleville Shoe Manufacturing Co., ASBCA No. 46036, 95-2 BCA ¶ 27,680 at 138,011:

We also fault appellant for not reserving its claim. Since the definitized contract had the effect of superseding the letter contract, it was necessary for the parties to recognize the existence of claims based on events occuring while the letter contract was in effect with an express reservation in the definitive contract or an acknowledgment that, notwithstanding definitization, the claims would be a matter for resolution by separate agreement. Lear Siegler, Inc. (Instrument Division), ASBCA No. 15250, 71-2 BCA ¶ 9059; Sylvania Electric Products, Inc.% u, ASBCA No. 11206, 66-1 BCA ¶ 5536.

Because P&W failed to reserve its claims based on events occurring prior to definitizing the 0144 Contract which superseded the Advance Acquisition Contract, we hold that P&W's breach claim, arising out of the definitization process is barred by waiver.

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Alternatively, P&W's breach claim in connection with the definitization of the 0144 Contract is also discharged by accord and satisfaction.

After 6 months of unsuccessful negotiations at the working level, the parties' senior management, Admiral DeMayo and P&W President, Mr. Wegner, took over the negotiations in December 1986 (finding 118). Since both of them were involved with the F404 Second Source Program from its inception, they were fully aware of the issues (600% overhead and cost analysis) that divided the parties. In lieu of focusing on these issues, Admiral DeMayo and Mr. Wegner traded-off positions and reached a settlement on the basis of a "give-and-take" compromise. We have found that in reaching a settlement to definitize the 0144 Contract, the parties reached a meeting of the minds that all disputes related to definitization would be resolved. (Finding 121)

Because definitization of the 0144 Contract was a proper subject matter for compromise, and a compromise involving substituted performance was reached between Mr. Wegner and Admiral DeMayo, who we have found had become de facto PCO (finding 118), we hold that P&W's breach claim, as it relates to the definitization of the 0144 Contract, is discharged by accord and satisfaction when the parties signed the definitized contract in July 1987 (finding 122). See Brock & Blevins Co. v. United States, 343 F.2d 951, 955 (Ct. Cl. 1965).

Because of our holding here, we need not discuss the bases which support P&W's claim for breach. We have, however, considered all allegations carefully in the course of our fact finding, and we find they would not, in any event, support a case for breach.

IV.

WHETHER P&W'S BREACH CLAIM IN CONNECTION WITH THE PRICING OF THE 0045 CONTRACT IS BARRED BY DEFINITIZATION

In connection with the pricing of the 0045 Contract -- the first competitive engine procurement for FY88 -- P&W accuses the Navy of "using negotiation tactics that breached the Navy's affirmative duties of good faith and sunk to levels of subjective bad faith, ratcheted P&W's" prices for the -0045 Contract below the levels called for in the Investment Incentive clause" (P&W br. at 160).

Pratt and Whitney listed the following specifics in support of its claim for breach:

"(a) requirements for multiple BAFO's and direct comparisons to GE's pricing, contrary to the SSP and the prohibition against auction techniques in FAR 15.610(d); (b) rejection of contractually agreed- to standards for pricing; (c) repudiation of FAR 15.8 requirements for cost analysis; (d) imposition of competitive standards -- indeed, unfair competitive comparisons to the buyout offer from GE; (e) misrepresentation in negotiation; (f) phony internal documentation; (g) a requirement for still further corporate contribution; and (h) threats to end the F404 Second-Source Program."

(Emphasis in original) (P&W br. 160-161)

The 0045 Contract was ultimately definitized bilaterally by Modification No. 00002. The modification was signed by P&W's Director of Contract Management on 29 January 1988, and by the PCO on 19 February 1988. Pratt and Whitney reserved no claims. (Finding 179)

All of the facts which support P&W's claim for breach in connection with pricing the 0045 Contract predated and therefore were known to P&W prior to 29 January 1988. We conclude that P&W breach claim is barred by definitization. Belleville Shoe Manufacturing Co., ASBCA No. 46036, 95-2 BCA ¶ 27,680 at 138,011.

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Because P&W failed to reserve its claims based on events occurring prior to definitizing the 0045 Contract which superseded the Advance Acquisition Contract, we hold that P&W's breach claim, arising out of pricing the 0045 Contract is barred.

Because of our holding here, we need not discuss the bases which support P&W's claim for breach. We have, however, considered all allegations carefully in the course of our fact finding, and we find they would not, in any event, support a case for breach.

SUMMARY

I. Pratt and Whitney's claim for breach of the Investment Incentive clause, as it related to the FYs90-92 engine procurements, are not barred by any of the remaining affirmative and other defenses the Navy raised.

II. In not awarding P&W any FY90 F404 engines, the Navy breached the Investment Incentive clause and, for reasons stated herein, is liable for common law damages caused by such breach.

III. Pratt and Whitney's claim for breach of the Investment Incentive clause, insofar as it related to the definitization of the 0144 Contract, is barred by definitization and accord and satisfaction, and is otherwise without merit.

IV. Pratt and Whitney's claim for breach of the Investment Incentive clause, insofar as it related to the pricing of the 0045 (FY88) Contract, is barred by definitization, and is otherwise without merit.

Pratt and Whitney's appeal in ASBCA No. 46880 is sustained to the extent indicated above, and is denied in all other respects. The Board remands ASBCA No. 46880 to the parties for determination of the amount of damages. ASBCA No. 46881 is dismissed as duplicative of ASBCA No. 46880.

PETER D. TING

Administrative Judge

Armed Services Board of Contract Appeals

I concur

ALAN M. SPECTOR

Administrative Judge

Acting Chairman

I concur

MARK N. STEMPLER

Administrative Judge

Vice Chairman

Armed Services Board of Contract Appeals

I certify that the foregoing is a true copy of the Opinion and Decision of the Armed Services Board of Contract Appeals in ASBCA Nos. 46880 and 46881, Appeals of United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Propulsion, rendered in conformance with the Board's Charter.

EDWARD S. ADAMKEWICZ

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Recorder,

Armed Services Board of Contract Appeals

FN1 The Secretary's goal was to standardize the F404 engine to a single configuration and logistics system with the second source's engine built to total parts interchangeability (R4, tab 196).

FN2 An "Advance Acquisition Contract" generally contains a "Limitation Of Government Liability" clause limiting the Navy's termination liability to an amount specified in the clause (see, e.g., Clause H-5, R4, tab 2101 at 7-13; tr. 23/42-43). The limitation is based on what Congress has already authorized for advance acquisition (tr. 23/45).

FN3 The Navy's absolute refusal to provide P&W program cancellation protection is explained in its 5 November 1985 "lessons learned" document: The lessons learned about investment incentives are many. Almost from the first moment we began discussing this program with P&W, we were faced with the problem of making a long-term "deal" without violating our one year authorization to obligate funds. We could not guarantee to buy tools in FY88 without having the funds available in FY85! We could not guarantee to buy a finite number of engines from P&W because this represented an unauthorized obligation. We could not agree to program cancellation protection without having enough funds authorized to pay for the entire program up front. The Anti-Deficiency Act and our entire government financial system is specifically designed to prevent long range obligations. There are provisions within the law to allow capital investment incentive deals with contingent liabilities, but they require very carefully structured justifications, a risk assessment and a return on investment analysis to be approved by Congress before the deal can be made. (R4, tab 2295 at 10-11)

FN4 A 30/30/40 split was typical of other Navy second source programs. Each vendor got 30 percent of the annual buys and competed for the remaining 40 percent. (Tr. 4/66)

FN5 Non-recurring costs other than Special Tooling included those costs P&W incurred in validating the data package, preparing its plant for manufacturing the F404 engines, establishing a vendor base, and substantiating and preparing its engines for qualification (tr. 18/84-88).

FN6 At the time in question, Congressional appropriations and authorizations specifically identified the F/A-18 fighter program. Money for the F404 engines was a part of the F/A-18 aircraft budget. (Tr. 16/84). It was P&W's understanding that, as long as the F/A-18 program was funded, there would be funding for the F404 engines. (Tr. 5/131)

FN7 The "F404 Production Guarantee" clause appears at ¶ 21, p.13, of the Model Contract revisions P&W forwarded to the PCO by letter dated 31 May 1985. It provided: In consideration for the Contractor's substantial participation in the costs of becoming a qualified second source for the engines delivered under this contract, the Government agrees to permit the Contractor to compete for the production of all F404 engine models being procured or contemplated for procurement by the Navy, including derivatives or growth versions of the engine, and to provide the Contractor with complete Level 3 data packages to enable the Contractor to produce the derivative or growth version engines. During the period covered by paragraph 4 of Special Provision H, the guaranteed minimum production shall take into consideration any Government requirement for these derivative or growth version engines.

FN8 A "derivative" version of the F404 engine involved parts changes and did not necessarily involve increased performance capabilities. The -402 or EPE engines, and the -400D engines envisioned for the A-6F aircraft were considered "derivatives" of the F404 engine. (Tr. 16/39-40; 18/80-81) A "growth" version of the F404 engine was one designed to higher performance capabilities such as higher thrusts, higher

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speeds, and higher temperatures. The F5B2 engine envisioned for the A-12 aircraft, and the -414 engine designed for the FA-18E/F aircraft were considered "growth" versions of the F404 engine. (Tr. 16/37, 41) The parties have stipulated that: (1) the F404-GE-400D engine, designated for use in the A-6F aircraft, and (2) the F404-GE-402 engine, also known as the Enhanced Performance Engine or the EPE engine, are "derivative or growth versions" of the F404 engine as that term is used in the Investment Incentive clause of the -0144 and -0045 Contracts (exh. 4003). The FY96/97 OSD Budget projected that 1,000 F/A-18E/F aircraft and 2,200 engines would be purchased through FY[20]15 (R4, tab 462 at 4; tr. 16/50-52).

FN9 This condition was included at the Navy's insistence. It pertained to "a bunch of routine approvals that we [the Navy] had to go through to award a contract" (tr. 18/77, 80). Among them, the requirement for an acquisition plan, pre- and post-negotiation business clearance memoranda, and CJ&A (class justification and approval for procurement other than full and open competition), etc.(tr. 17/185, 190). The Navy acknowledged that condition ¶ 2(d) would be met "as long as an award to Pratt & Whitney was not prohibited by, or inconsistent with law or regulation" (tr. 18/58-59).

FN10 The Navy and P&W agreed to share the up-front cost of the program as follows: Pratt and Whitney would pay for the non- recurring engineering and substantiation costs, and it would finance the carrying costs for the Special Tooling. The Special Tooling costs would be reimbursed by the Navy in accordance with the Investment Incentive clause. The Navy would pay for the engine qualification costs including electricity and fuel costs. (Tr. 18/30-31, 88; R4, tab 2290)

FN11 Military Standard DoD-D-1000B defines a level 3 data package as one that is "sufficient for a competent manufacturer to produce a part with physical and performance characteristics interchangeable with those of the original source without additional design effort or resorting to the original source for assistance" (R4, tab 199 at 6; tr. 6/203-204).

FN12 The initial competitive contract following qualification was the FY88 buy for engine deliveries beginning in April 1989 (R4, tab 2286).

FN13 The Defense Contract Audit Agency issued a report on P&W's proposal on 21 May 1986. The report found that despite inadequacies in P&W's cost or pricing data and other shortcomings, it considered P&W's proposal "to be an acceptable basis for negotiating a price." (R4, tab 2316)

FN14 If P&W understood the PCO to demand head-to-head competition with GE, the issue was brought up with the PCO's supervisor and resolved -- P&W was not "accountable to that standard." (tr. 22/103)

FN15 In November, 1986, P&W had not yet qualified its F404 engines. It viewed the Navy's suggestion as an attempt to take back with one hand what the other hand had given as an incentive for P&W to qualify its engines on schedule.

FN16 There was no formal referral by the PCO to higher authority. At some point, higher authority from both sides apparently conferred and decided to take over the definitization negotiations.

FN17 The parties have stipulated that the 1 April 985 version of the FAR, being in existence on the day the 0144 Contract was executed (30 July 1985) was applicable (tr. 25/36; tab 4004). See findings 106 and 124.

FN18 FAR Subpart 15.6 pertained to "Source Selection." FAR 15.612, "Formal source selection," provided, in part: (a) General. A source selection process is considered "formal" when a specific evaluation group structure is established to evaluate proposals and select the source for contract award. This approach is generally used in high-dollar- value acquisitions and may be used in other acquisitions as prescribed in agency regulations. The source selection organization typically consists of an evaluation board, advisory council, and designated source selection authority at a management level above that of the contracting officer.

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FN19 James H. Webb, Jr., was Acting Secretary and then Secretary of the Navy from 10 April 1987 to 23 February 1988 (exh. 4002).

FN20 The PCO acknowledged that in order for the SSAC to recommend an award to the Source Selection Authority, it would have to determine that P&W's prices were fair and reasonable (tr. 24/278).

FN21 At the time P&W submitted its proposal for the FY88 procurement in October 1986, it had not produced its first F404 engine. Thus, P&W was "reluctant to put ourselves out on a limb and talk about learning past the 250th engine when we hadn't built an engine yet" (tr. 20/104-105).

FN22 FAR 52.215-22 instructs that the "PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA" (APR 1984) clause, FAR 52.215-22 be inserted in solicitations "when it is contemplated that cost or pricing data will be required." The RFP for the FY 88 engines included such a clause (see R4, tab 2185 at 8-5). We find that cost or pricing data was required and was submitted by P&W. No cost analysis based on P&W's cost and pricing data was performed by the PCO. However, an independent cost estimate based on DCAA audits and "other information" was performed. (Tr. 24/289, 290, 292)

FN23 See Clause H-34, "Contractual Price Commitment" of Contract No. N00019-87- C-0045 (R4, tab 2101).

FN24 Since no minimum engine quantity was guaranteed to GE, the Navy could award 100 percent of the FY89 engines to P&W. This scenario was not feasible because it "could result in production break in GE's" line" and impact its learning. In addition, GE was the design agent of the F404 engine and was providing engineering support to the existing engines. It was also developing growth and derivative versions of the F404. (Tr. 13/181-182; 14/98-99)

FN25 Secretary Garrett testified that, as of 1989, the Navy planned to purchase 836 A-12s Twice as many engines plus spares would be purchased. (Tr. 24/97)

FN26 The EPE engine was a derivative of the F404 engine; it was basically a F404 engine with more thrust. General Electric was developing this engine for Kuwait "because of the higher temperatures in [that] country." (Tr. 11/130, 13/16) The EPE engine constituted 30 percent of the FY90 procurement (tr. 13/17). The EPE requirement was problematic for P&W as well as NAVAIR because the engine was not at that time defined by specifications or drawings (tr. 11/131), and GE and P&W were still working on a data transfer agreement (tr. 13/20-21). The Navy, however, was confident that P&W could build the EPE "if they had received all the necessary data from GE" (tr. 13/22). In early February, 1989, the PCO took steps to implement this new procurement strategy (tr. 12/308-309; R4, tab 2193). While the FY90 EPE engine procurement was strictly for Foreign Military Sales (Kuwait) purposes, the Navy began buying the EPE engine for itself the following fiscal year (FY91) (tr. 13/16).

FN27 A fuller and more precise explanation of the concept was provided by Pratt and Whitney's financial and learning curve expert: As a general proposition, in a proposal in which, like the 1989 F404 RFP, the contractors were required to price units that would be manufactured and delivered over several years, a then-year dollar offer would state the exact price that the contractor would be paid over the entire period. The contractor would estimate and take the risk of inflation by building it into its proposed TY$ price. Still generally speaking, a constant-year dollar price proposal removes much of the risk of inflation by having the contractor assume that all prices will be paid in the specified base-year dollars. The contract will then provide for adjustment of the price by using an index to measure inflation from the base-year dollars. (Exh. 4006 at 8-9)

FN28 "LPT" stands for Low-Pressure Turbine. The F404 engine is comprised of 6 piece part interchangeable modules: (1) High- Pressure Compressor, (2) Combuster, (3) High-Pressure Turbine, (4) Fan Module, (5) Low-Pressure Turbine, and (6) Afterburner. (Tr. 26/60, 83)

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FN29 FAR 15.612(d) provided "The source selection authority shall use the factors established in the solicitation (see 15.605) to make the source selection decision."

FN30 The Navy sought dismissal for lack of jurisdiction on the ground that the underlying "claims" submission did not seek the payment of money in a sum certain. By decision issued on 29 February 1996, we held that because the sum certain amounts of P&W's various theories of damages can be determined by the contracting officer by mathematical calculation, P&W's 5 March 1993 submission constituted a "claim" as defined in FAR 33.201, and we therefore have jurisdiction over P&W's appeal. United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Propulsion, ASBCA Nos. 46880 et al., 96-1 BCA ¶ 28,226.

FN31 In United Technologies Corporation, Pratt & Whitney Group, Government Engines and Space Propulsion, ASBCA No. 46880 et al., we held that the Board had no jurisdiction over claims founded upon the United States Constitution.

1997 WL 84911 (A.S.B.C.A.), 97-1 BCA P 28818, ASBCA No. 46880, ASBCA No. 46881

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COMPETITION FOR THE JOINT STRIKE FIGHTER ENGINE

8. Senator WARNER. Secretary England, during your appearance before the committee, you stated that there had been an "engine competition" for the Joint Strike Fighter (JSF) program. Would you please clarify this for the record?

Secretary ENGLAND. The following excerpt from a DOD January 1996 report to the congressional defense committees summarizes JSF engine selection history: ". . . The Joint Advanced Strike Technology (JAST) Program (later renamed the JSF Program) awarded contracts to both GE and P&W for Concept Exploration Phase and Concept Development Phase efforts. Subsequently, all three JAST Program Weapon System Contractors independently selected either the basic, or a de-

rivative of, the P&W F119 as the cruise engine for their [respective] Preferred Weapon System Concepts and Demonstrator aircraft. The JAST Program, therefore, is awarding a follow-on contract to P&W in fiscal year 1996 to provide hardware and engineering support as Government Furnished Equipment for the Weapon System Concept Demonstration efforts commencing in fiscal year 1997. The Department appreciates the committee's concerns about a competitive source for engines. The JAST Program acquisition strategy has provided for introduction of a second engine source during the production phase."

9. Senator WARNER. Secretary England, were there formal engine competitions involving P&W and GE for either the prototype concept demonstrator aircraft phase or the subsequent system development and demonstration phase of the JSF program? If there were formal competitions, please provide the engine source selection solicitations and evaluation results for each of these phases of the JSF program, and the estimated competitive savings that resulted from these competitions.

Secretary ENGLAND. There were no formal Government engine competitions for either phase of the JSF program.

GENERAL ELECTRIC'S MARKET SHARE

10. Senator WARNER. Mr. Donnelly, there was considerable discussion in the hearing about GE exiting the large, high-thrust, military fighter engine business if the F136 program is cancelled. Would you please provide GE's position on this issue?

Mr. DONNELLY. If the F136 engine program is terminated, as the DOD is proposing in the fiscal year 2007 budget, GE will be forced to exit the high performance fighter engine business. Large combat engines contain unique technologies that result from the efforts of highly dedicated design teams. Specifically, multistage high-pressure fans, variable exhaust nozzles, and afterburners have no applicability in the commercial jet engine world. We have built up the critical design, systems integration techniques, manufacturing, and test skills for these technologies over several generations of large military combat engines, culminating in our current product portfolio of the F110 and F404/F414 families.

All three of the platforms on which these engines are qualified (F–15, F–16, and F–18) are considered mature from a propulsion standpoint. GE is not aware of any DOD plans to require increased thrust or other significant performance changes on any of these engines or platforms. In the short-term, the F404/F414 and F110 engine families will only require sustaining engineering and manufacturing capabilities to support the existing fleets. The bulk of these engineering teams are now transitioning to the F136, as new design and engineering opportunities diminish on the legacy engine families. These teams will not be required and will be disbanded if the F136 is terminated.

There is no other program, current or envisioned, that would allow GE to maintain this critical capability. Without these unique skills in place, it would take GE many years to reconstitute a team and then design, develop, test, and produce a new high performance fighter engine. If the F136 program is canceled, GE will be forced to exit the high performance fighter engine business and the DOD will be captive to a single supplier of high performance fighter engines. This situation last existed during the 1970s and early 1980s and led to the first Great Engine War. We would hope the Nation does not place itself in that position again.

11. Senator WARNER. Secretary England, there was considerable discussion in the hearing about whether or not GE would exit the high-thrust, fighter engine business if the F136 program is cancelled. Is there any DOD program other than JSF that would keep GE engaged in designing, developing, and producing large, high-thrust fighter engines (engines in the 40,000 lbs. thrust category) either now or in the near future? If not, given that it takes 15 years or so to design, develop, test, and initiate production of a new fighter engine, isn't it logical to conclude that the Department will become dependent on only P&W to provide high performance fighter engines in the future if the F136 program is terminated?

Secretary ENGLAND. The JSF is the only DOD program that requires an engine in the 40,000 lb. thrust category. The decision to rely on a single engine supplier for the JSF program does not preclude competition on future engine programs.

ENGINE MATURITY

12. Senator WARNER. Secretary England, at the hearing, you talked about the acceptability of the risk to the JSF program and the warfighter of terminating the

F136 engine program. Would you please tell when, in terms of flying hours, a fighter engine is determined to have reached maturity?

Secretary ENGLAND. I am unaware of any standard definition or metric for determining a fighter engine's maturity for development decisions. There is a standard metric for fleet engine maturity, which says an engine has reached maturity at 50,000 flight hours.

13. Senator WARNER. Secretary England, would you also provide the estimated number of flying hours that will be accumulated on the F119 engine for the F–22 before the F135 engine for the JSF goes into operational service and the assumptions for arriving at that flying hour estimate?

Secretary ENGLAND. When the first JSF aircraft is delivered in late 2009 (September 2009), the U.S. Air Force projects approximately 145,000 hours will be accumulated on the F119 engine for the F–22. The estimate is based on 336 flight hours per aircraft per year.

ECONOMIC/COST SAVINGS ANALYSIS

14. Senator WARNER. Secretary England, during your appearance before the committee, you stated that the Department analyzed the second engine strategy and concluded that having a second engine would not yield a net cost savings. Your letter to Representative Rob Simmons dated February 27, 2006, included the specific DOD break-even analysis. Would you please provide the specific economic assumptions, including engine unit quantity and engine unit cost versus production quantity with and without competition, as well as the life cycle cost assumptions used in this specific break-even analysis for the alternate engine program?

Secretary ENGLAND. [Deleted.]

BENEFITS OF COMPETITION

15. Senator WARNER. Mr. Chênevert, during your appearance before the committee, you argued strongly that sole-source procurement is good for the JSF engine. Yet, when asked how your company would mitigate the impact of potential supplier strikes on engine production if you became the sole-source engine provider for the JSF program, I believe you stated, ". . . we have multiple sources for parts. . ." Also, I believe your company just began running ads in both Aviation Week and Flight magazines announcing your entering the business of producing parts for the GE/SNECMA CFM56 commercial engine. The ads state, "You ask for a competitive edge. So we entered the competition." The tag line of the ad reads, "Now you have a true choice." Would you please explain why competition is appropriate/good for those instances, but not appropriate/good for the JSF engine?

Mr. CHÊNEVERT. Competition is appropriate for the JSF and the P&W engine was selected for both competing JSF aircraft offers. In reference to the statements on P&W competing for CFM56 business, P&W has invested in this business, not our customers, and believe we can make a return on that investment in a truly free market place. The DOD has decided that the investment in an alternate engine is not a cost effective investment and we support that decision. Unlike the commercial market place, the DOD invests in the development and procurement and a further competition for procurement will not provide any return.

DRIVING DOWN ENGINE-RELATED EVENTS

16. Senator WARNER. Secretary England, at the hearing, the United Technologies Corporation witnesses showed a chart of how engine-related, class A events for single engine fighter aircraft have decreased over time. It appeared to me that the trend dramatically improved with the onset of the Great Engine War competition in the 1980s. Would you please provide your comments on the impact of competition in driving improvement in engine-related accidents, particularly for single-engine aircraft?

Secretary ENGLAND. The most well known example of competition in aircraft engine procurement is the Great Engine War, which began in the 1970s as the Air Force and Navy were searching for more reliable power plants for the F–15, F–16, and F–14 aircraft. There is little disagreement that the competition created by the Great Engine War resulted in critical improvements in engine performance and reliability; however, there are significant differences between the circumstances of the Great Engine War and where we are today. In order to make accurate comparisons,

it is first necessary to understand the context of the Great Engine War and how the lessons learned from that era may or may not apply to current issues.

In the early 1970s the Services were eager to field the next generation of fighter aircraft to counter the Soviet air threat. In their rush to outperform the Soviets, a premium was placed on performance and power requirements (thrust to weight) rather than reliability and durability metrics. The Air Force's stated order of priority in fielding the new engine was: "thrust, weight, everything else." The P&W F100 was selected for the F–15 and the F–16 based on considerable advances P&W had achieved in thrust and weight. Although this engine was initially well received by the Air Force, it soon developed stall problems and turbine failures due to the extreme maneuvering levels achieved by these new air frames.

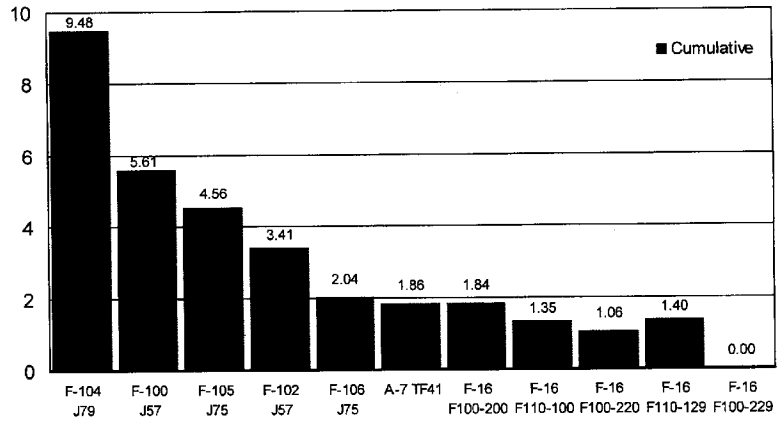
In the rush to field new engines, P&W powerplants for the F–15 and F–16 were only tested for 150 hours on the test-stand and 50 hours in the aircraft before going into production. Although these early tests extensively stressed time at high Mach numbers to guard against stress failures, they did not address the significant factors related to throttle movement. Gradually engineers began to better understand the durability issues associated with engine cycles, which are defined as the movement from the idle position to maximum power and then to an idle or intermediate position. They discovered that engine cycles are profoundly more important than just the accumulation of hours in evaluating engine life.

When the P&W F100 engine performance problems became apparent, the Air Force believed P&W was financially responsible for fixing them. P&W thought the Air Force should pay, since P&W had provided the Air Force with the engine it requested. Ultimately, the Air Force redirected Government funds to improve the P&W engine while pursuing an alternate engine source with GE, thereby kicking off the Great Engine War.

To avoid a repeat of the reliability issues experienced with the P&W F100, the Air Force Scientific Advisory Board proposed that engine usage be carefully defined at the beginning .of engine development, thereby increasing the importance of reliability relative to thrust and weight. GE used a combination of corporate, Air Force, and congressional funds to develop a derivative of their F101 engine used to power the B–1 bomber. In contrast to P&W, GE designed their new engine, which eventually became the F110, to the new stringent durability and reliability specifications required by the Air Force in the aftermath of the P&W dispute. It was these more stringent design criteria that gave GE a distinct reliability advantage over P&W as the Great Engine War commenced.

Despite the initial concerns with the F100, it was still more reliable than engines developed for the 1950s and 1960s vintage aircraft such as the F–104 and F100. The chart below addresses the trend in single engine aircraft safety and reliability over the past several decades.

Single Engine Safety and Reliability (Class A engine related flight mishaps per 100k engine flight hours in single engine aircraft)



Source: US Air Force

In contrast to the focus on thrust and weight in 1970s fighter engines, reliability was a major factor in the selection of the P&W engine for JSF and continues to be a critical factor in the test program. Compared to the 200 engine test hours of the 1970s, the P&W engine in the JSF program has already amassed nearly 5,000 test-stand hours incorporating Accelerated Mission Test (AMT) profiles. These AMT profiles are designed to stress the engine cycles rather than just log operating time.

Furthermore, over the past 30 years engine testing and design validation philosophy have evolved to the point that the Services have changed their key engine metric from hours to Total Accumulated Cycles (TACs). Thus, engine removals and maintenance actions are now often triggered on TACs, as opposed to hours. In addition to AMT mission execution, which primarily tests for Low Cycle Fatigue (LCF) effects, High Cycle Fatigue (HCF) testing has been incorporated to expose failure modes associated with high frequency/low amplitude effects. The combination of AMT and HCF testing has become the standard for testing propulsion systems to their limits to ensure a safe and reliable product.

The lessons learned from the Great Engine War competition indicate that the positive trends in fighter engine reliability over the past 30 years are the result of advanced design tools, improved manufacturing techniques, and a fundamental shift in engine testing and design validation philosophy. At issue is whether we expect competition to stimulate any further reliability improvements beyond the gains already realized from technology and testing advancements over the past several decades. Considering the current reliability of the F135 and its predecessor, the F–22's F119, fixing any problems with the original engine may cost far less than developing and producing a second engine—which might develop its own unique problems.

F136 MILESTONES FOR CY06

17. Senator WARNER. Mr. Donnelly, during the hearing I raised the subject of what milestones or benchmarks would be completed during the current calendar year (2006) that would give this committee reason to recommend continuation of your system development and demonstration (SDD) contract for an additional year. Would you please provide this information along with those scheduled SDD accomplishments, beyond this year, which place you in a competitive position at the conclusion of SDD?

Mr. DONNELLY. A number of significant milestones will be achieved during the current calendar year that will further fortify the F136 engine's importance to the JSF program as a robust, competitive solution to maximize value to the warfighter. I also attach a complete history of prior milestones in order to create a complete picture of the F136 engine. In April, the team completed the integrated baseline review consisting of a thorough review of technical, cost, and schedule elements of each major system and component in the engine. In the coming months, extensive design activity will take place on a component-by-component basis to modify the configuration tested in the pre-SDD phase to achieve an enhanced, optimized design that will meet the needs of the JSF aircraft that have evolved over the last 5 years of the aircraft's SDD phase. This will lead to the preliminary design review with the Joint Program Office (JPO). The completion of this significant milestone will launch the efforts for detailed component design culminating in the F136 critical design review next year.

In parallel with the design efforts, additional engine and component testing will be conducted in 2006. Engine testing will continue on the short take-off/vertical landing (STOVL) engine to further develop the complex control system software. Component testing is currently underway on the combustor, afterburner, and control system to prove design concepts planned for the product configuration and reduce technical risk of the SDD full-engine testing program. Beyond 2006, the F136 team will continue to progress on its path to design, test, and qualify an engine optimized for performance, safety, reliability, and affordability. The team will build seven product-configuration engines for ground testing, six for flight testing and one spare. The F136 engine will complete over 10,500 hours of testing before entering service in 2012 as a fully competitive engine for the JSF aircraft. The following summarizes the F136 SDD milestones, followed by the Joint Strike Fighter Competitive Engine Story:

2006

Initial Baseline Review
STOVL Engine Testing (pre-SDD engine, ~100 hours)
Preliminary Design Review
Component Testing

2007

Engine Testing (2 pre-SDD engines, ~300 hours)
Component Testing
Initiate SDD Hardware Manufacturing
Critical Design Review

2008

Build First 5 SDD Engines
First SDD Engine Test (350 hours) Component Testing

2009

Extensive ground testing for flight readiness (5 engines, >1,800 hours)
Build initial flight test engines

2010

Engine Testing (5 engines, >2,000 hours ground testing)
Delivery of 5 Flight Test Engines
Build 2 additional SDD Engines
Initial Flight Release
First Flight with F136 Engine

2011

Engine Testing (7 engines, >3,000 hours ground testing)
Delivery of 6th Flight Test Engine
Continued Flight Testing

2012

Initial Service Release
First Production F136 Engines Delivered

The Joint Strike Fighter Competitive Engine Story

In 1991, after an extensive and rigorous competitive prototype fly-off between Lockheed and Northrop and GE and P&W, Lockheed and P&W were chosen to develop and produce the F–22 fighter for the Air Force. P&W was awarded "a competitively procured" contract initially valued at $1.36 billion. The Air Force competitively selected the P&W F119 engine over the GE F120 engine using formal source selection procedures.

In 1993, a technology program that is the forerunner to the JSF program is initiated. It is called the "Joint Advanced Strike Technology" (JAST) program.

In 1994, the JAST JPO is established and four airframe teams (Lockheed, Boeing, McDonnell-Douglas and Northrop Grumman) began engaging in trade studies on future JSF aircraft concepts. This notional aircraft would be used by the air branches of all three Services and would ultimately replace the Air Force, Navy, and Marines Corps fleets of F–16s, F–18s, and AV–8Bs.

In 1995, after McDonnell-Douglas and Northrop Grumman had teamed up, a Government conducted competition is initiated to pick two airframe teams to build and fly prototype aircraft. Lockheed, Boeing, and the McDonnell-Douglas/Northrop Grumman teams all chose the F119 as the propulsion system for their airframes. (The program office "encouraged" the airframers to use the F119 so that there would be "commonality" with the F–22. It is important to note, at this point, that, unlike the F–22 prototype fly-off, there was no formal source selection for the JSF engine and, in fact, the competitive fly-off that subsequently occurred did not involve an engine flyoff. All the airframe competitors used the P&W F119 engine in their proposals and propulsion performance was not a factor in selecting the winner of the fly-off.)

Concurrently, Congress, concerned that this process will ultimately lead to a sole-source production award to the P&W F119, directs the DOD to establish a second source engine program for the JSF and adds $7 million to the DOD fiscal year 1996 budget for this purpose. (This is a critical point in the discussion of the JSF engine competition. In the earliest phases of the JSF program, Congress, recognizing that the JSF program will be multi-service, multi-national and involve several thousand aircraft, directs the DOD to provide for a continuing engine competition in the production phase of the program so as not to get caught in the situation that existed in the 1970s and early 1980s when the DOD was captive to single, monopolistic supplier of high performance fighter engines.)

In 1996, Lockheed and Boeing are competitively selected to build and fly prototype JSF aircraft. These prototype aircraft are both powered by the P&W F119 en-

gine. This phase of the JSF program is called to the Concept Demonstration Aircraft (CDA) phase.

Concurrently, the DOD requests $18 million in the fiscal year 1997 budget to begin a "Competitive Engine Program" for the JSF. Congress adds $10 million to the DOD request and renames the program the "Alternate Engine Program".

On January 23, 1997, the Naval Air Systems Command awards P&W a "non-competitively procured" $804,046,096 cost-plus-award-fee/cost-plus-fixed fee contract for the JSF Engine Ground and Flight Demonstration Program. The contract award announcement specifically states: "This contract was not competitively procured."

Concurrently, DOD requests $20 million to continue the development of the "Alternate Engine" for the JSF. Congress adds $15 million to this request and requires the DOD to certify that the full funding is in place for the alternate engine program.

During 1998, the CDA phase of the JSF program continues.

Concurrently, DOD certifies that the alternate engine program is fully funded and requests $25 million to support the program. Congress adds $7.5 million to the program request and directs the DOD to accelerate the competition.

During 1999, the CDA phase of the JSF program continues.

Concurrently, DOD requests $29 million to support the alternate engine program. Congress adds $15 million to the request and again expresses strong support for competition.

During 2000, the CDA phase of the JSF program continues.

Concurrently, DOD requests $94 million to support the alternate engine program. Congress again expresses strong support for competition.

In 2001, the CDA phase concludes with the selection of Lockheed Martin as the winner over Boeing. On October 26, 2001, Lockheed Martin is awarded an $18,981,928,201 cost-plus-award-fee contract for the JSF System Engineering and Manufacturing Development program by the Naval Air Systems Command. The contract award announcement specifically states "This contract was competitively procured through a limited competition; two offers were received." On the same date, the Naval Air System Command awards P&W a "non-competitively procured" $4,803,460,088 cost-plus-award-fee contract for the design, development, fabrication, and test of the F135 propulsion system and various other F135 development activities. The contract award announcement specifically states: "This contract was not competitively procured." (It is important to note at this point that, contrary to the claims made by P&W and unlike the F–22 engine selection, there was no formal competition involved in the JSF engine selection in either the CDA or the SDD phases of the JSF program. Further, at the conclusion of the CDA phase of the program, a new engine development program is initiated for a different P&W engine referred to as the F135. While the F135 is similar in some respects to the F119, it is a different engine that requires several billion dollars to develop.)

Concurrently, DOD requests $118 million to support the alternate engine program. Congress again expresses support for competition and adds $2.5 million to the request. The P&W engine is now designated the F135 and the GE engine is designated the F136.

During 2002, the SDD phase of the JSF program continues. Concurrently, DOD requests $150 million to continue the development of the F136. Congress again expresses support for competition and adds $29.75 million to the request. GE and Rolls-Royce form a 60/40 limited partnership to develop and produce the F136.

During 2003, the SDD phase of the JSF program continues.

Concurrently, DOD requests $100 million to continue the development of the F136. Congress again expresses support for competition and adds $66.8 million to the budget request.

During 2004, the SDD phase of the JSF program continues.

Concurrently, DOD requests $231 million to continue the development of the F136. Congress again expresses support for competition and adds $3.5 million to the budget request.

During 2005, the SDD phase of the JSF program continues.

Concurrently, DOD requests $338 million to continue the development of the F136. Congress approves the request and again expresses support for competition. In August 2005, the F136 team is awarded a $2.4 billion SDD contract to begin the final development phase of the F136 program.

In February 2006, the President's fiscal year 2007 budget request recommends termination of the F136 program and withdraws support for competition. Up to this point, $1.35 billion has been appropriated in support of the program.

GE/R–R F136 FUNDING PROFILE

[In millions of dollars]

Fiscal Year	DOD Request	Congressional Add	Total
1996		7	7
1997	18	10	28
1998	20	15	35
1999	25	7.5	32.5
2000	29	15	44
2001	94		94
2002	118	2.5	120.5
2003	150	29.75	179.75
2004	100	66.8	166.8
2005	231	3.5	234.5
2006	338		338
2007		?	?
	1,123.0	157.05	1,280.05

QUESTIONS SUBMITTED BY SENATOR JOHN MCCAIN

COMPETITION

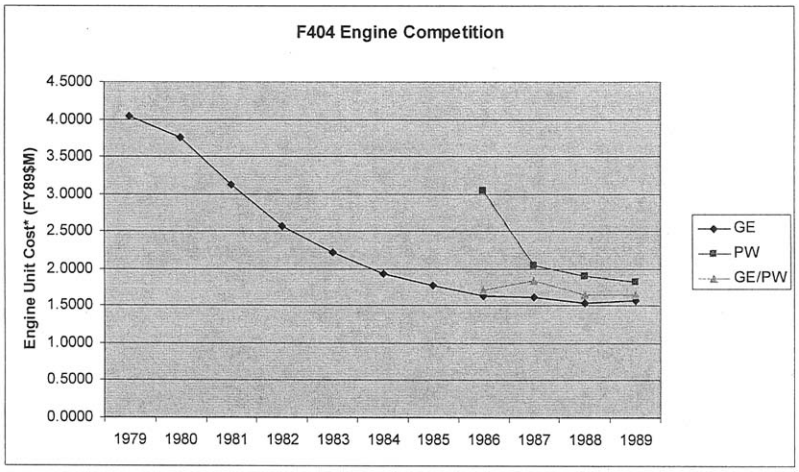
18. Senator MCCAIN. Secretary England, in your view, is the proposed buy of JSF engines large enough to support two competitive engines?

Secretary ENGLAND. We know that in order to achieve a net savings from competition, the development costs for the alternate source must be offset by the long-term savings from either lower total procurement costs or lower O&S costs. With respect to fighter engine competition, our primary experience is the Air Force's Great Engine War and the Navy's second source program with the F/A–18's F404. In both of these historical cases, neither the Air Force nor the Navy realized sufficient procurement savings to offset the development costs of the alternative engines. Consequently, we do not believe the proposed buy of JSF engines will yield net procurement cost savings.

There are two reasons for this assessment: first, the investment cost of developing a second engine source is high—at least an additional $2.0 billion in the case of the F136 for the JSF. Second, splitting a given production quantity between two contractors often results in higher, rather than lower, production costs. This is due to a reduced advantage from "learning curve" effects (whereby costs decrease as a company produces more units) and from "rate effects" (whereby fixed costs are spread over production units).

The following charts illustrate our experience with the F404 engine competition in the Navy's second source program and the F100/F110 competition in the Air Force's Great Engine War. Figure 1–1 shows actual F404 engine procurement costs before and during the competition. Unit costs of this engine did not decrease after competition was introduced.

Figure 1-1. F404 Engine Unit Cost comparison. Average unit cost increased with second supplier. Competition cancelled in 1989.



The cost of competition was understood during the Great Engine War when the Air Force conducted the Analysis of Alternative Procurements for Fighter Engines. In their congressional testimony the Air Force did not project any procurement savings; on the contrary, they assessed that a split buy would actually cost the government more than a single supplier.

Table 1-1. Air Force Analysis of Alternative Procurements for Fighter Engines

Contract Award	Cost to Government $B(83)
Split	17.32
All to PW	16.39
All to GE	16.25
Split	16.90
All to PW	15.99
All to GE	15.74

Source: Defense Department Authorization and Oversight, Hearings on H.R. 5167 before the Committee on Armed Services, 98 Cong. 2 sess. (GPO, 1984),pt. 2, p. 255.

Historical evidence shows that competition is more likely to result in O&S savings than in reduced procurement costs. In the case of the Great Engine War, the Air Force anticipated savings from reduced O&S costs through more reliable engines and better contractor responsiveness. Although the Air Force was very specific in their projections, there is no empirical data that shows how much the Air Force actually saved in O&S costs. It is very difficult to assess that they achieved any savings because the estimates were based on how much they would save over the original "unimproved" P&W F100 engine. P&W did, in fact, invest $400 million to fix the problems and produce a more reliable engine while the Air Force was investing another $500 million to develop an alternate engine.

The current issue for the JSF alternate engine program is whether we expect engine competition to achieve significant reliability improvements beyond the gains al-

ready realized from technology and testing advancements over the past several decades. We must also assess whether we could achieve greater reliability at lower cost by investing in the primary engine rather than creating a second engine supplier. The Department believes that if we are faced with engine reliability problems in the future, the most practical option will likely be to fix or improve the capability of the primary engine rather than incurring the high investment cost of creating a second supplier of engines. Considering the reliability of modern engines in general and the performance of the JSF engine so far, fixing any problems with the original JSF engine may cost far less than developing and producing a second engine—which might develop its own unique problems.

19. Senator MCCAIN. Secretary England, in your experience, and expert opinion, when does competition offer a better business case than using a sole-source provider?

Secretary ENGLAND. Please see the answer to question 18 for this response.

ANALYSIS

20. Senator MCCAIN. Secretary England, when was the analysis for the decision to cancel the JSF alternate engine completed?

Secretary ENGLAND. DOD has reviewed and assessed the costs and benefits of the alternate JSF engine several times since the establishment of the JSF program in the mid-1990s. During deliberations on the fiscal year 2007 budget, DOD considered the findings of past assessments, along with initial test results from the F135. The F135 is derived from the F119 engine used in the F–22, so experience with that engine was considered as well. These factors contributed to the judgment that the potential benefits to be gained from developing an alternate engine for the JSF would not justify the added development and operating costs. Two key factors supporting that conclusion were engine reliability and cost.

Technological advances have permitted major improvements in engine reliability over the past several decades, thus enabling the Department to procure the single-engine JSF for three Services. The design of the F135 engine has matured after almost 5,000 test hours, and the engine is performing well at this stage of testing. We know that engine problems can arise over years of operational use, but we are confident that we can hedge against such risks. One mitigating factor is that the F135 engine was produced using the same engineering and manufacturing practices as the F22's F119 engine, which is performing well after roughly 18,000 engine flight hours. Also, if we do face reliability problems in the future, we believe that fixing any problems with the original engine will cost far less than developing and producing a second engine (which might develop its own unique problems). It is this collective knowledge and experience that guided the Department's decisions years ago to rely on a single engine supplier for both the F–22 and the F/A–18E/F.

We do not believe that maintaining two JSF engine suppliers would yield cost savings, for two reasons. First, the investment cost of developing a second engine source is high—at least an additional $2.0 billion in the case of the F136. Second, splitting a given production quantity between two contractors often results in higher, rather than lower, production costs. This is due to a reduced advantage from "learning curve" effects (whereby costs decrease as a company produces more units) and from "rate effects" (whereby fixed costs are spread over production units). Our experience with the F404 engine in early-model F/A–18s illustrates the point: the average unit costs of this engine did not decrease after competition was introduced.

There are risks in every development program, and hard choices must be made as to whether to accept or reduce them. In the case of the JSF engine, we believe that the program office and the prime contractor will be able to overcome any difficulties that arise and that maintaining a second source for the engine would not be an effective use of taxpayer dollars.

21. Senator MCCAIN. Secretary England, when did the program manager's advisory group (PMAG) assessments take place?

Secretary ENGLAND. Please see the answer to question 14 for this response.

22. Senator MCCAIN. Secretary England, what were the recommendations of these PMAGs?

Secretary ENGLAND. Please see the answer to question 14 for this response.

23. Senator MCCAIN. Secretary England, did the Department consider the JSF PMAG assessments?

Secretary ENGLAND. Please see the answer to question 14 for this response.

24. Senator MCCAIN. Secretary England, what did both of the PMAGs conclude and recommend to the program manager with regard to the competitive engine program?

Secretary ENGLAND. Please see the answer to question 14 for this response.

25. Senator MCCAIN. Secretary England, did the Department do any other analysis either prior to or during the internal DOD 2007 budget deliberations, to arrive at the decision to terminate the F136 program? If not, why not?

Secretary ENGLAND. Please see the answer to question 20 for this response.

26. Senator MCCAIN. Secretary England, did the Department conduct a Defense Acquisition Board (DAB) review prior to the decision to sign the SDD contract?

Secretary ENGLAND. The F136 engine was addressed at the DAB review held on May 5, 2005. The discussions focused on the transition from Pre-SDD to the SDD contract. The DAB review did not discuss the merits of a competitive engine program, nor the possibility of canceling the program.

27. Senator MCCAIN. Secretary England, what was the consensus of the DAB with regard to the competitive engine program?

Secretary ENGLAND. Please see the answer to question 26 for this response.

28. Senator MCCAIN. Secretary England, the DOD guidance for conducting cost analyses is that the total life cycle cost of the system must be considered. What was considered in the analysis that supported the decision to cancel the JSF alternate engine?

Secretary ENGLAND. In order to achieve a net cost savings, competition between two engine suppliers must generate cost savings that exceed the investment needed to establish a second engine supplier. Excluding the sunk costs of developing the JSF second engine, competition would have to reduce procurement and/or O&S costs by $2 billion in order to generate net savings. At issue is whether—given all the factors that drive costs up or down—splitting the buy between two suppliers will reduce costs by such a large amount.

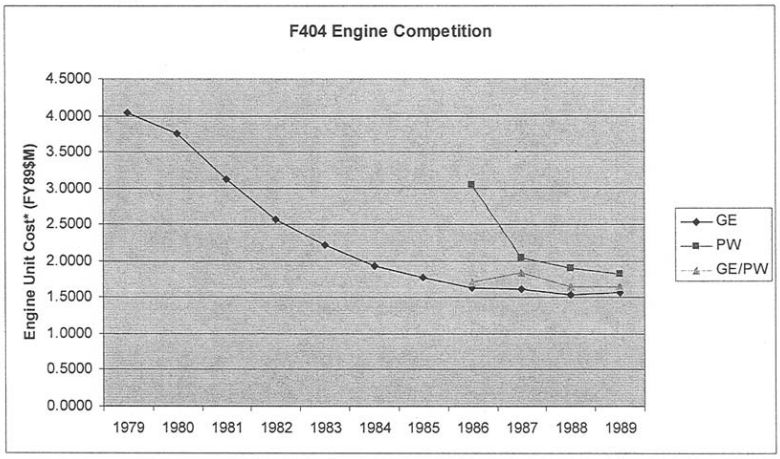
The 2002 break-even cost analysis focused on the amount of procurement savings required to offset development costs and loss of learning associated with a second supplier. While competition can provide some production cost benefit, splitting a given production quantity between two contractors can have the net effect of increasing production costs. This is due to a reduced advantage from "learning curve" effects (whereby costs decrease as a company produces more units) and from "rate effects" (whereby fixed costs are spread over production units). Our experience during the Great Engine War with the Air Force fighter engines, and subsequently with the Navy's F/A–18 F404 engine, indicates that competition does not generate net procurement savings. See Table 1–1 and Figure 1–1 below.

Table 1-1. Air Force Analysis of Alternative Procurements for Fighter Engines

Contract Award	Cost to Government $B(83)
Split	17.32
All to PW	16.39
All to GE	16.25
Split	16.90
All to PW	15.99
All to GE	15.74

Source: Defense Department Authorization and Oversight, Hearings on H.R. 5167 before the Committee on Armed Services, 98 Cong. 2 sess. (GPO, 1984),pt. 2, p. 255.

Figure 1-1. F404 Engine Unit Cost comparison. Average unit cost increased with second supplier. Competition cancelled in 1989.



O&S savings are much more difficult to assess than production savings; however, we know several areas where O&S costs will be higher with two engine suppliers than with one. Most of the parts in the GE and P&W engines are unique, including the fans, turbines, combustors, and compressors. Supporting two types of engines would involve establishing two separate spares pipelines in the fleet and at the depots, providing additional training and tools for fleet maintainers, creating two separate depot capabilities—thereby increasing nonrecurring costs and recurring unit repair costs since each repair line would handle fewer units—and making future modifications for growth, reliability improvements, safety enhancements, and obsolescence management on two different engines.

The main way to drive down O&S costs via competition is to significantly increase engine reliability. This saves O&S costs by reducing maintenance hours and decreasing the frequency of replacing parts and subsystems. Reliability was a major factor in the selection of the P&W engine for JSF and continues to be a critical factor in the test program. Engine design and testing philosophy has significantly evolved since the Great Engine War; compared to the 200 engine test hours of the 1970s, the P&W engine in the JSF program has already amassed nearly 5,000 test-stand hours incorporating Accelerated Mission Test (AMT) profiles. The AMT profiles in use today are designed to stress the engine cycles (defined as the movement from the idle position to maximum power and then to an idle or intermediate position) rather than just log operating time. Testing engine cycles is profoundly more important than the accumulation of hours and is a significantly more accurate measure of an engine's durability and reliability.

At issue is whether we expect engine competition to achieve significant reliability improvements beyond the gains already realized from technology and testing advancements over the past several decades. It is likely that DOD could achieve greater reliability at lower cost by investing in the primary engine rather than creating a second engine supplier.

29. Senator MCCAIN. Secretary England, does the plot on slide eight of reference one (titled Break Even Analysis) take into consideration the total life cycle cost of the engine, including the costs to sustain the engine over its life? If not, please explain why not. [Retained in committee files.]

Secretary ENGLAND. Please see the answer to question 14 for this response.

30. Senator MCCAIN. Secretary England, would you agree that it is important to consider life-cycle costs when making a decision on the largest aviation program in the DOD budget over the next 2 decades? If not, why not?

Secretary ENGLAND. Please see the answer to question 28 for this response.

31. Senator MCCAIN. Secretary England, on page 8 of reference 1, it appears there are some assumptions that went into creating these assessments. Would you please

provide the key assumptions that went into creating this slide? For example, what was the unit price of the engine, what was the total number of engines, etc. [Retained in committee files.]

Secretary ENGLAND. Please see the answer to question 14 for this response.

32. Senator MCCAIN. Secretary England, were sustainment costs (that is, operating and support costs) considered in this analysis? If not, why not?

Secretary ENGLAND. Please see the answer to question 28 for this response.

33. Senator MCCAIN. Secretary England, do you believe that if all costs projected over the life of the JSF program were included in the Department's analysis it might show a greater payback, thus changing the Department's business case conclusions? If that were the case, would the Department still have recommended termination of the F136 program? If so, on what grounds?

Secretary ENGLAND. Please see the answer to question 28 for this response.

COMPETITION II

34. Senator MCCAIN. Secretary England, in your written statement you mention the Great Engine War of the 1980s between P&W and GE and you state that safety and reliability of engines have increased 10-fold over the past 30 years. What role did competition play in the innovation that led to those safety and reliability advances?

Secretary ENGLAND. Please see the answer to question 16 for this response.

35. Senator MCCAIN. Secretary England, since the JSF will be our primary strike fighter aircraft for the next 30 years, what role would competition play over that timeframe with regard to further innovation and improvements in safety and reliability?

Secretary ENGLAND. Please see the answer to question 16 for this response.

36. Senator MCCAIN. Secretary England, the planned production quantities and unit cost make the JSF engine the single largest engine procurement and operations and support cost program in the history of DOD aviation. The DOD has documented the savings that have accrued over the past 2 decades as a result of the first Great Engine War. It doesn't appear that the cost analysis presented by the Department considered the total life cycle cost of the engine. Why does the Department believe that the dynamics that created significant savings in the first Great Engine War are no longer applicable to the JSF program?

Secretary ENGLAND. Please see the answer to question 16 for this response.

F135 AS A DERIVATIVE OF F119

37. Senator MCCAIN. Secretary England, in constant year dollars, the SDD cost of the F135 is almost double that of the F119 engine for the F–22. If the development and demonstration cost is almost double, how does the DOD justify describing the F135 as a derivative of the F119?

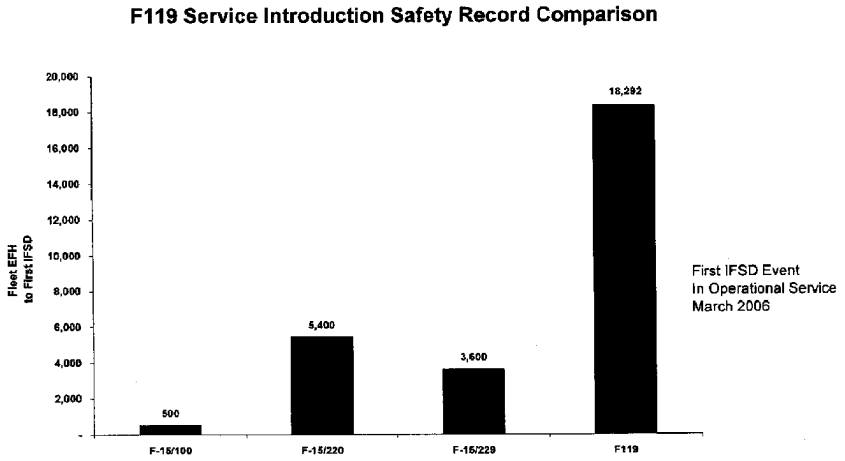
Secretary ENGLAND. In fiscal year 2002 dollars, the development costs for the F–22's F119 and the JSF's 135 cruise engines are $3.3 billion and $4.3 billion respectively. There is an additional development cost of $1.05 billion for the lift fan and lift nozzle unique to the JSF STOVL variant. These STOVL components are being developed by Rolls-Royce and will be compatible with both the F135 and F136 cruise engines.

The F119 and F135 engines share a similar core and were developed using similar design, manufacturing, and testing techniques. The engine core is the power module containing the high pressure compressor, the combustor, and the high pressure turbine. The core represents about 50 percent of the overall engine and it is typically one of the most expensive parts to design due to the stresses placed on critical elements operating at extreme temperatures and pressures. The only significant difference between the F119 and the F135 is scale. The F119 produces 35,000 lbs. thrust while the F135 is in the 40,000 lbs. thrust category.

We expect the F135 engine to achieve comparable reliability performance as the F119 engine because of the similarities in the core and the fact that they were designed, engineered, and manufactured using the same processes and techniques. By most any measure, both the F135 and the F119 are performing very well so far. A key safety metric pertinent to twin engine fighters, such as the F–22, is measured by in-flight shut downs (IFSD). As shown in Figure 1–1, the F119 fares considerably

better than all models of the F100, the safest fighter engine in the Air Force inventory today, by achieving over 18,000 engine flight hours (EFH) before experiencing an IFSD. This is nearly six times greater than the most recent F100 model (F100–PW 09229).

Figure 1-1. Number of Fleet Engine Flight Hours (EFH) prior to First In-Flight Shut Down (IFSD)



We recognize that fighter aircraft can develop engine related problems later in their service life. For example, the durability problems discovered in the F/A–18's GE F404 engine did not emerge until the aircraft had been in service for over a decade. This was well past the operational engine maturity milestone of 200,000 engine flight hours and several years after P&W had ceased production as a second supplier of F404 engines. Although this was a serious issue at the time, it neither grounded the fleet nor required a second supplier to rectify the problem.

If DOD is faced with engine reliability problems in the future, the most practical option will likely be to fix or improve the capability of the primary engine rather than incurring the high investment cost of creating a second supplier of engines. Considering the current proven reliability, fixing any problems with the original engine may cost far less than developing and producing a second engine—which might develop its own unique problems.

38. Senator MCCAIN. Secretary England, since the F135 is so different from the F119, is not qualified yet, and will not see operational service for at least 6 years, how is it that the Department can characterize the engine program for JSF as being problem free and low risk?

Secretary ENGLAND. Please see the answer to question 37 for this response.

PRODUCTION DISRUPTIONS

39. Senator MCCAIN. Secretary England, at some point, the JSF will be the only fighter aircraft in the fleet. What would happen if the sole supplier of JSF engines encountered unforeseen disruptions in either engine production or the ability to support those engines (e.g. labor dispute, terrorism, natural disaster)?

Secretary ENGLAND. The Department depends on sole suppliers for several large programs and understands the risks involved with sole-source dependency. Both the F/A–18E/F and the F–22 depend on sole engine sources. While disruptions such as labor disputes can be resolved, it is practically impossible to ensure against all unforeseen natural disasters or terrorists acts. The cost of reestablishing the F136 at some point in the future or copying the F135 in a second source program would most likely not exceed the cost of the current program. The Department regards this as an acceptable risk.

40. Senator MCCAIN. Secretary England, what is the DOD gameplan if a sole-source provider has financial trouble or has its personnel go on strike?

Secretary ENGLAND. Please see the answer to question number 39 for this response.

41. Senator MCCAIN. Secretary England, what steps could DOD take to respond to such disruptions?

Secretary ENGLAND. Please see the answer to question number 39 for this response.

42. Senator MCCAIN. Secretary England, what steps could DOD take to prevent such disruptions?

Secretary ENGLAND. Please see the answer to question number 39 for this response.

INDUSTRIAL BASE IMPACT

43. Senator MCCAIN. Mr. Donnelly, Mr. Guyette, Mr. Chênevert, and Mr. Newton, if the JSF alternate engine is cancelled, what companies other than P&W will be able to provide large, high-thrust, fighter engines for the U.S. military?

Mr. DONNELLY. The only two companies in the free world that are capable of designing, developing, and producing large, high-thrust fighter engines are GE and P&W. I believe that the JSF PMAG in 2002 also came to this conclusion. If the JSF alternate engine is canceled, P&W will become the sole-source supplier of large, high-thrust fighter engines for the U.S. military for JSF and future systems.

Mr. GUYETTE. If the F136 is canceled, to my knowledge the only company able to provide high thrust fighter engines (above 25,000 lbs. thrust) would be P&W.

Mr. CHÊNEVERT and Mr. NEWTON. Mr. Donnelly testified that they (GE) will continue to stay in the business, have plenty of military opportunities, they would apply the technical talent to other military and commercial programs, and that they would reconstitute the program, get the technical talent, and rebuild the team, if necessary. We believe Mr. Donnelly's response stated GE would be able to provide large, high-thrust, fighter engines.

44. Senator MCCAIN. Mr. Donnelly, Mr. Guyette, Mr. Chênevert, and Mr. Newton, do you believe that competition offers the best value for the American taxpayer as opposed to sole source? If not, why not?

Mr. DONNELLY. Competition will always offer the best value for the taxpayer. In addition to cost savings, the tangible and intangible benefits of competition include better contractor responsiveness, more infusion of technology, improved product performance, reduced development and production risks, and the potential for enhanced foreign military sales. The Great Engine War, which was begun by the Air Force in the 1980s, bore this out. Even P&W acknowledged the savings (Fort Lauderdale Sun-Sentinel, Broward Metro Edition, Business Section, page 1D, April 15, 2005). The benefits of that competition to the DOD are still being felt today.

Mr. GUYETTE. The first Great Engine War has overwhelmingly proven that when a large fleet of fighter engines is going to be purchased and maintained, competition drives to best value in performance, reliability, improved technologies, procurement cost, and life cycle costs.

Mr. CHÊNEVERT and Mr. NEWTON. Deputy Secretary of Defense, Gordon England, stated, "We do not see realistically that we do save any money on this (alternate engine) program through competition." We support the Secretary's statement and we believe that the administrations decision to eliminate the alternate engine program will save taxpayers money. A best value solution was chosen, based on the maturity, reliability, and commonality with the engine that powers the F–22. This is the most cost effective propulsion system for the JSF.

45. Senator MCCAIN. Mr. Donnelly, Mr. Guyette, Mr. Chênevert, and Mr. Newton, what DOD programs, other than the JSF, do you foresee in the next 30 years that will require large, high-thrust, fighter engines?

Mr. DONNELLY. I do not see any DOD programs other than the JSF in the foreseeable future that will require large, high-thrust fighter engines. Future DOD programs being discussed today are speculative at best, and subject to budget and programming uncertainties. The JSF is the only program in the foreseeable future that can support the critical design and engineering teams for large, high-thrust fighter engines. Should the F136 program be terminated, as DOD has proposed, P&W will

become the sole-source provider for large, high-thrust fighter engines both now and in the future, for both JSF and future applications.

Mr. GUYETTE. It is always difficult to forecast the future, but certainly the potential for long-range strike candidates and future UCAV candidates to need a high-thrust combat engine exists. In my opinion, the likelihood is high.

Mr. CHÊNEVERT and Mr. NEWTON. The Air Force has announced its intention to field a next generation long-range strike aircraft, which requires this capability. Based on history, propulsion will need to begin development in the near future to meet this need. Other programs such as the Unmanned Combat Air System (UCAS) and the Advanced Mobility Concept (AMC–X) may require large, high thrust, lower bypass engines that lend themselves to fighter engine technology attributes as well. Both these are in the near-term, but long-term requirements are set by the customer and our opinion would only be speculative.

46. Senator MCCAIN. Mr. Donnelly, Mr. Guyette, Mr. Chênevert, and Mr. Newton, do you believe that the JSF program of record is large enough to sustain two makers of large, high-thrust, fighter engines?

Mr. DONNELLY. The answer to the question is an unequivocal, yes. The Great Engine War in the 1980s produced cost savings on a competitive engine buy of 1,800 engines. The JSF Program Manager, Admiral Stephen Enewold, recently testified that there is the potential for 4,000–5,000 installed engines for domestic and international JSF purchases. When you consider these installs, plus the volume of future business to sustain and support these engines over the 30–40-year life cycle of the JSF program, the volume of business is huge, somewhere in the $70–$110 billion range. This is more than enough business to sustain two makers of these engines.

Mr. GUYETTE. Based on the documented results of the first Great Engine War, there is no question that the program is large enough to sustain two makers. Internal Air Force memos in 1987 estimate that competition was generating procurement savings of 30 percent and operations and sustainment savings of 15 percent. A monopolistic, sole-source award will not produce such savings.

Mr. CHÊNEVERT and Mr. NEWTON. DOD Deputy Secretary England testified that in the case of JSF, it is not necessary and not affordable to have a second engine supplier. If the industrial base would require, which it does not in this case, then perhaps the Department may make the investment to sustain two engine makers—at any cost. But again, in this case, the Department has said that sustaining two engine makers is not required. In fact, regardless of whether the alternate engine is produced, GE and Rolls-Royce will continue to produce military engines for the foreseeable future and have testified as much before the committee. If deemed necessary, any program could sustain two engine makers, but we feel that the underlying question is if sustaining two engine manufacturers is cost effective or necessary.

47. Senator MCCAIN. Mr. Donnelly, Mr. Guyette, Mr. Chênevert, and Mr. Newton, in recommending the termination of the F136 engine program, only one large, U.S., high-thrust, fighter engine provider would remain to meet DOD's needs. How will that affect the competitive industrial base?

Mr. DONNELLY. Termination of the F136 program would force GE to exit the large, high-thrust fighter engine business, leaving P&W as the sole-source provider of these engines for JSF and any future applications. Loss of GE's unique manufacturing processes will also affect the supplier base. This situation last existed during the 1970s and early 1980s, and led to the first Great Engine War. We would hope the U.S. does not place itself in that position again.

Mr. GUYETTE. If the supplier base is only required to respond to a monopoly original equipment manufacturer, the competitiveness of the industrial base will shrink. All businesses respond better in both performance and cost when there are competitive choices.

Mr. CHÊNEVERT and Mr. NEWTON. We disagree that only one provider would remain to meet DOD's needs as discussed in the response to question #43.

48. Senator MCCAIN. Mr. Donnelly, Mr. Guyette, Mr. Chênevert, and Mr. Newton, is there any other way to maintain a competitive industrial base for high-thrust, fighter engines other than the JSF program? If so, what is it?

Mr. DONNELLY. In GE's view, the JSF program is the only approved program, now and in the future, that is capable of maintaining a competitive industrial base for large, high-thrust fighter engines.

Mr. GUYETTE. The JSF program is the only program currently needing such a product and able to generate a competitive industrial base.

Mr. CHÊNEVERT and Mr. NEWTON. The combination of leveraging commercial business, research and development programs (e.g. Versatile Affordable Advance Turbine Engine, Tip Turbine Engine Concept, Integrated High Payoff Rocket Propulsion, etc. . .), production and improvements of existing products, and sustainment of those products is sufficient to maintain the capability to compete in the future.

49. Senator MCCAIN. Mr. Donnelly, Mr. Guyette, Mr. Chênevert, and Mr. Newton, how would you propose that DOD maintain the competitive base if the F136 program is terminated?

Mr. DONNELLY. We see no other way, presently or in the future, to maintain a competitive industrial base in large, high-thrust fighter engines if the F136 is terminated. The only way to secure enduring cost savings and value to DOD and the taxpayer, now and in the future, is through an ongoing JSF engine competition.

Mr. GUYETTE. I see no way to maintain a competitive base if the F136 is terminated. The suggestion that cost transparency generates savings on a sole-source contract is simply wrong. The only thing that generates savings and improvements is ongoing competition.

Mr. CHÊNEVERT and Mr. NEWTON. The combination of leveraging commercial business, research and development programs (e.g. Versatile Affordable Advance Turbine Engine, Tip Turbine Engine Concept, Integrated High Payoff Rocket Propulsion, etc. . .), production and improvements of existing products, and sustainment of those products is sufficient to maintain the capability to compete in the future.

PRODUCTION DISRUPTIONS II

50. Senator MCCAIN. Mr. Donnelly, Mr. Guyette, Mr. Chênevert, and Mr. Newton, at some point, the JSF will be the only fighter aircraft in the fleet. What would happen if the sole supplier of JSF engines encountered unforeseen disruptions in either engine production or the ability to support those engines (e.g. labor dispute, terrorism, natural disaster)?

Mr. DONNELLY. Disruptions in engine production will result in shortages to the aircraft production line, delaying the addition of JSF aircraft to the force structure. During the period of sustainment, disruptions in supply of engine parts will cause "open holes," i.e. aircraft without engines, resulting in reduced pilot training, longer downtime in depots leading to increased maintenance costs, and reduced warfighting capability.

Mr. GUYETTE. By my calculations, once the JSF program is fully implemented, over 80 percent of all U.S. TACAIR assets will be powered by one engine. The dramatic impact of large disruptions is easily imagined, such as a grounding during a time of combat. The impact of more routine disruptions is born by the operators and maintainers on a day-in/day-out basis and can be demoralizing while degrading our expected capability.

Mr. CHÊNEVERT and Mr. NEWTON. All defense companies have the same potential for disruptions that require us to engage in sound planning practices to cover contingencies for strike, terrorism, national tragedy, etc. We will have the ability to meet customer requirements in the unlikely event of a work stoppage. The likelihood of these types of disruptions is further reduced because the entire content of an engine is not produced at any one site. P&W is not the expert on force structure, but contingency planning for the engine provider should not be all that different than for the other sole-source providers of aircraft, ships, or other subsystems of military products. The need to plan for contingencies is no different for P&W than it is for Lockheed Martin, the sole-source provider of tactical aircraft, or Northrop Grumman as a sole-source ship provider for the LPD–17, for example.

51. Senator MCCAIN. Mr. Donnelly, Mr. Guyette, Mr. Chênevert, and Mr. Newton, what do you propose DOD should do if a sole-source provider has financial trouble?

Mr. DONNELLY. Given the criticality of propulsion to the entire JSF program, severe financial troubles at a sole-source supplier would likely require Government assistance, possibly on a large scale.

Mr. GUYETTE. If a sole-source provider of this magnitude has financial trouble, in my experience the U.S. Government/DOD will have no choice but to come to their assistance.

Mr. CHÊNEVERT and Mr. NEWTON. P&W and its parent United Technologies are financially sound and forecast continued growth and solid performance.

52. Senator MCCAIN. Mr. Donnelly, Mr. Guyette, Mr. Chênevert, and Mr. Newton, what recourse will the DOD have if the personnel of a sole-source provider go on strike?

Mr. DONNELLY. In all probability, the contract will contain standard language requiring return to work upon demand of the DOD, however the U.S. Government has very limited ability to actually force unwilling workers to perform their jobs properly.

Mr. GUYETTE. I believe that the potential for a strike by the maker of such a large number of critical products will drive the DOD to what are normally undesirable business practices, such as building up expensive and excessive levels of spare parts/modules, maintaining a workforce that can take over functions in the field that would normally be done by the civilian workforce, etc.

Mr. CHÊNEVERT and Mr. NEWTON. P&W has the responsibility to meet our contract commitment and would be responsible to ensure disruptions do not impact the customer so it is not apparent that any recourse would be necessary in the event of a strike. There have only been two work disruptions at P&W's Connecticut operations in the last 45 years, each lasting less than 2 weeks.

In the unlikely event of a strike threatening the national interest, the Government can obtain an injunction under the Taft-Hartley Act requiring striking employees to return to work.

53. Senator MCCAIN. Mr. Donnelly, Mr. Guyette, Mr. Chênevert, and Mr. Newton, your workers union will recognize the leverage they will have since they will know their company has an invaluable product that only they can make. What will stop them from going on strike to achieve their desires?

Mr. DONNELLY. GE has enjoyed a longstanding history of cooperative relationships with its unions during peak volume periods and industry downturns and has proactively worked together through these cyclical periods to avoid any customer disruptions. GE recognizes and respects the right for its unionized employees to participate in concerted activity per their labor agreement, which is negotiated every 3 to 4 years. GE also maintains several non-union sites and external sources to offload production in the event of any concerted activity at unionized sites. Finally, GE represented employees maintain a very competitive compensation and benefit plan and have a shared interest in maintaining customer satisfaction and avoiding any production interruptions.

Mr. GUYETTE. All good companies strive to deal honestly and fairly with our workforces, but over several decades there is no way to forecast what the workforce of a monopoly might resort to in order to achieve their goals.

Mr. CHÊNEVERT and Mr. NEWTON. Our labor force delivers the engine for the F–22 and C–17 and they are proud of this fact. We have enjoyed good labor relationships in the aerospace industry and all P&W employees feel a strong sense of pride in delivering to our DOD customers.

54. Senator MCCAIN. Mr. Donnelly, Mr. Guyette, Mr. Chênevert, and Mr. Newton, what plans do you have in place to respond to such disruptions?

Mr. DONNELLY. As stated above, GE has enjoyed a longstanding cooperative relationship with its union officials and union-represented employees. Nevertheless, as a prudent and customer-focused business, GE routinely takes steps to minimize impact on customers in the event of a work stoppage. Prior to national union negotiations that occur every 3 to 4 years, GE prepares detailed contingency plans to continue to meet customer requirements, including continuation of operations at our non-union plants and distribution centers and at our global facilities.

Mr. GUYETTE. We continue to dialogue with our union leadership to forestall disagreements and negotiate satisfactory contracts that benefit the taxpayer, shareholders, and workers.

Mr. CHÊNEVERT and Mr. NEWTON. P&W engages in sound planning practices and has contingency plans, which provide us the capability to meet customer commitments in the unlikely event of a work stoppage. These plans typically contain provisions for alternate final assembly sites, building required inventory ahead and using alternate labor resources. These plans are not unlike those in place at unionized Government facilities.

55. Senator MCCAIN. Mr. Donnelly, Mr. Guyette, Mr. Chênevert, and Mr. Newton, what programs do you have in place to prevent such disruptions?

Mr. DONNELLY. For more than 30 years, GE and employee unions have successfully negotiated contract agreements that have been fair to employees and maintained competitiveness of the GE businesses. We participate in ongoing communications and cooperative initiatives with our union and non-union employees to main-

tain relationships and enhance understanding about customer requirements, product development, and the business goals for success. This participation occurs at all levels of the company to ensure that our union officials and represented employees stay connected throughout the year on business progress and market realities.

Mr. GUYETTE. Same as 54.

Mr. CHÊNEVERT and Mr. NEWTON. P&W engages in sound planning practices and have contingency plans, which provide us the capability to meet customer commitments in the unlikely event of a work stoppage. There have only been two work disruptions at P&W's Connecticut operations in the last 45 years, each lasting less than 2 weeks.

QUESTIONS SUBMITTED BY SENATOR SUSAN M. COLLINS

INDUSTRIAL BASE IMPACT

56. Senator COLLINS. Mr. Chênevert, given my work with two shipyards in Maine, I fully understand and appreciate the importance of maintaining a highly skilled industrial base and providing workload for these technical and professional—and many times irreplaceable—employees. Are the skill sets that are required for military and civilian engine work similar?

Mr. CHÊNEVERT. The tools, technology, materials, and processes have become closely aligned between military and commercial products, hence engineering personnel can readily adapt to working commercial programs one day and military the next.

57. Senator COLLINS. Mr. Chênevert, in your manufacturing plants today, is it common practice to have engineers and other employees shift from military to commercial engine work, or vice versa?

Mr. CHÊNEVERT. Yes, the use of standard work and processes for engineering dilutes the argument that one needs specific development or production resources on military or commercial products to remain viable in that sector. In fact sharing of engineering resources can be used to stabilize and maintain an experienced engineering workforce during highs and lows for specific business segments. Integrated production lines are also common in the engine business.

In 2000, P&W moved its Military Engines division from West Palm Beach, Florida to East Hartford, Connecticut to be collocated with our Commercial Engine Business. We did this to capture the synergies that we have outlined in response to this question and it has been a tremendously successful transition.

58. Senator COLLINS. Mr. Donnelly, if GE ultimately does not proceed with building the JSF alternate engine, what other military engine work—in addition to jet engines—would continue?

Mr. DONNELLY. GE Aviation is a strong business that consistently wins commercial aviation competitions around the world. Given this success, this business has proven its ability to develop advanced technologies and define products to meet or exceed the ever increasing demands of the customer. GE Military Systems within GE Aviation is the only GE business that produces "make to specification" items for the U.S. military. There are very unique technologies and design expertise requirements associated with large combat military engines that our business will no longer have a need to support if we are not participating in the JSF. There are no other programs existing today that would preserve our ability to maintain this unique skill set. Furthermore, from an industrial base point of view, GE's vast success in the commercial engine business would only serve to bolster the quality and success of the JSF propulsion development, as opposed to sole reliance on a single developer with less success in the commercial market.

59. Senator COLLINS. Mr. Donnelly, what future military engine work do you foresee a chance to compete for?

Mr. DONNELLY. The JSF is the largest fighter program in history, and we are not aware of any other large military combat engine programs in the development pipeline for which we will be able to compete. Although the Air Force is reported to be working towards a new Long-Range Strike (bomber) program, the timing and funding for future systems such as this is problematic and uncertain. If recent history is a guide, economic and risk factors suggest the propulsion system chosen for these systems will likely be a derivative of the JSF engine. Without the F136 program for JSF, GE will be unable to effectively compete for current or future military systems requiring large, high-thrust engines.

QUESTIONS SUBMITTED BY SENATOR EDWARD M. KENNEDY

CONSULTING ALLIES

60. Senator KENNEDY. Secretary England, we all want to encourage defense cooperation between the United States and our closest allies. The JSF program has been held out as an example of such cooperation. However, it seems to me that real cooperation, particularly when it comes to important decisions such as whether to terminate the JSF alternate engine program, would involve close consultations, not notifications after the fact. At yesterday's hearing, Lord Drayson (U.K. Minister of Defence for Procurement) said that the U.S. had not consulted with the U.K. on the decision to terminate the alternate engine, only informing them after the fact. What message does this lack of consultation send to our potential partners on future cooperative efforts?

Secretary ENGLAND. The Department continues to focus on JSF work-share with international partners. This decision is important in keeping affordability a corner stone of the JSF program and is the right decision for all of the JSF partners. Rolls-Royce remains an integral and critical element of the JSF program, fully responsible for delivering the lift fan assembly for all STOVL engines as well as maintaining their workshare in the F135 engine.

ANALYSIS

61. Senator KENNEDY. Secretary England, I read in your testimony that you want to avoid the development costs of the alternate engine, and that these costs could be, "at a minimum, $2.4 billion through the FYDP." You also say that the Department concluded "having a second JSF engine would not yield net cost savings through competition." On what basis has the Department reached this conclusion?

Secretary ENGLAND. Please see the answer to question 28 for this response.

62. Senator KENNEDY. Secretary England, have you done a business case analysis that considers total life cycle costs, or are you only considering development and initial procurement costs?

Secretary ENGLAND. Please see the answer to question 28 for this response.

63. Senator KENNEDY. Secretary England, if you didn't consider total life cycle costs, will you provide that analysis now? The follow-on operating and support costs for an engine can be substantial, and should be an important part of congressional deliberations on this matter. Please include your assumptions on the impact of competitive pressure on future life cycle costs.

Secretary ENGLAND. Please see the answer to question 63 for this response.

64. Senator KENNEDY. Secretary England, why has the Department not provided Congress with whatever analysis was conducted to inform your decision?

Secretary ENGLAND. Please see the answer to question 20 for this response.

65. Senator KENNEDY. Secretary England, the 2002 PMAG analysis provided by the Department included break-even analysis but did not include life-of-the-program savings analysis. Would you please provide life-of-the-program estimates including all anticipated foreign sales, and anticipated engine replacement requirements?

Secretary ENGLAND. Please see the answer to question 14 for this response.

DEVELOPMENT COST

66. Senator KENNEDY. Mr. Donnelly, the committee is aware of the $2.4 billion SDD funding required for F136 engine development. Would you please provide your estimates of the funding that will be required to carry the F136 into production, including sustainment costs?

Mr. DONNELLY. The fighter engine team has committed to complete the SDD effort for the contracted $2.4 billion and we see no impediments to prevent us from delivering a qualified F136 engine at the completion of that effort, on time, at cost. As far as additional expenses, we would anticipate working with the JPO to execute a low-rate initial production contract and other vehicles as necessary to support the normal introduction of the F136 to its assigned operating bases. The value of those contracts cannot be determined at this time, since the Government has not yet determined its plans for deployment of the F136.

COST CONTROL

67. Senator KENNEDY. Secretary England, at the hearing, the Government alleged that oversight of the program would allow the Department to control cost increases. How will the Department ensure quality and performance of the P&W F135 engine in the absence of competitive pressures, not only for the acquisition of the engine, but also for spare parts and replacement engines?

Secretary ENGLAND. The development contract for the F–135 engine is a cost-plus-award-fee type contract. It contains objective criteria intended to drive down future procurement costs. The procurement contract will initially be cost-plus-award-fee as well, but will transition to a fixed-price contract, mirroring the acquisition strategy of the aircraft. Each of the contracts are negotiated with certified cost and pricing to ensure accurate, complete, and reasonable cost and pricing data. We have been able to control cost on previous sole-source engine programs for the F–22A and F/A–18E/F.

68. Senator KENNEDY. Secretary England, can you verify whether P&W has raised its estimated ship set cost for the F119 engine on the F–22, and if so, what were the current and previous cost estimates?

Secretary ENGLAND. P&W has not raised its estimated ship set cost for the F–22 F119 engine. In fact, engines costs have decreased about 20 percent from the first Production Readiness Test Vehicle (PRTV) aircraft through the current Lot 5 aircraft on contract today.

[In millions of dollars]

Quantity Firm-Fixed Price	Contract	F119 Unit Price	Reduction from PRTV (Percent)
6	PRTV	$11.442	
12	PRTV 2	11.420	0
20	Lot 1	10.853	−5
26	Lot 2	10.535	−8
42	Lot 3	10.385	−9
44	Lot 4	9.757	−15
48	Lot 5	9.174	−20
48	Lot 6	In negotiation	TBD
40	Lot 7	TBD	TBD
40	Lot 8	TBD	TBD
40	Lot 9	TBD	TBD

INDUSTRIAL BASE

69. Senator KENNEDY. Secretary England, we hear competing views about whether your decision to terminate development of the JSF alternate engine will have a significant effect on the engine industrial base. What have you concluded about the effect that cancelling the development would have on our ability to look to sources other than P&W for future fighter engines?

Secretary ENGLAND. Please see the answer to question number 39 for this response.

F119/F135 COMMONALITY

70. Senator KENNEDY. Secretary England, in your testimony, you said that the competition held for the F–22 engine (F119) was sufficient to meet the requirements of competition for the F–35 (F135) because there is a "high degree of commonality" between the two engines. Would you please provide a side-by-side comparison of the performance metrics of the F119 and F135 engines?

Secretary ENGLAND. The engine commonality is not based on the performance metrics. The F135 is a derivative of the F119 engine and is modified for the F–35 missions and usage. The turbomachinery is approximately 70 percent common with the F119 from a parts and manufacturing processes perspective. The engine's compressor shares the most common parts with F119, although part numbers will be different. The rest of the turbomachinery has commonality through design criteria and manufacturing processes.

71. Senator KENNEDY. Secretary England, would you please provide a detailed list of components and/or modules that are common between the F119 and the F135?

Secretary ENGLAND. The F135 is a derivative of the F119 engine and is modified for the F–35 missions and usage. The turbomachinery is approximately 70 percent common with the F119 from a parts and manufacturing processes perspective. The engine's compressor shares the most common parts with F119, although part numbers will be different. The rest of the turbomachinery has commonality through design criteria and manufacturing processes.

72. Senator KENNEDY. Secretary England, if the two engines have so much commonality, then why was it necessary to award P&W such a large, sole-source SDD contract to develop the F135?

Secretary ENGLAND. Please see the answer to question 37 for this response.

73. Senator KENNEDY. Secretary England, how many non-competitive SDD contracts have you awarded that have a total value of $2 billion or greater?

Secretary ENGLAND. Over the last 3 to 5 years, the Department has awarded five non-competitive contracts that exceeded $2 billion. The Army awarded three and the Navy awarded two. There were no such awards made by the Air Force.

QUESTIONS SUBMITTED BY SENATOR JOSEPH I. LIEBERMAN

APPLIED SIGNIFICANCE

74. Senator LIEBERMAN. General Magnus, I know that the STOVL variant of the JSF is most important to the Marine Corps. Given that the P&W (F135) and GE/Rolls-Royce (F136) engines are to be interchangeable, and that the STOVL hardware limits STOVL thrust, do you see any way that the alternate engine could provide a thrust advantage over the primary P&W (F135) engine?

General MAGNUS. No. STOVL lift fan components have been designed to accommodate specification levels of torque generated by the STOVL engine. Higher levels of torque cannot be accommodated by the lift fan hardware. As a result, the alternate engine cannot provide a thrust advantage.

75. Senator LIEBERMAN. Admiral Willard, General Corley, and General Magnus, beyond economics, it is important to determine whether a single engine program would impact the Services' operational capability. What do the Combatant Commanders (COCOMs) think about the single engine strategy?

Admiral WILLARD. It would be inappropriate for me as a Service Vice Chief to attempt to articulate COCOM views of specific acquisition decisions. Navy remains informed by the COCOM's demand signal for capabilities inherent within existing designs for JSF. As a Service provider, Navy is confident that the current JSF with its single-source engine will be sufficient to meet this demand signal.

General CORLEY. The Air Force has assessed the operational capability of the single engine program and supports the President's budget. We defer to the COCOMs to provide their opinion on the single engine program.

General MAGNUS. Headquarters, Marine Corps is responsible for providing forces to the COCOMs that are properly organized, trained, and equipped. We believe that we are providing the best, most capable aircraft to meet the COCOM's requirement for TACAIR missions.

F–18 COMPARISON

76. Senator LIEBERMAN. Admiral Willard, it is my understanding that the U.S. Navy operates the world's largest fleet of aircraft (F–18) powered by a single engine supplier. Would you please characterize the Navy's experience managing a single engine supplier?

Admiral WILLARD. The following points are provided, based upon the F404–GE–F400/402 engine (F/A–18 A–D powerplant) and the F414–GE–400 engine (F/A–18E/F and EA–18G powerplant) production history.

- The F404 engine, produced by GE, was originally a sole source, new design, based upon the F110 engine. Industrial base concerns and possible cost savings led the Navy to begin production of an identical design by a second source, P&W. P&W made rapid progress on the second source engine. Feeling competitive pressure, GE offered the Navy tremendous savings in return for a sole sourcing agreement. The Navy terminated P&W participation and awarded a sole-source agreement to GE for F404 engines. This engine is meeting F/A–18 A–D performance requirements and reliability is currently above goal.

• The GE F414 engine was designed using lessons learned from the F404 engine program. From the beginning, GE, in concert with the airframe manufacturer Boeing, was focused on lowering costs. Utilizing multi-year procurement and performance-based logistics contracts has allowed the F414 engine to exceed fleet performance and reliability goals.

77. Senator LIEBERMAN. Admiral Enewold, would you please clarify the total planned procurement of JSF aircraft?

Admiral ENEWOLD. The planned procurement, for the Department of the Navy, of JSF is 680 aircraft. The mix of STOVL and CV variants is under study.

78. Senator LIEBERMAN. Admiral Willard, would you please provide the total planned procurement for the single-source, F–18 aircraft and the number of associated engines that are anticipated to be procured for this program?

Admiral WILLARD. The procurement numbers are as detailed below.

F/A–18 A–D

GE delivered 3,469 F404 whole engines for the F/A–18 aircraft (United States Navy and foreign military sales). P&W delivered 215 F404 whole engines for the F/A–18 aircraft. There were a total of 3,684 F404 engines delivered.

F/A–18E/F and EA–18G

GE F414 engines are procured as whole engines (made of six modules) and additional modules. Aircraft procurement is 462 F/A–18E/F + 90 EA–18G = 552 aircraft. Two F414 engines were procured for each aircraft (552 x 2 = 1,104) plus 54 whole engine spares plus spare modules. The spares are derived from the requirement to support 6+1 deploying air wings + 30-day surge sustainment. Each squadron site has one spare whole engine (two for an aircraft carrier) and repair modules enabling 30 days support.

F414 Spare Modules

Afterburner — 30
Combustor — 66
Fan — 103
High Pressure Compressor — 163
High Pressure Turbine — 83
High Pressure Turbine — 104

REPROGRAMMING OPTIONS

79. Senator LIEBERMAN. Secretary England, if funding for the alternate engine is restored, where will the $1.8 billion come from?

Secretary ENGLAND. If Congress decides to restore this $1.8 billion, then it would need to decide how to fit in this funding, along with other DOD requirements, in its fiscal year 2007 DOD Appropriations Act.

80. Senator LIEBERMAN. Secretary England, if funding for the alternate engine is reprogrammed, what budget accounts have extra money for redistribution?

Secretary ENGLAND. The President's fiscal year 2007 DOD budget request funds our most pressing military requirements and includes no "extra money for redistribution" in any account.

F–16 EXPERIENCE

81. Senator LIEBERMAN. Secretary England, is there evidence to suggest that engine costs were lowered after a second source was introduced to power the F–16?

Secretary ENGLAND. F–16 engine unit prices decreased approximately 10 percent between 1986 and 1991, during which there was competition between F100 and F110. However, it is unclear if this decrease was the result of competition or other factors such as learning curve and procurement quantities. Additionally, development of a second engine resulted in increased RDT&E expenditures. Overall, there is little evidence to substantiate exact savings resulting from competition.

INDUSTRIAL BASE INFLUENCE

82. Senator LIEBERMAN. Mr. Donnelly, GE is the world's largest jet engine manufacturer with 50 percent of the world's engine market. Your company will produce

4,000 fighter jet engines for the F–18, without any competition, until at least 2013. GE also has the opportunity to provide engines on the UCAS. Given these facts, how can you argue that the cancellation of the alternate engine will put GE out of the fighter engine business?

Mr. DONNELLY. While GE-Aviation is a successful jet engine supplier, the majority of our business is for commercial jet engines. Of the 4,000 F–18 engines you reference, over 3,600 have already been delivered. It is worth noting that during the 4,000-engine run P&W did competitively produce approximately 400 GE-designed F404 engines, until their bid process became embroiled in the "Ill Wind" scandal. Every UCAS designed so far has used off-the-shelf engines or a minor derivative of an off-the-shelf engine. Thus, unmanned systems do not afford an opportunity for utilization of critical design skills. By adroitly reassigning design teams as new designs are completed and other opportunities arise, GE has been able to provide cutting edge combat engine designs like the F101, F404, F110, F414, YTF120, and now the F136 to the U.S. military for the last 30 years. With the loss of the opportunity to design the F136 and no other new engine designs required for future combat systems, our unique military design, test, and manufacturing teams will be disbanded and dispersed. This will leave all future U.S. combat systems powered by a single supplier.

83. Senator LIEBERMAN. Mr. Donnelly, GE currently has a number of development and production programs for defense and commercial applications (GenX for 787, GP7000 for Airbus A380, F414 for F–18G, and F110 for F–15) in addition to the JSF. Given the number of projects GE is working on in addition to JSF, how can GE claim that the elimination of the alternate engine will harm its engineering base?

Mr. DONNELLY. While it is true that GE has a number of commercial engines in the development phase, the unique skills required for high thrust military engines will atrophy. The design of the F414 is complete and production is scheduled to end in a few years. The F110 engine line is being kept open exclusively by international customers (last U.S. delivery of an F110 was 4 years ago) and neither the F–15 or F–16 need any new propulsion designs. Large military combat engines require design and systems integration of several unique skills, including high pressure fans, augmenters, and variable exhaust nozzles. These are components not used in the commercial world, but are needed to allow military aircraft to reach supersonic speeds. As these unique design, manufacturing, and test teams disband and disperse, reconstituting them would be a time-consuming and expensive proposition. Mr. Bolkcom described this in his testimony to the Airland Subcommittee on March 28, 2006. Without the F136, GE's unique military design, test, and manufacturing skills will disappear.

COMPETITION

84. Senator LIEBERMAN. Mr. Donnelly, according to your written statement, the matrix you referenced in your testimony is dependent upon a number of assumptions and is not constructed to produce precise figures. For example, you assume that further competition will reduce costs by 10 percent. But such a percentage does not take into account procurement costs, life cycle costs, nor increased engine reliability. Can you confirm that your matrix model is based upon assumptions, rather than updated reliability statistics on fighter engines?

Mr. DONNELLY. The business matrix that I described in my opening statement was intended to be a simple, accurate, and easily understood way to show the huge magnitude of the JSF engine business. Our matrix considers all the parameters in the life-cycle cost of an engine. The range of assumptions goes from the unprecedented procurement cost, reliability, and maintainability targets established by the DOD for the JSF engine on the lower left side of the matrix, to the more data-driven statistics from legacy systems on the upper right side of the matrix. This takes into account updated reliability statistics for fighter engines. We anticipated that there would be questions regarding our assumptions, so we structured the matrix to encompass a range of values for the key business parameters, such as the number of initial installed and spare engines, the price of the engines, and the number of equivalent engines bought over the life of the JSF program to sustain and support the engines. Depending upon the values chosen for these parameters, you can determine from the matrix a very precise answer for the total value of the business for those conditions. The matrix shows that for even the most conservative values for the key parameters (lower left comer), the volume of business is huge, greater than

$50 billion. If you choose values for the key parameters based on historical precedent (upper right hand comer), the value of business is in excess of $110 billion.

Contrary to your statement, the cost savings example that I cited does take into account procurement costs, life cycle costs, and increased engine reliability. We actually surveyed the Air Force data from the Great Engine War and found that the Air Force cited cost savings of 21 percent from the competition. Again, just to be conservative, and for the purposes of illustration only, we chose to show what a 10 percent competitive cost savings would produce for JSF. What this showed was that even at a modest savings of 10 percent, the savings would more than offset the costs of carrying the F136 competitive engine in the JSF program. If we had chosen a more realistic savings percentage, consistent with historical precedent, the savings to DOD for maintaining the JSF engine competition would be significantly greater.

The point of our matrix is to show that the projected volume of JSF engine business is huge, the competitive cost savings are significant, and these savings will more than offset any additional costs to retain the F136 engine program. In addition to these cost savings, the DOD will get all the traditional benefits of competition, including better contractor responsiveness, greater infusion of technology, reduced development and production risk, better performance and reliability, and the potential for enhanced foreign military sales.

85. Senator LIEBERMAN. Mr. Donnelly, the Pentagon reports that there are no cost savings due to further competition. How do you respond?

Mr. DONNELLY. We believe the Pentagon statement is inconsistent with prior historical precedent of savings achieved in the Great Engine War, and is also not based on sound life cycle cost analysis that takes into account the initial installed and spare engines as well as the volume of business associated with ongoing sustainment and support costs for the engines. If a life cycle cost analysis had been conducted in accordance with the approved DODD 5000.1 and DODI 5000.2 series guidance, we believe the Pentagon would have reached a different conclusion.

86. Senator LIEBERMAN. Mr. Chênevert and Mr. Newton, one of the arguments for reinstating funding for the alterative engine program is that it fosters competition. But it is my understanding that the Government has considerable comparative information about the P&W F135 engine and the GE/Rolls-Royce F136 engine already available. Can you describe the results of the testing between the P&W and GE/Rolls-Royce engines?

Mr. CHÊNEVERT and Mr. NEWTON. There are currently nine F135 engines in the development test program (five carrier variant/conventional takeoff and landing [CV/CTOL] and four short takeoff vertical landing [STOVL]). At the time of the hearing March 15th, these engines had accumulated 4,764 hours. As of April 24, 2006, these engines have accumulated a total of 5,060 hours (2,934 CV/CTOL and 2,126 STOVL), in addition to over 3,600 hours in the program's concept demonstration aircraft (CDA) phase. There have been 6,245 total endurance accelerated mission test (AMT) cycles to date (3,932 CV/CTOL and 2,313 STOVL). The CV/CTOL engine, FX634, has completed sea-level AMT. In addition, the first CTOL flight test engine (FTE) completed initial build and was delivered to Lockheed Martin Aeronautics Company (LM-Aero) in December 2005. The F135 program is on-track to support first flight in 3rd quarter 2006.

It is our understanding that the F136 has completed approximately 200 hours of ground test on a pre-production configuration.

87. Senator LIEBERMAN. Mr. Chênevert, how many competitions has P&W won for its large fighter engines?

Mr. CHÊNEVERT. P&W was selected through competition to power the F–16, F–15, F–22, and F–35. Specifically, on the JSF program, while there was not a Government-released request for proposal, the prime airframe suppliers (Lockheed Martin, McDonald Douglas, and Boeing) solicited engine proposals for their concept demonstration aircraft. P&W and GE both provided proposals. P&W was the selected engine supplier for all demonstrator aircraft. Often in the engine business the air system prime contractor will seek proposals and select sub-system suppliers.

GE has won the competition for propulsion on the F–18, U–2, and F117, none of which have an alternate engine program to compete for production engines.

ENGINE CAPABILITIES

88. Senator LIEBERMAN. Mr. Chênevert, do you believe the additional lead time given to the GE/Rolls-Royce engine will improve performance and thrust capability?

Mr. CHÊNEVERT. No. The F135 and F136 engines are being designed to the same specification to ensure interchangeability. A feature of interchangeability is that an engine exchange must be transparent to the airframe and the pilot. The F135 has a growth plan to facilitate the insertion of technology improvements and will be able to meet the needs of the airframe as the system matures.

The F135 has demonstrated that it meets current performance specification. The maturity associated with a derivative design that incorporates technology incrementally, through engineering changes, yields far less risk than a new design that has not benefited from operational experience.

89. Senator LIEBERMAN. Mr. Chênevert, has the P&W F135 engine met all standards within the appropriate timeframe?

Mr. CHÊNEVERT. Both CV/CTOL and STOVL engines have demonstrated specification level of maximum thrust and continue with development testing that includes software verification, operability, endurance, and altitude operation. CV/CTOL initial flight release is planned for April 2006.

90. Senator LIEBERMAN. Mr. Chênevert and Mr. Newton, as I understand it, the P&W F135 engine is ahead of the GE/Rolls-Royce F136 engine in development. Can you describe when the P&W engine will be operational, in relation to the GE/Rolls-Royce engine?

Mr. CHÊNEVERT and Mr. NEWTON. P&W has delivered the first flight test engine and a spare engine. Production lot engines will begin delivery in 2008. Initial service release is schedule for 2008 and operational capability release (OCR) is scheduled for 2009. It is our understanding the F136 will not achieve OCR until 2013.

91. Senator LIEBERMAN. Mr. Chênevert and Mr. Newton, there has been some concern that the P&W F135 engine will not deliver as much thrust as the GE/Roll-Royce F136 engine. Is this true?

Mr. CHÊNEVERT and Mr. NEWTON. The F136 is being designed to the same specification and must be interchangeable with the F135. The lift fan clutch and gearbox have been designed to the current specification and will not transmit more power without durability impacts. The exhaust nozzle and aft section of the fuselage have also been sized to optimize air system performance to the current specification and will not allow more airflow. The P&W F135 is the only engine that has demonstrated specification thrust.

92. Senator LIEBERMAN. Mr. Chênevert, if required, can the F135 engine be designed to produce more thrust?

Mr. CHÊNEVERT. The F135 engine has the ability to produce additional thrust and can take advantage of funded technology program insertion to incorporate this at the customers' request. P&W has a roadmap to increase thrust as the weapons system requires.

93. Senator LIEBERMAN. Mr. Chênevert, in your response to the question on how P&W will control prices, you commented on the use of redundant suppliers and sourcing parts competitively. Would you please clarify your remarks?

Mr. CHÊNEVERT. P&W sources component manufacture to best value suppliers. We do this competitively at the start of a program and develop long-term agreements with these suppliers. Redundant suppliers are only maintained for commodity type parts due to the expense of development, tooling, and support associated with redundant suppliers.

94. Senator LIEBERMAN. Mr. Chênevert, during previous testimony, it was unclear if either engine has flown in a JSF. I seem to recall the JSF demonstrator flying. Was this aircraft powered by a P&W engine?

Mr. CHÊNEVERT. Yes, during the CDA phase of the JSF program, the U.S. Government gave Lockheed Martin and Boeing authority to select an engine for their candidate aircraft. Both airframers selected P&W. The P&W solution was based on the F119 engine that was being developed for the F–22 aircraft. The P&W engine was the only engine to fly in both JSF concept demonstrator aircraft.

95. Senator LIEBERMAN. Mr. Chênevert, can you please explain why SDD cost for the F135 primary JSF engine is greater than the anticipated cost for the F136 alternate engine?

Mr. CHÊNEVERT. The P&W/Rolls-Royce F135 team has responsibility for the total propulsion system including lift components. It also has the responsibility to produce significantly more engines for aircraft flight test support and qualification.

The engine development effort for the other engine is a subset of the responsibility that the P&W/Rolls-Royce F135 team has.

[Whereupon at 12:32 p.m. the committee adjourned.]

DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 2007

THURSDAY, MARCH 16, 2006

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

COMBATANT COMMANDERS ON THEIR MILITARY STRATEGY AND OPERATIONAL REQUIREMENTS

The committee met, pursuant to notice, at 8:44 a.m. in room SH–216, Hart Senate Office Building, Senator John Warner (chairman) presiding.

Committee members present: Senators Warner, Inhofe, Talent, Dole, Thune, Levin, Reed, Bayh, and Clinton.

Committee staff members present: Charles S. Abell, staff director; Leah C. Brewer, nominations and hearings clerk; and John H. Quirk V, security clerk.

Majority staff members present: William M. Caniano, professional staff member; Regina A. Dubey, professional staff member; Ambrose R. Hock, professional staff member; Gregory T. Kiley, professional staff member; Sandra E. Luff, professional staff member; Derek J. Maurer, professional staff member; David M. Morriss, Counsel; Lucian L. Niemeyer, professional staff member; Lynn F. Rusten, professional staff member; Sean G. Stackley, professional staff member; Scott W. Stucky, general counsel; and Richard F. Walsh, counsel.

Minority staff members present: Richard D. DeBobes, Democratic staff director; Daniel J. Cox, Jr., professional staff member; Gabriella Eisen, research assistant; Evelyn N. Farkas, professional staff member; Peter K. Levine, minority counsel; Michael J. McCord, professional staff member; and William G.P. Monahan, minority counsel.

Staff assistants present: Jessica L. Kingston and Pendred K. Wilson.

Committee members' assistants present: John A. Bonsell and Mark Powers, assistants to Senator Inhofe; Mackenzie M. Eaglen, assistant to Senator Collins; Clyde A. Taylor IV, assistant to Senator Chambliss; Greg Gross, assistant to Senator Dole; Stuart C. Mallory, assistant to Senator Thune; Elizabeth King, assistant to Senator Reed; William K. Sutey, assistant to Senator Bill Nelson; Todd Rosenblum, assistant to Senator Bayh; and Andrew Shapiro, assistant to Senator Clinton.

STATEMENT OF SENATOR JAMES M. INHOFE

Senator INHOFE. The hearing will come to order. We would like to ask our witnesses to assume their proper positions at the table. Senator Warner, our chairman, is not here yet so I will go ahead and read his opening statement at this time:

> "The committee meets today to receive testimony from the commanders of the United States Central Command (CENTCOM) and the United States Special Operations Command (SOCOM) on the posture of U.S. forces in their areas of responsibility (AOR). General Abizaid and General Brown, we welcome you back before the committee and commend you for the outstanding leadership you continue to provide to our Nation and to our men and women in uniform and their remarkable families.
>
> "The performance of the forces in both of your commands has been magnificent and heroic."

I would like to add mine to that also. I will be doing my 11th trip over to the AOR and that is what I come back with every time, the great job that you are doing there.

> "I thank you both of you for accommodating an earlier start time. We face a number of votes later on this morning and the hearing is very important."

That has been changed. Our votes I believe are going to start at 10:30 and then we are going to be wiped out the rest of the day. So that is probably good news to you guys.

> "You and your forces are clearly at the tip of the spear and you have all earned our abiding respect and admiration and continued support. We extend our thanks to those who serve and our thoughts and prayers are with the families and friends who have had loss, been lost, or wounded defending liberty around the world.
>
> "The situation in Iraq is still tense. As we convene here, the new Iraq assembly was sworn in today and we look to them to form a government of national unity that will have to make hard decisions about the way ahead for Iraq. There are sure to be some difficult days ahead, requiring more fighting and sacrifice. But at this critical juncture, Iraqi leaders must reach out across political and religious and sectarian lines and form a government that gives a voice to all Iraqis. Your insights on the situation in Iraq will be invaluable to the committee.
>
> "Progress in Afghanistan remains positive. Despite remarkable advances, we must not forget that there is still a viable insurgency that the United States and Afghan forces, along with coalition North Atlantic Treaty Organization (NATO) partners, must stem. General Abizaid, your assessment of the security situation in Afghanistan, the counternarcotic issue, democratic progress, reconstruction, and the expansion of the NATO mission in Afghanistan are important to the committee.
>
> "Secretary of State Rice said in Senate testimony last week: 'We may face no greater challenge from a single country than from Iran.' Developments in Iran are trou-

bling and the committee looks forward to your evaluation of the situation in Iran and its impact on the region.

"General Abizaid, in your very comprehensive statement I took great interest in your comments about the need for more interagency support. You said: 'We need significantly more military personnel in the CENTCOM AOR with expertise in areas such as economic development, civil affairs, agriculture, and the law.' I fully agree and have spoken about this publicly. I have now written to each Cabinet secretary and requested their personal view of support they are providing to your operations in Iraq and Afghanistan.

"Detention and interrogation operations remain a matter of considerable concern to this committee. In addition to the legal debate, the treatment of detainees has been the focus of detailed national and international attention. An update on detention operations in your AOR will be of great interest."

I want to make sure that you understand that I am attributing that to Senator Warner, not to me.

"General Brown, the special operations warriors of the U.S. SOCOM are a premier team of American servicemembers whose abilities are acknowledged and admired worldwide. The 2006 Quadrennial Defense Review (QDR) report validates and continues many ongoing special operations initiatives and also recognizes that success in the global war on terrorism requires a full spectrum of engagements. This committee is committed to enhancing your capability and maintaining your high standards.

"The committee may meet in closed session immediately following the open session to receive classified testimony and to allow you to respond more fully to the committee's questions if necessary. This could very well be changed by the frequency of our votes at that time.

"Both of you and your commands have accomplished so much for our Nation in the 4½ years since the attacks on September 11, 2001. Again, gentlemen, thank you and your magnificent servicemembers for your service. We have much ground to cover today. Our Nation is truly fortunate to have such capable military officials leading our forces in these important commands."

Senator LEVIN.

STATEMENT OF SENATOR CARL LEVIN

Senator LEVIN. Mr. Chairman, I join you in welcoming General Abizaid and General Brown. The men and women of the CENTCOM and the SOCOM are bearing the brunt of the dangerous work on which our Nation has embarked since September 11, 2001. We owe them and their families and their commanders a debt of gratitude.

Despite 3 years of the best efforts and the heroic sacrifices by our military personnel, Iraq is teetering on the edge of the abyss. Today our forces are confronting an insurgency that is at least as

virulent as at any time in the past. The prospects for a sectarian civil war are higher than at any time in the past. That fact is even beginning to be recognized by some members of the administration. U.S. Ambassador Khalilzad said in a press interview just a few days ago that "Iraq is bleeding and moving toward civil war." Those are Ambassador Khalilzad's words.

The U.S. must use every bit of leverage that it has with all Iraqi factions to forestall such an occurrence. Recently I was joined by Senator Susan Collins and Senator Jack Reed in calling on President Bush to make it clear to Iraqi leaders that a prompt political settlement is a condition of continued U.S. presence in the country. Here is part of what we wrote to the President:

> "We urge you to make it clear, Mr. President, to the Iraqis how important it is to us that they achieve a political settlement, form a unity government, and make the necessary amendments to their constitution. We believe it is essential that the Iraqi leaders understand that our continued presence is not unconditional and that whether they avoid all-out civil war and have a future as a nation is in their hands. If they don't seize that opportunity, we can't protect them or save them from themselves."

We concluded that:

> "The bottom line is this: The U.S. needs to make it clear to Iraqi leaders that a prompt political settlement is not only essential to them, it is a condition of our continued presence."

Well, unfortunately President Bush sent the wrong message on March 13, 2006, when he said that it will take time for Iraqis to form a new government and that this process, in the President's words, "will require patience by America."

The fact is that Americans have already shown extreme patience and are now understandably downright impatient with the failure of Iraqi leaders to reach a political settlement. Iraqi leaders do not seem to understand the reality that Americans do not support an unlimited, unconditional, and open-ended military presence in Iraq.

The Associated Press reported on March 4, 2006, that following a meeting with General Abizaid, Iraqi President Talabani said that General Abizaid, "assured him U.S. forces are ready to stay as long as we ask them, no matter what the period is." General Abizaid has assured me that that is not the message that he delivered, but President Talabani apparently chose to hear otherwise, perhaps because that has been the consistent message that he has heard from the United States administration.

The Iraqi parliament met for the first time today. Their leaders have said they favor a government of national unity. If they do not translate their words into the political compromises required to put together such a government of national unity, then I am afraid it is probable that the sectarian violence will increase and the country will descend into civil war. If that occurs, the Iraqi security forces (ISFs), which the U.S. military has worked so assiduously to train and equip, could fracture along ethnic and sectarian lines and could then become part of the problem, rather than part of the solution.

U.S. forces could then find themselves caught in the middle of a civil war which is even more intractable and less manageable than the current insurgency. U.S. forces could even find themselves in the middle of a larger Mideast war, a war where the Sunni Arabs in Iraq turn to neighboring Arab countries and the Iraqi Shiites turn to Iran, and Turkey intervening to forestall a Kurdish move to forcibly annex Kirkuk and the surrounding oil fields in an effort to create an independent Kurdistan.

I would be interested in General Abizaid's reactions to my comments and in any event look forward to his perspective on the situation in Iraq and in Afghanistan. His perspective has never been more important than it is today. We of course look forward to General Brown's perspective on the SOCOM's expanded role and strategy for fighting the global war on terrorism, on the foreign training missions which SOCOM is uniquely authorized to conduct, and on any plans to strengthen the management of SOCOM's procurement programs by the command and by the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict (SOLIC).

Again, my thanks to our witnesses for their service, their extraordinary service in the most difficult of circumstances, and I thank you, Mr. Chairman.

Senator INHOFE. Thank you, Senator Levin.

General Abizaid and General Brown, we will recognize you at this time for your opening statements and, as is always the case, your entire statements will be made a part of the record. General Abizaid, you are recognized.

STATEMENT OF GEN JOHN P. ABIZAID, USA, COMMANDER, UNITED STATES CENTRAL COMMAND

General ABIZAID. Thank you, Mr. Chairman, Senator Levin, members of the committee. Thanks for the opportunity to be here. Most importantly, thanks for your continued support of the troops in the field. We very much appreciate it. They are doing a great job out there. Their sacrifice, courage, and professionalism are really without equal anywhere in the world.

Their continued success depends upon your support. I am honored to be here today with General Brown. We live next to one another in Tampa and we almost never see one another. So General Brown, it is good to see you, and I am honored to be here with you. His forces are absolutely instrumental in the conduct of this war and the work that they do in the counterterrorist arena and many other areas is just absolutely superb.

Over the past several years, I have spent considerable time in the CENTCOM theater meeting with regional leaders, their commanders and troops, and our commanders and troops in the field. Despite the dangers and difficulties there, we remain committed to achieving stability in Iraq and Afghanistan, destroying the cellular structure of al Qaeda and its allies wherever we find them, and protecting the flow of strategic resources to the global economy.

There are just less than 200,000 American service men and women serving throughout the 27 countries in the CENTCOM area of operations (AO). The number is much reduced from the well over 300,000 U.S. troops that were serving there 3 years ago. In addition, coalition forces serving in the theater today number well over

30,000. Moreover, 3 years ago we were not in the position where we had 240,000 ISFs serving with us, nor were there approximately 86,000 Afghan security forces fighting with us against a common enemy.

We also need to consider that today there are 70,000 Pakistanis and nearly 20,000 Saudis who are effectively battling extremists on their own soil independent of our operations. Indeed, when you look at the theater level of operations going on throughout the CENTCOM AO, there is well over 600,000 people under arms fighting against common foes and dealing with common problems, all designed to defeat extremism in the region.

Clearly, the struggle against extremism is not one that we fight alone, but it is not a fight that can be won without American resolve, patience, and determination. Sectarian tensions today, particularly in Iraq, are high. The bombings at Samarah have showed us how close such tensions are to the surface of Iraqi politics. They also show Iraqis the danger of allowing emotions to control the future.

Iraq is a nation uniquely rich in natural resources and human capital. Both could be squandered if sectarian agendas are allowed to trump national common sense. In many respects, sectarian issues are of more concern from the security perspective than the insurgency. While we are still a long way from civil war in Iraq, it is essential for a government of national unity to form soon in order to continue the building of national institutions and ensure security.

We anticipate that 2006 will be a year in which important transitions take place and accelerate across the theater. With our partners in the region, we will work to solidify counterterrorist efforts and increase the unraveling of al Qaeda networks. ISFs will move to the lead in counterinsurgency operations, NATO's International Security Assistance Force (ISAF) will more fully assume responsibility for security in Afghanistan, and the democratically elected full-term governments in both Iraq and Afghanistan will increasingly exercise sovereignty, an indicator of progress in the campaign that must be reflected in our operations.

It is important to recognize that this exercise of sovereignty and these other transitions may create friction in the region. But achieving these milestones will be important. Whether in Iraq, Afghanistan, or other countries in the region, security against extremists and terrorists will ultimately be best provided by well trained, loyal, local forces and visionary, inclusive leaders. This underscores the essence of our broader strategy in the region, partnering with governments and their militaries to help them develop the capabilities and institutions to defeat terrorists and extremists on their own.

While counterterrorist and counterinsurgency operations will continue to be the focus of U.S. military operations throughout 2006, our conventional capabilities will continue to deter potential regional adversaries, such as Iran. The year ahead will require patience and the harnessing of all power within our national capabilities—economic, diplomatic, political, and military. We will need the continued support of our coalition allies, and of course we will need

the continued support of the people and the Congress of the United States.

Mr. Chairman, I thank you for the great support that the committee has provided to our troops in the field and I stand ready to answer your questions.

[The prepared statement of General Abizaid follows:]

PREPARED STATEMENT BY GEN JOHN P. ABIZAID, USA

UNITED STATES CENTRAL COMMAND POSTURE FOR 2006

I. INTRODUCTION AND OVERVIEW

United States Central Command (CENTCOM) is in the middle of a fifth consecutive year of sustained warfare in its area of operations (AO). The Command remains engaged in three principal activities: (1) defeating al Qaeda and associated extremist networks throughout the region, (2) stabilizing Iraq and Afghanistan, and (3) partnering with governments and their militaries in the region to help them develop the capabilities and institutions to defeat terrorists and extremists on their own. In addition, U.S. and Coalition military forces ensure the flow of global resources and deter hostile powers throughout the region. These activities are mutually reinforcing. Progress in one spurs momentum in others. CENTCOM forces are daily engaged in the full spectrum of military operations throughout a major theater of war. Counterinsurgency, counterterrorism, training of friendly forces, civil affairs and humanitarian operations are examples of the routine joint missions performed with great distinction by our young troops.

Given the complexity of the region and the numerous operations in which we are engaged, CENTCOM is divided into three subcomponent commands. Combined Forces Command-Afghanistan (CFC–A) oversees U.S. and coalition activities in Afghanistan, parts of Pakistan and the Central Asian states. Multi-National Force-Iraq (MNF–I) heads our operations in Iraq. Combined Joint Task Force-Horn of Africa (CJTF–HOA) directs our efforts in Sudan, Somalia, Ethiopia, Eritrea, Djibouti, Yemen, Kenya, and the Seychelles. These commands employ military forces to conduct a variety of operations and are fully supported by our maritime, air, land, and special operations component commands. We continually reassess and adapt our command and control efforts in order to meet changing circumstances. We anticipate major transitions in 2006, as we shift the burden of counterinsurgency lead to Iraqi forces and as the North Atlantic Treaty Organization (NATO) assumes a more direct role in stability operations in Afghanistan.

In 2005, military forces throughout the region did their part to put pressure on extremist networks, particularly al Qaeda and associated movements. Across the CENTCOM theater, regional nation counterterrorist cooperation and independent operations to kill and capture key al Qaeda leaders increased. In Iraq and Afghanistan, U.S. and coalition counterterrorist forces destroyed and disrupted al Qaeda cells and worked to deny al Qaeda operatives secure safe havens. In Pakistan and Saudi Arabia, local security forces experienced increasing success in combating their internal al Qaeda threats. While al Qaeda remains dangerous, the majority of nations in the region actively attack this terrorist group and their associated movements. These attacks, combined with al Qaeda's deliberate slaughter of innocent civilians, have made their ideology less attractive in the region than it was a year ago.

In Iraq and Afghanistan, we worked closely with Iraqi and Afghan army and police forces in providing the security that enabled millions of Iraqi and Afghan citizens to take part in free elections. The elections of 2005 were watershed events. Not only was each a significant setback for the extremists and insurgents in these countries, but most of the security tasks during election periods were conducted by Iraqi and Afghan national forces, giving further confidence to their people that security and representative government are inextricably linked.

The Iraqi elections in December were particularly important. Since the dictatorship of Saddam Hussein was removed in 2003, a persistent insurgency in Sunni Arab areas has hampered progress toward civil government. In December's elections, Sunnis voted in large numbers. While too soon to gauge the impact of this participation on the broader insurgency, the new government will have 4 years in which to build durable government institutions. Iraqi stability can be achieved through a combination of reliable security forces, an improving economy, and legitimate government. Legitimacy will in part be defined in terms of how Iraq's leader-

ship manages sectarian violence. Civil unrest must ultimately be handled by Iraqis for Iraqis.

Our training of Iraqi security forces over the past year produced significant, tangible results. Many Iraqi Army units are now in the lead in the counterinsurgency fight in key areas of the country. While large numbers of units are being equipped and trained, institutional building of military academies and training centers moves forward as well. Small teams of U.S. and coalition soldiers serve with the Iraqi military and many Iraqi police units, providing Iraqi forces with access to U.S. and coalition combat support and logistics enablers. A similar model exists with Afghan National Army units.

During 2005, U.S. forces patrolled vital seaways and air space to ensure the continued flow of commerce in this energy-rich region of the world. American military presence coupled with robust military exercise programs, which enhance cooperation and coordination with our friends in the region, sent important signals to unfriendly states in the region such as Iran and Syria. Simultaneously, we continued to work with governments in the region to help them build force capabilities to deny our extremist enemies access to ungoverned spaces and safe havens from which to plan and execute terrorist strikes.

U.S. and coalition forces also engaged in numerous humanitarian missions throughout the CENTCOM area of responsibility (AOR). We worked closely with the Pakistani military in reacting to the devastating earthquake there, deploying over 1,200 American military personnel who brought logistical and medical capabilities that saved thousands of lives. Throughout the Horn of Africa, we performed low cost, but much appreciated civil action projects, such as digging wells, building schools, and providing small medical and veterinary team visits to remote villages. Such operations deepen trust and cooperation between U.S. forces and the citizens of the region. When coupled with counterterrorist and border control training, our Joint Task Force in the Horn of Africa provides a stabilizing influence in a difficult, underresourced region. CJTF–HOA's work there makes extremist activity in the region more difficult.

In 2006, we must capitalize on these successes. We will work closely with our partners throughout the region to continue to pressure the al Qaeda network, take down its operating cells, expose its dangerous designs and goals, and kill and capture its leaders, while preventing these extremists from obtaining weapons of mass destruction (WMD). We will accelerate moving competent Iraqi forces, both military and police, to take the lead in the counterinsurgency fight, while continuing our efforts to train these forces to perform the full range of military tasks required of a sovereign state. In Afghanistan, training of Afghan security forces will also take on added importance. CENTCOM will continue to transition conventional stability operations in Afghanistan to NATO. However, with a significant U.S. conventional presence in the eastern part of the country, a robust American counterterrorism capability throughout the entire country, and continued development of provincial reconstruction teams (PRTs), U.S. efforts in Afghanistan will remain vital to achieving stability there. In the Horn of Africa, we will continue to work to enable regional nations to strengthen their ability to resist extremist activity.

U.S. forces will also continue to maintain an unmatched naval and air presence in the region that deters destabilizing activities by Iran, while safeguarding the region's vital links to the global economy. As always, we must guard against and be ready to respond to the potential for strategic surprise and unwelcome developments, such as a major terrorist strike against oil infrastructure, a closure of one of the region's strategic sea lanes, escalating political strife, or nation state expansion or support of terrorist activity. Given the ongoing volatility in the Middle East, the Horn of Africa, and Central Asia, these areas will continue to require considerable regional and international political, diplomatic, and military effort and focus in the years ahead.

As this statement is written, there are slightly over 200,000 American soldiers, sailors, airmen, coastguardsmen, and marines serving in the CENTCOM region. Coalition countries contribute an additional 28,000 troops under CENTCOM throughout the theater—their contributions remain indispensable. Other international efforts, such as NATO's International Security Assistance Forces (ISAF) in Afghanistan, provide additional international military capability. Taking into account Afghan and Iraqi forces, which operate alongside U.S. and coalition forces, and Pakistani, Saudi, and other regional forces, there are over 600,000 troops under arms engaged in combat operations in the CENTCOM region.

American forces in the CENTCOM AOR operate at an exceptional standard of tactical and operational excellence. Their fusion of operations and intelligence, ability to strike with precision, global logistics capabilities, outstanding small unit leadership, and integrity and professionalism make them a formidable force without equal.

In nearly 5 years of continuous combat, they have achieved a remarkable record of tactical victory in nearly every engagement.

Our troops and their families have endured significant sacrifice over years of dangerous yet essential duty in the CENTCOM area. Our Nation has lost many of its brave citizens in these dangerous combat zones. Others have been grievously wounded. We honor their courage and determination. We are also mindful of the losses of Iraqi, Afghans, and the troops of our many coalition partners who fight alongside us.

As Iraq and Afghanistan move toward stability and as we and our partners continue to fight against al Qaeda and its allies in the region, we should not underestimate the challenges ahead. We operate in a volatile and dangerous part of the world where extremists battle moderates in an ideological struggle of influence and ideas. This is not a clash between civilizations, but within one—the Muslim world. We must help the moderates succeed, while recognizing that our enemies are as patient as they are ruthless. The continuing support of Congress and the American people is essential to achieving success in the long war ahead.

II. MISSION

U.S. CENTCOM conducts operations to attack, disrupt, and defeat terrorism, deter and defeat adversaries, deny access to WMD, assure regional access, strengthen regional stability, build the self-reliance of partner nations' security forces, and protect the vital interests of the United States within the AOR.

III. NATURE OF THE REGION

The CENTCOM region spans 6.5 million square miles and 27 countries including Iraq, Afghanistan, Iran, Egypt, the countries of the Horn of Africa, Jordan, Syria, Lebanon, the countries of the Arabian Peninsula, Pakistan, and the Central Asian states as far north as Kazakhstan. It incorporates a nexus of vital transportation and trade routes, including the Red Sea, the Northern Indian Ocean, and the Arabian Gulf. It is home to the strategic maritime choke points of the Suez Canal, the Bab el Mandeb, and the Strait of Hormuz. It encompasses the world's most energy-rich region—the Arabian Gulf alone accounts for 57 percent of the world's crude oil reserves, 28 percent of the world's oil production, and 41 percent of the world's natural gas reserves.

The more than 650 million people who live in the region make up at least 18 major ethnic groups of many nationalities and cultures. While predominantly Muslim, the region is home to adherents of all of the world's major religions. Human civilization had its birth in this region, with many cities dating back thousands of years. The diverse peoples of the region take understandable pride in their rich culture and history.

Economic, social, and political conditions vary greatly from one nation to another, with per capita incomes ranging from $200 to nearly $40,000. Many countries in the region suffer from pervasive corruption, low economic growth, and high unemployment that is likely to persist given the high proportions of young men and women relative to overall populations. Some governments remain hard pressed to meet popular demands for economic opportunity, more social services, and increased political participation. But in the past year, the region has also witnessed dramatic, if incremental, progress in some of these areas.

Revolutions in global communications technologies and mass media outlets have offered many in the region hopes for greater prosperity and political opportunity. At the same time, the many complex insurgencies and extremist and terrorist groups in the region feed on the fear of rapid change in a dynamic world that is increasingly interconnected. The challenge for the people in the region is to manage change without resorting to organized violence and at a pace that promotes rather than erodes stability. The challenge for the United States is to help people manage change without turning to the dark ideologies of extremists.

IV. GLOBAL COUNTERTERRORISM AND THE LONG WAR

Defeating al Qaeda and associated ideological movements will require significant counterterrorism cooperation among our allies and partners not only within the CENTCOM AOR, but throughout the globe. It will also require the dedication of military, intelligence, and many other components of national power. Our network of allies and agencies will eventually defeat the al Qaeda network, but we have yet to master the integration of national and international power to achieve success against this ruthless, borderless enemy. We have long experience with nation-state warfare. We must, in the years ahead, learn to organize ourselves to defeat a stateless enemy capable of delivering state-like destruction without having state-like

vulnerabilities. Defeating such an enemy requires a careful study of its clearly articulated strategy and vision.

A. The Nature of the Enemy

Al Qaeda and ideologically-linked groups such as Ansar al Islam, the Islamic Movement of Uzbekistan, al Ittihad al Islami, Jemaah Islamiyah, and Ansar al Sunna represent the main enemy to long-term peace and stability in the CENTCOM AOR, promoting and thriving on instability and violence. They challenge our partners in Iraq, Afghanistan, Pakistan, and Saudi Arabia. They attack our friends in Jordan, Egypt, Turkey, Morocco, Madrid, and London. Although we have not experienced another attack on our homeland, the enemy that brought us September 11 continues to represent a clear and unambiguous threat to our country.

This enemy seeks to topple local governments, establish a repressive and intolerant regional theocracy, and then extend its violence to the rest of the world. To effect such change, this enemy believes it must evict the United States and our coalition allies from the region. Masking their true intentions with propaganda, rhetoric, and a sophisticated use of the mass media and the internet, this enemy exploits regional tensions and popular grievances. Al Qaeda and its associated movements exhibit strategic patience and are willing to wait decades to achieve their goals.

These extremists defame the religion of Islam by glorifying suicide bombing, by taking and beheading hostages, and by the wanton use of explosive devices that kill innocent people by the score. Their false jihad kills indiscriminately and runs contrary to any standard of moral conduct and behavior. The enemy's vision of the future would create a region-wide zone that would look like Afghanistan under the Taliban. Music would be banned, women ostracized, basic liberties banished, and soccer stadiums used for public executions. The people of the region do not want the future these extremists desire. The more we talk about this enemy, the more its bankrupt ideology will become known. But more important, the more that regional leaders talk about and act against this enemy, the less attractive it will be. Osama bin Laden and Musab al Zarqawi cannot represent the future of Islam.

Al Qaeda and their allies are ruthless, giving them power beyond their relatively small numbers. They are masters of intimidation. Their depraved attacks menace entire communities and can influence the policies of national governments. They embrace asymmetric warfare, focusing their means on the innocent and defenseless. In Jordan, they target wedding parties. In Iraq, they murder children playing in the streets, doctors working in hospitals, and United Nations (U.N.) employees supporting Iraqi efforts to build their country. They respect no neutral ground.

This enemy is linked by modern communications, expertly using the virtual world for recruiting, fundraising, planning, training, indoctrination, and proselytizing. The internet empowers these extremists in a way that would have been impossible a decade ago. It enables them to have global reach and to plan and coordinate terrorist operations throughout the world.

Finally, and most important, this enemy seeks to develop or acquire WMD. If they could develop or acquire a chemical, biological, or nuclear device, they would use it. This is not a guess. This is what they say. Their willingness to use suicide means to deliver such a weapon heightens this threat. There should be no mistake about the stakes in this broader war against al Qaeda. The enemy must be deprived of time, safe haven and resources to prevent development and use of mass-casualty producing devices.

Today, we have a much fuller understanding of the al Qaeda network than we did on September 11, 2001. It exists in the geographic realm, but also thrives in virtual space, constituting a global threat. Geographically, it seeks ungoverned spaces inside weak and failing states where it can establish safe havens and training sites. In these areas, military forces—ours or others—can have good effects. But this is a thinking enemy, adapting against our strengths. They have developed virtual safe havens. They have front companies. They employ facilitators and sympathetic charities that move their finances and enable their ideology to spread around the region. It is a secretive, complex network that often hides in plain sight.

Fortunately, the vast majority of the people in the region want nothing to do with the perverted vision of Islam preached by al Qaeda. But the power and grip of the al Qaeda movement and ideology should not be underestimated. Communism and fascism started with relatively few, but deeply committed adherents, and the hate preached by al Qaeda resonates with young men and women of little hope. Its global reach is already disturbingly apparent. In 2005, they enlisted suicide bombers from all over the Middle East and deployed over 500 of them worldwide, killing thousands of innocent civilians, most of whom were Muslims.

B. Principles of Global Counterterrorism and the Long War

For the first time in our history, the principal enemy facing the United States is not another nation state—it is an ideologically-driven, borderless network. Such an enemy requires new thinking on how we organize and fight. Militarily, we will continue to kill and capture al Qaeda leaders, shut down training camps, destroy operational cells, and prevent al Qaeda and associated movements from exploiting ungoverned spaces. Certainly, such action requires precision targeting and highly sophisticated intelligence networks of our own. Nonmilitary measures to defeat al Qaeda will be increasingly decisive in ultimately bringing about the network's defeat. In order to counter its fanatical ideology and diminish its sources of strength, all elements of international and national power—diplomatic, political, economic, financial, the private sector—must be used to pressure the entire al Qaeda and associated movement network over time.

We know the enemy's strategy and have a clearer understanding of how it operates. We and our friends in the region therefore have an opportunity to confront this enemy, adapt our tactics, techniques and procedures, and defeat these extremists before al Qaeda and its underlying ideology become mainstream. To do so, we must:

- Partner with our allies in the region to help them develop their own capabilities to defeat terrorists and extremists
- Make clear to the people of the region that we have no designs on their territory or resources; that we fight together out of respect and mutual self-benefit
- Expose the enemy's fanatical ideology and dangerous designs
- Provide in coordination with regional security forces the protective shield which enables continued political and economic reform and progress
- Prevent al Qaeda and associated movements from obtaining weapons of mass destruction
- Target, shut down, and hold liable those who finance extremist organizations and operations
- Evolve and broaden our coalition to more readily share intelligence and conduct military operations
- Develop responsive wartime authorities to invest in regional security forces, border security and counterterrorist units
- Improve our networks among our agencies, allies, and partner governments to coordinate and integrate all instruments of national power
- Invest in human capital to increase our intelligence capabilities, focusing on linguists, regional specialists, and human intelligence (HUMINT) resources
- Understand that the enemy targets our political will with asymmetric means and that achieving victory will be more about perception, will and intelligence-driven counterterrorism actions, than firepower, mass, maneuver, and territory conquered

C. Strategic Presence

As we implement these principles, forces should be deployed in the region to focus on building partner military capacity, protecting the flow of strategic resources, deterring hostile states, and maintaining regional U.S. counterterrorist capacity. It is important to understand that the current large conventional force posture is largely a function of counterinsurgency work in both Iraq and Afghanistan. As the lead for counterinsurgency operations shifts to Iraqis and Afghans, it is reasonable to assume that our conventional force levels will drop. As both countries stabilize and as new longer term security arrangements emerge, proper force levels can be determined. Regardless of the timing of stabilization, regional security needs will still require flexible, agile, and strategically located forward operating sites and security cooperation locations. Such locations will provide regional deterrence, adequate expandable infrastructure for contingency operations, and power projection capability for all types of forces. The Arabian Gulf, Central Asia, and Horn of Africa will require the reassurance that the strategic presence of U.S. forces brings to a volatile, vital region of the world.

V. IRAQ

A. Situation Overview

1. Coalition Forces

Multi-National Force-Iraq, headquartered in Baghdad, commands the Multi-National Corps-Iraq (MNC–I). MNC–I oversees two U.S. Army divisions and one U.S. Marine Expeditionary Force (MEF)—employing altogether 15 U.S. brigades/regi-

mental combat teams—and three multinational Coalition divisions. Coalition divisions control zones in southern and northern Iraq. Poland and the United Kingdom (UK) lead an 11-nation and 10-nation effort, respectively, in the south, while the Republic of Korea's 'Zaytun Division' conducts operations from Irbil, in northeast Iraq. Additionally, Multi-National Security Training Command-Iraq (MNSTC–I) leads coalition efforts to train and equip Iraqi security forces (ISF). The MNSTC–I commander also serves as the commander of the NATO effort to train these forces and build supporting institutions.

At the height of the December 2005 elections, there were approximately 154,000 U.S. forces and 21,000 coalition forces in Iraq. Significant air, naval and Special Operations Forces (SOFs) supported these troops from within Iraq and across the region. These numbers have decreased in recent months to approximately 130,000 U.S. and 19,000 coalition troops. The most significant change in terms of troop levels in 2005 was the number of trained and equipped ISF. In January 2005, there were 127,000 total Ministry of Defense and Ministry of Interior security forces, or 78 battalions. About a year later, there were approximately 231,000 combined security forces constituting more than 160 battalions. More important, these increasingly capable Iraqi forces are assuming greater responsibility for combating the insurgency.

2. The Enemy

Iraqi insurgents are predominantly Sunni Arab and consist of three major elements: Iraqi rejectionists, Saddamists, and terrorists and foreign fighters. These groups operate primarily in 4 of Iraq's 18 provinces, where they receive varying levels of support from the Sunni population but are certainly not supported by all Sunni Arabs. Indeed, Sunni Arabs participate in all governmental activities and constitute a large number of Iraqi's security forces. These different insurgent groups have varying motivations but are unified in their opposition to U.S. and coalition presence and their refusal to accept the authority of the legitimate, democratically-elected government of Iraq. While deadly and disruptive, the insurgency is also attractive to numbers of unemployed Iraqi young men and criminals.

The Iraqi rejectionists, mostly Sunni Arabs who want a return to their privileged status under Saddam, form the largest insurgent group. Their leadership is fragmented. They view themselves as an "honorable resistance" seeking to oust foreign occupation forces and unwilling to recognize the new-found power of groups previously excluded from political and economic life.

The Saddamists are mostly former senior officials from Saddam Hussein's dictatorship. Their numbers are smaller than the Iraqi rejectionists. They seek a return to power by trying to de-legitimize and undermine the new Iraqi Government through a campaign of mass intimidation against the Sunni population. They also conduct stand-off attacks with improvised explosive devices (IEDs), rockets, and mortars against U.S. and coalition forces, Iraqi security forces, and government officials in an attempt to demoralize these groups. They exploit criminal elements to assist them with these attacks. The Saddamists lack broad popular support, but they harbor long-term designs to try to infiltrate and subvert the newly-elected government from within.

The terrorists and foreign fighters are the smallest but most lethal group. The al Qaeda in Iraq (AQI) network, led by the terrorist Zarqawi, is the dominant threat within this group. AQI's objective is to create chaos in Iraq by inciting civil war between Sunni and Shia through terrorist acts such as the recent bombing of the Golden Mosque in Samarra. Such mayhem, they believe, will topple the elected government of Iraq and drive Coalition forces from the country. This could enable AQI to establish safe havens for Islamic extremism within Iraq from which to launch terrorist attacks against other moderate regimes in the region. Zarqawi has pledged his allegiance to Osama bin Laden, and the goals of AQI support bin Ladin's broader objective of establishing a Caliphate throughout the Middle East. AQI's network is well-organized and funded. Its cellular structure permits recovery and retention of lethality even when key Zarqawi lieutenants have been killed and captured.

AQI has also established a robust network to bring suicide bombers into Iraq. Extremists throughout the Middle East and the suicide bombers themselves help finance these murderous operations. These suicide bombers primarily target Shia civilians. Through sophisticated information operations, the terrorists and foreign fighters in Iraq use their mass murder events, kidnappings, and beheadings to establish in the media the image of an Iraq in chaos with little hope of progress or peace. There is little popular support for these terrorists and foreign fighters, but their ability to intimidate entire communities enables them to operate from constantly shifting safe havens.

While the main enemy forces operate primarily in the Sunni triangle area, potential challenges exist in both the south and north. In the south, radical Shia splinter groups such as Muqtada Sadr's Jaysh al Mahdi (JAM) could pose an armed threat to the new Iraqi Government. While Sadr's followers have begun to embrace the political process instead of violence, the JAM and other radicalized Shia elements with their own militias remain a latent threat to Iraqi stability. The Iraqi Government recognizes that such militias are long-term threats that need to be demobilized or incorporated into Iraq's legitimate security force institutions to ensure enduring national stability. In the north, while the Kurdish population continues to be a strong force for democracy and stability in Iraq, tensions over the status of Kirkuk could jeopardize internal stability. MNF–I will continue to assist efforts by the Iraqi Government to address this issue in a fair and equitable manner.

B. Strategic Focus

This past year, U.S. and coalition forces in Iraq focused on: training, building, and conducting operations with capable Iraqi security forces; providing the shield behind which political and economic progress can continue and legitimate government institutions can form and take root; and killing and capturing terrorists and neutralizing the insurgency. In 2006, the training and transitions with Iraqi security forces will continue with a focus on the Iraqi Army assuming the lead in counterinsurgency and stability activities and an enhanced effort on the Iraqi police. Our goal, which we share with the people of Iraq, is a country at peace with its neighbors and an ally in the broader war against extremism, with a representative government and security forces sufficient to maintain domestic order and deny Iraq as a safe haven for terrorists.

Iraqis will increasingly take the lead in killing and capturing terrorists and neutralizing the insurgency in 2006. A key component of the counterinsurgency strategy in Iraq is to distinguish between those elements of the enemy who can be persuaded to join the political process and support the legitimate Government of Iraq and those who are irreconcilable, determined to achieve their goals only through violence and intimidation. The difference between Sunni participation in the January and December 2005 elections was significant, indicating that many Sunnis are beginning to identify their future with the political process instead of violence. Continued efforts at broadening Sunni reconciliation will be critical in bringing an increasing number of Iraqi rejectionists into the political fold.

Such reconciliation, however, will not extend to those who do not recognize the legitimacy of the democratically-elected government of Iraq. Terrorists, foreign fighters, and Saddamists make up the majority of this category. They offer no positive vision for the future of Iraq, only chaos, the slaughter of innocents, and the desire for power. U.S., coalition, and ISFs will remain on the offensive, capturing and killing these enemies of the new Iraq, and will continue to clear areas of Iraq, such as those in Tal Afar, several Syrian border towns, and towns in the Euphrates River valley, from which terrorists operated. Future infiltration of such towns will be prevented by holding these areas with increasingly capable ISFs, and building local economic, political, and security forces and institutions to advance the safety and opportunities of Iraqis in such regions.

The insurgency in Iraq cannot be neutralized solely by military means. The political component is decisive. It allows a way for those willing to put down their arms to settle their differences through ballots, not bullets. Over the past year, U.S. and coalition forces, and increasingly Iraqi Army and police units, provided the security shield behind which political progress continued. The political accomplishments of the Iraqi people during 2005 were remarkable. Iraqi citizens, by the millions, braved threats of violence to vote for an interim government in January 2005. These elected representatives formed an interim government and ministries, and crafted a constitution, which was approved by the Iraqi people in a national referendum. Then in December over 10 million Iraqis voted again to elect a permanent government. All of these political milestones were set out in the Transitional Administrative Law, demonstrating that the rule of law is beginning to take hold in Iraq. When compared to our own political experience in forming a new republic, Iraq's political progress in 2005 is impressive.

We should not underestimate the current difficulties in forming a new government in the midst of a disruptive insurgency, terrorist activity, and increased sectarian tensions. The frustrating, slow, yet necessary process of forming a parliamentary government must be guided by responsible Iraqi leaders. Reaching political compromise between ethnic and religious groups that have for centuries settled their differences through bloodshed will be difficult. Enemies of the new Iraq will try to derail efforts to form a government through violence and attempts to increase sectarian tensions as was done in the bombing of the Golden Mosque in Samarra.

Patience will be required both in Iraq and the United States as attempts at political compromise take time and seem inconclusive. The role of U.S. and coalition troops, and more prominently, Iraq's security forces, will be to continue to provide the security that is essential for the political process to unfold and be successful. A successful political process is primarily in the hands of Iraq's newly-elected leaders who must work hard to forge a national unity government based on fair compromises that include all major ethnic and religious groups.

Increased security will also set the conditions for continued reconstruction in Iraq. The infrastructure supporting the basic needs of Iraqis requires complete overhaul and will take years to reach the level of neighboring states. Nevertheless, progress has been made due to American, Coalition, and Iraqi efforts and resources. Over 3,600 schools have been rehabilitated, and over 47,000 school teachers and administrators have been trained. Approximately 240 hospitals and more than 1,200 clinics have reopened. Baghdad's three sewage plants, which serve 80 percent of the city's population, have been rehabilitated. Thirteen power plants have also been rehabilitated, providing approximately 60 percent of power generation in Iraq. Umm Qasar's status as an international port has been restored with up to 80 ship offloads of a wide range of commodities occurring each month.

More work needs to be done. For decades, Saddam Hussein neglected Iraq's infrastructure and the basic needs of the Iraqi people, while building lavish palaces for himself. Sabotage continues to negatively impact Iraq's oil industry and electricity supply. An inefficient economic structure, insurgents, criminals, and corruption all hamper progress in these areas. Enhanced Iraqi security and economic reform of these key infrastructure systems are absolutely necessary for reconstruction and economic progress in 2006.

MNF–I's main military effort in Iraq centers around training and building increasingly capable and loyal Iraqi security forces. MNSTC–I leads this effort and over the past year, steady progress has been made, especially in terms of Iraqi forces' willingness and ability to engage in combat. A year ago there were not significant numbers of Iraqi battalions ready for combat. Now there are over 160 Iraqi Army and police battalions engaged in combat operations against the terrorists and insurgents. Over 70 of these are taking the lead in this fight, while approximately 90 are fighting alongside U.S. and coalition forces. Last year Iraqi operational headquarters at the brigade and division level did not exist, and neither did combat service support battalions. Now there are ten division and 35 brigade headquarters in the Iraqi Army as well as seven service support battalions supporting Iraqi combat forces. In all, there are approximately 109,000 trained soldiers and 124,000 police.

More important, but more difficult to quantify, the intangibles of leadership, unit cohesion, and loyalty—critical elements of an effective military force—have improved. In 2004, some Iraqi Army and police units disintegrated when confronted by insurgents. Now they are standing, fighting, and prevailing over the enemy on the battlefield. They are also increasingly planning and conducting independent operations. Iraqi security forces are fighting and dying for their country, taking significantly higher casualties than our own. There is no shortage of Iraqis volunteering to serve their country.

It is important to remember that American and coalition forces are fighting as a close team with Iraq's security forces. We have over 190 embedded transition teams operating as an integral part of Iraqi units. These American and coalition forces are making essential contributions as they enable Iraqi battalions to receive logistical and combined arms support from U.S. and coalition forces. Many American and coalition units also have Iraqi partner units with which they conduct combined operations and training.

Throughout the country, Iraq's security forces are also taking over their own battlespace. Currently more than 40 Iraqi Army battalions have assumed primary control of their own AOR, including important areas in Baghdad. Similarly, we have transferred authority of over a dozen forward operating bases to Iraqi units. As these Iraqi forces increasingly move to assume control over more areas of the country, U.S. and coalition forces will increase their focus on turning over more and more security responsibility at a pace appropriate to local conditions.

The international community remains involved in the training of ISFs. Coalition members representing 18 countries are part of the NATO Training Mission-Iraq (NTM–I). NTM–I focuses on developing a professional Iraqi officer corps. The assistance of Jordan, Egypt, and the United Arab Emirates (UAE) continues to be noteworthy.

Ensuring capable ISFs means more than training and equipping soldiers and police, it also means helping Iraqis build the institutions, particularly the Ministries of Defense and Interior, that can sustain and instill loyalty in these forces and provide the resources and oversight necessary to prosecute a complex counter-

insurgency campaign. In 2006, MNSTC–I will increasingly focus on such efforts, working with the new leaders of these ministries to encourage Iraqi participation in them that is broadbased, from all ethnic and religious groups, and to address problems, such as corruption, that have plagued these ministries in the past.

Significant progress has been made in training and building Iraq's security forces, but challenges remain. Like many institutions in Iraq, these security forces were for decades the instruments of Saddam's reign of terror. They existed to brutalize the people of Iraq. These forces are now being trained to serve the people. Such a radical change in mission and culture will not take place overnight. But if these institutions and the Iraqis who lead them are increasingly able to focus on serving the Iraqi national interest, the stability and longevity of Iraq's new democracy will be enhanced.

C. Transitions and Timing

The focus of U.S. and coalition military operations in Iraq has proceeded from invasion, to liberation, to occupation with the Coalition Provisional Authority, to partnership with the interim and transitional governments. In 2006, we will emphasize building self-reliance in Iraq's security forces and newly-elected government institutions. An essential element of achieving overall success in Iraq will depend on the leadership, vision, and character of Iraq's newly-elected government officials.

2006 is likely to be a year of significant transition in Iraq. The process of moving capable Iraqi forces to the forefront of fighting the insurgency has already begun. In liberating Tal Afar from extremist control last summer, 11 Iraqi battalions and 5 U.S. Army battalions carried the fight. Iraqi forces also took the lead in providing security for the December 2005 elections and in dealing with the post-Samarra bombing tensions. We will work to accelerate this transition in 2006. But shifting the balance of Iraqi forces to the forefront of the fight is not a simple task. If it is not done well, a security vacuum could develop in certain areas of the country, to be filled by terrorists and Saddamists. The timing of this transition should be dictated by sound strategy and an assessment of intangibles such as leadership, unit cohesion, and loyalty, not fixed timetables or other arbitrary deadlines.

The same holds true for CENTCOM recommendations on determining the appropriate number of U.S. troops in Iraq. Our long-term strategy in the region will not likely be furthered by the continuing presence of a large U.S. military footprint in the Middle East. But our current strategy would be undermined by a precipitous withdrawal of U.S. forces from Iraq. The timing of when to reduce our forces in the region, therefore, becomes the crucial issue. Unexpected tensions or widespread violence could lead to a need for more American forces in Iraq. CENTCOM recommendations on the issue of troop levels to our civilian leadership will continue to be based on conditions on the ground in Iraq, as well as an assessment of how the U.S. force posture in the region bolsters America's national interest in the broader fight against terrorism and extremism. We have recently transitioned from 17 to 15 brigades in Iraq. To the extent U.S. forces in Iraq are further reduced during 2006, it will be the result of our troops and Iraqi forces increasingly meeting their objectives.

VI. AFGHANISTAN

A. Situation Overview

1. Coalition Forces

There are approximately 20,000 U.S. and 4,500 coalition forces from 25 nations deployed in Afghanistan as part of Operation Enduring Freedom (OEF). These forces are commanded by CFC–A, headquartered in Kabul, which assures unity of effort with the U.S. Ambassador in Kabul and the NATO ISAF. Combined Joint Task Force-76 (CJTF–76) is a division-level subordinate command. CJTF–76 directs major and routine combat operations throughout Afghanistan. Linked into CJTF–76 is a robust special operations capability from U.S. and coalition nations. Additionally, NATO's ISAF contributes approximately 8,500 troops—over 150 of whom are American. These troops are primarily located in Kabul and northern and western Afghanistan.

2. The Enemy. Consistent with CENTCOM's primary goal of defeating al Qaeda and its allies, CFC–A maintains an intense focus on any indications that al Qaeda is attempting to reestablish a safe haven in Afghanistan. Al Qaeda senior leaders operate in Pakistan's rugged and isolated Federally-Administered Tribal Area (FATA) that borders eastern Afghanistan. In addition to al Qaeda, three insurgent groups—all with al Qaeda links—constitute the main enemy threat in Afghanistan: (1) the Taliban, (2) Haqqani Tribal Network, and (3) Hezb-i-Islami Gulbuddin (HIG).

The Taliban operates primarily in the southern and eastern provinces and Kabul. Its core supporters, mostly Pashtun, seek its return to power. The Taliban has demonstrated resilience after defeats. They appeared tactically stronger on the battlefield this year, and they demonstrated an increased willingness to use suicide bomber and IED tactics. While the Taliban remain very unpopular in most parts of the country, pockets of hard-core support remain. Taliban activities remain clearly linked to al Qaeda funding, direction, and ideological thinking. The Taliban do not have the capability to exercise control over large areas of Afghanistan, but they are disruptive to reconstruction and reconciliation efforts. It is increasingly clear that Taliban leaders also use Pakistan's FATA to organize, plan, and rest. Pakistani efforts to deny this safe haven, while considerable, have yet to shut down this area to Taliban and al Qaeda use.

The Haqqani Tribal Network operates primarily in eastern Afghanistan and the FATA region of Pakistan. Haqqani goals are limited primarily to obtaining autonomy in eastern Afghanistan and the FATA region. Although the most tactically proficient of the enemy we face in Afghanistan, they present a limited strategic threat.

The HIG, while remaining dangerous, similarly presents only a limited strategic threat. It operates primarily in eastern Afghanistan and is heavily involved in illicit activities such as narcotics and smuggling, resembling a Mafia-like organization more than an insurgent movement with national goals. Nevertheless, given its historical links with al Qaeda, it can help facilitate al Qaeda operations in Kabul and eastern Afghanistan if it finds that doing so enhances its interests. Some HIG operatives may be considering political reconciliation.

B. Strategic Focus

In 2006, CFC–A will continue to focus on: killing and capturing terrorists and neutralizing the insurgency; providing the shield behind which economic and political progress can move forward and legitimate government institutions can form and take root; and training and building capable Afghan security forces. Additionally, CFC–A will work to ensure a smooth transition with NATO as NATO troops assume additional responsibilities and territory in Afghanistan and support counternarcotics efforts throughout the country. Our goal, which we share with the people of Afghanistan, is a country at peace with its neighbors and an ally in the broader war against terror, with a representative government and security forces sufficient to maintain domestic order and deny Afghanistan as a safe haven for terrorists.

During the past year, CFC–A continued aggressive offensive military operations to kill and capture terrorists and insurgents and shut down the sanctuaries in which they operate. Given that the terrorists and insurgents that we are pursuing often operate in both Pakistan and Afghanistan, a key element of our strategy is deepening our cooperation with the Pakistani military operating on the Pakistan-Afghanistan border. The important work to de-legitimize Afghan warlords and disarm and demobilize irregular Afghan militias also continues. These efforts take time, rarely producing major breakthroughs, but incremental progress in this important area continues. U.S. and coalition forces dominate the battlespace and are increasingly involving Afghan National Army units in military operations.

The continued insurgency in Afghanistan will not be defeated solely by military means. In fact, the center of gravity of CFC–A's campaign is decreasingly military and increasingly in the domain of governance and economic development. American, Coalition, and Afghan forces are continuing to provide the critical shield behind which progress in the political and economic realms can continue.

In 2005, there was noteworthy political progress in Afghanistan. The citizens of Afghanistan went to the polls in September to elect a Parliament, which was seated on December 19. Voter turnout was over 50 percent, with 6.2 million Afghans voting for over 5,800 national and provincial candidates. Extremists failed to make good on their threats of murder to disrupt the elections. Afghan security forces played their most visible and effective role to date in providing essential security to enable the election.

Reconstruction remains a critical way to isolate our enemies, depriving them of their support base and giving Afghans hope for a better future. Continuing and sustained development efforts will be critical to overall success. The United States and our allies will continue to work with the Afghan Government in assisting Afghanistan in building the infrastructure needed for a functioning economy. The London Conference in January 2006 was an important step in this regard. More generally, PRTs, small civil-military affairs teams with civilian and interagency expertise, remain an important tool to achieve these results. This past year, CFC–A and its NATO–ISAF partners increased the number of PRTs to 24. Of these, 15 were directed by CFC–A, and 9 others operated under the authority of NATO–ISAF. Over

time, Afghan PRTs will transform from military to civilian-led organizations, and ultimately become provincial development authorities of the Afghan Government.

A key strategic interest of both Afghanistan and the United States is to prevent Afghanistan from becoming a terrorist safe haven again. The most effective long-term way to achieve this end is to enable the institutions of the democratically-elected Afghan Government to consolidate and extend their reach and legitimacy throughout the country. Coalition PRTs help do this by enhancing local security and extending the authority and visibility of the Afghan Government into the provinces.

Training, building, and mentoring the Afghan National Army (ANA) remains a central pillar of our strategy to stabilize Afghanistan. The Afghan Army has suffered through 30 years of civil war, shattering the institutional structures of this force. Given the state of the ANA, our focus has been on quality—building from the ground up—not on quantity. There has been steady progress. The Afghan Army now numbers over 26,000 trained and equipped troops.

U.S. and coalition forces support the training of fielded ANA battalions with Embedded Training Teams (ETT). There are over 650 military personnel serving in ETTs. These ETTs provide training, combat effects, and logistics support to ANA units. Additionally, ANA forces are now conducting combined operations with American and coalition forces. Most important in terms of progress, the citizens of Afghanistan are beginning to view the ANA as a truly national institution that is both trusted and respected. The ANA played a critical role in providing security for the September parliamentary elections, extending its reach to remote villages. Its performance was widely applauded by senior Afghan officials, U.S. commanders in the field, and, most importantly, the people of Afghanistan. As the ANA is fielded, CFC–A will continue initiatives to help the Afghans reform their Ministry of Defense, the Afghan General Staff, and the ANA Regional Military Commands. While the progress with the Army is remarkable, problems with recruiting, infrastructure, and organizational reach need continued attention.

Although the development of an effective Afghan National Army is proceeding on schedule, the Afghan National Police (ANP) force requires considerable work. In conjunction with Germany and other international parters, building a professional and competent ANP remains a top CFC–A priority. Over 58,000 police have been trained. However, the force is still hampered by irregular pay, corruption, and substandard leadership that is often unaccountable to a central ministry. CFC–A and the Department of State are focused on helping the leaders of Afghanistan address these problems with additional mentoring and an emphasis on building the institutional capacity and equipment of the police force. The Government of Afghanistan and the Ministry of Interior have begun reforms, including those that cover pay, rank structure, and curbing corruption. Ultimately, police provide the security backbone against any insurgency and criminal activity. Afghanistan is intensely tribal and lacks modern infrastructure. Loyal and competent police are essential to spreading the rule of law and good governance. A long, hard road is ahead to make the Afghan police what the Nation needs.

2006 will be an important year in terms of transitioning additional responsibility and territory to NATO. Specifically, Stage III of the ISAF transition is scheduled for the late spring or summer of 2006 when Regional Command South (RC South) transfers to NATO command. NATO forces in this area will be primarily British, Canadian, and Dutch. They are prepared to aggressively address the threat situation in RC South, which remains high. CENTCOM continues to work closely with NATO to enable its command and control structures and to ensure a successful NATO transition in Afghanistan.

Having NATO, an organization consisting of 26 of the world's most powerful countries, committed to Afghanistan's future is good for Afghanistan. NATO–ISAF is already a major contributor to Afghanistan's security. As NATO eventually assumes control over all conventional U.S. and coalition forces in Afghanistan, the United States will remain the single largest contributor of forces to this NATO effort, while also retaining a very robust counterterrorism force throughout the entire country. Deepening international commitment to Afghanistan's future will do much to assist the emerging Afghan Government and diminish al Qaeda's attractiveness to people in Central and South Asia.

The production and trafficking of illegal narcotics remain a significant threat not only to Afghanistan's long-term stability, but to the stability of the entire region. The United Kingdom has the overall lead, and the U.S. Department of State's Bureau of International Narcotics and Law (INL) Enforcement leads the U.S. effort. A counternarcotics branch in CENTCOM's Joint Interagency Coordination Group (JIACG) was established to better coordinate Department of Defense's (DOD) support for U.S. national efforts. During 2005, CENTCOM delivered $242 million in fiscal year 2005 DOD supplemental funding in support of INL programs for the Af-

ghan police, border security, and Counternarcotics Police (CNPA) equipment and training.

The campaign to stop narcotrafficking and eliminate poppy production is complex, requiring full interagency and international participation, particularly given the regional scope of the problem. The different elements of this campaign include law enforcement, judicial reform, poppy eradication, and alternative livelihood and public information programs. CENTCOM fully supports all of these programs. Our roles include intelligence support, helicopter transport, logistical and administrative assistance for counter-narcotics operators in country, and in extremis rescue, to include medical evacuations and close air support operations. Our PRTs also play a critical role developing viable economic alternatives to poppy production.

C. Much Accomplished, Much More to Do

Since September 2001, progress in Afghanistan has been remarkable: the al Qaeda safe haven in Afghanistan was eliminated and the Taliban removed from power; security was established for a political process in which the people of the country have freely elected a president and parliament; military units spearheaded an effort to bring the significant resources and expertise of the international community to help Afghanistan begin to address many of its longstanding problems; and the United States, along with our international partners and the Afghan Government, has begun the difficult work of helping the Afghan people build the institutions and infrastructure that are the key to the future of their country.

Given this progress, there is still a very strong notion of "consent" in this country—the Afghan people are very appreciative of the help they have received from international troops, especially those from the United States, and there is a strong, broadbased desire for such troops to remain in the country. But much work needs to be done and progress is not guaranteed. Helping Afghans build infrastructure, which in many regions is nonexistent, attack endemic corruption, address narcotrafficking, train their Army and police, all while fighting an insurgency that remains patient, hidden, and dangerous, are tasks that will require years. As in Iraq, an essential element of achieving overall success will depend on the leadership, character, and vision of Afghanistan's elected leaders.

VII. HORN OF AFRICA AND YEMEN

A. Situation Overview

The geographic region of CJTF–HOA includes Djibouti, Ethiopia, Eritrea, Kenya, Sudan, Yemen, Somalia, and the Seychelles. CJTF–HOA conducts operations, training, and humanitarian missions to assist host nations to help themselves in combating terrorism, denying extremist groups from utilizing ungoverned space, while trying to meet the needs of their citizens. CJTF–HOA is supported by two other commands: Commander Task Force-150, a naval force which is commanded by a Dutch Flag officer with nine ships from seven countries, and a Joint Special Operations Task Force. Overall, CJTF–HOA has approximately 1,400 U.S. forces on the ground and over 500 coalition personnel at sea.

The Horn of Africa is vulnerable to penetration by regional extremist groups, terrorist activity, and ethnic violence. Al Qaeda has a history of planning, training for, and conducting major terrorist attacks in this region, such as the bombings of U.S. Embassies in Kenya and Tanzania. The volatility of this region is fueled by a daunting list of challenges, to include extreme poverty, corruption, internal conflicts, border disputes, uncontrolled borders and territorial waters, weak internal security capabilities, natural disasters, famine, lack of dependable water sources, and an underdeveloped infrastructure. The combination of these serious challenges creates an environment that is ripe for exploitation by extremists and criminal organizations.

More specifically, Somalia, a failed state in the heart of HOA, is a safe haven for East Africa al Qaeda associated cells. There is also an increasing number of piracy operations that have been planned and launched from Somalia. In January 2006, our naval forces seized a vessel in the international waters off the Somali coast engaged in piracy. We will continue to monitor and, when necessary, take action against such destabilizing activities in the region.

Sudan remains a flashpoint of violence, particularly in the volatile Darfur region where over 2 million people have been displaced and an estimated 200,000 have been killed in the past 3 years. Ongoing peace talks there remain a challenge, and the potential for ungoverned space in Sudan to be exploited by terrorist groups is high. Additionally, the festering border conflict between Ethiopia and Eritrea has the potential to escalate into a full-scale war that would destabilize both of these countries, while potentially spreading instability throughout the HOA.

B. Strategic and Country Focus

As U.S. and partner forces continue to apply pressure on al Qaeda and associated movements in Iraq, Afghanistan, Pakistan, and other places, there is a likelihood that some of these extremists will migrate to the Horn of Africa in search of safe havens and ungoverned space, as they have done in the past. Working closely with U.S. Embassy personnel in the region, CJTF–HOA assists partner governments in building indigenous capacity to deny terrorists access to their territory. The building of indigenous capacity not only includes training local security and border forces, but also involves assisting with low-level civic projects throughout HOA such as digging wells, building schools and distributing books, and holding medical and veterinary clinics in remote villages. The capabilities gained by local forces from this training and the goodwill engendered by CJTF–HOA's numerous humanitarian operations help discredit extremist propaganda and bolster local desires and capabilities to defeat terrorists before they can become entrenched.

Our partners in the Horn of Africa share our goal of a region that is stable and free from terrorist activity and violence. Many have played a critical role in making progress toward this goal. Kenya is important in this regard, playing a leadership role throughout East Africa. With one of Africa's most professional militaries, Kenya has been a critical ally in our mutual fight against terrorism in the region. In September 2005, Kenya hosted regional exercise Golden Spear 2005, and in close cooperation with CENTCOM established the Disaster Management Center of Excellence in Nairobi. The primary focus of this Center of Excellence and the Golden Spear exercise is to build regional disaster management capacity and cooperation.

Djibouti, where CJTF–HOA is headquartered, continues to provide support for U.S. military basing, training, and counter-terrorism operations, including maritime interdiction operations. Yemen has demonstrated increasing willingness to confront extremists within its borders. We have worked together in training Yemen's coast guard, an important capacity given that Yemen lies astride the critical sea lane chokepoint of the Bab el Mandeb. The United States is working with the Yemenis to develop a long-term border security strategy to better safeguard their territory. Ethiopia continues to work on security sector reform and is committed to combating terrorism and countering extremism within its borders. CJTF–HOA has deepened its relationship with Ethiopia and has reached out to Eritrea, emphasizing to both the importance of reducing tensions along their common border.

C. Way Ahead: Internationalizing and Civilianizing

In many ways, CJTF–HOA is a model for how military forces might operate across the wider CENTCOM region in the future—our troops are in a preventive, economy of force posture, training and working in close cooperation with local security forces to identify extremist and terrorist threats that might try to become more established in the region. In 2006, the Marine Corps will transfer authority of CJTF–HOA's headquarters to the Navy.

Despite the excellent work by CJTF–HOA's troops, we continue to contemplate ways to increase the effectiveness of this command. One way is to increase international, civilian, and interagency involvement in CJTF–HOA's mission. Close allies such as the UK and France already conduct significant operations in this region. Coordinating more closely with these forces can enhance stability in the Horn of Africa. Partnering with civilian agencies for many of the humanitarian missions undertaken in this chronically underdeveloped region is an important step in building an assistance and security relationship that makes extremism less attractive.

VIII. THEATER SECURITY COOPERATION AND OTHER REGIONAL PARTNERSHIPS

As in the Horn of Africa, CENTCOM engages other regional partners and encourages deepening cooperation through a variety of Theater Security Cooperation (TSC) programs, the pillars of which are: (1) Foreign Military Financing/Foreign Military Sales (FMF/FMS), (2) International Military Education and Training (IMET), (3) the Counter-Terrorism Fellowship Program (CTFP), and (4) Combined Military Exercises.

FMF allocations help strengthen our relationships with such key states as Pakistan, Egypt, and Jordan. FMF/FMS initiatives have been especially important in improving the capabilities of the Pakistani military by providing the weapons and equipment that allow them to contest operating areas of terrorist and their supporters. IMET provides regional military personnel the opportunity to attend courses at U.S. military institutions while learning about human rights, democratic values, civilian control of the military, and the rule of law. The United States should welcome the opportunity to train as many officers in our school systems as possible. The DOD's CTFP is regarded as an innovative way to build a global network of

counterterrorism (CT) experts and practitioners. It also reinforces a central pillar of strategy in the region—increase indigenous CT capabilities in partner countries. Combined military exercises enhance interoperability and assist our partners in developing capabilities to fight terrorism and extremism within their own borders. In 2005, 58 combined training events enhanced regional military capabilities. Certain annual exercises, such as Eagle Resolve in the Gulf and Golden Spear in the Horn of Africa, also emphasize preparedness and the need for regional cooperation in the event of manmade or natural disasters.

These TSC programs merit long-term U.S. commitment. They boost interoperability with U.S. forces, encourage the professionalization of regional military forces, enhance intelligence sharing and information exchange, reinforce U.S. military access when required, and perhaps most importantly, foster the personal relationships between U.S. military personnel and their counterparts in partner countries that are central to building the trust and confidence needed between allies when they fight as partners against a common foe. We continue to support these programs as a matter of highest priority.

Whether sourced through economic support funds, coalition support funds, foreign military financing, or other programs administered by other U.S. agencies, the U.S. assistance provided to our friends in the region is fundamental to building long-term security partnerships. Further benefits to TSC programs can be realized through congressional authorities and funding levels which are flexible and facilitate interagency cooperation.

A. Pakistan

Pakistan remains an enormously valuable ally in the broad struggle against extremists in the region. Since September 11, 2001, Pakistan has captured or killed more al Qaeda operatives than any other country. It also launched major conventional operations against al Qaeda strongholds. Pakistani Army offensive operations in the FATA have disrupted extremist activity, but they have not fully shut down al Qaeda safe havens along the border with Afghanistan. This is likely more an issue of capability than of intent.

The Pakistani Army's deployment of additional troops along the border of Afghanistan prior to that country's September 2005 parliamentary elections helped ensure that the threats of violence by the Taliban and al Qaeda did not disrupt these important elections. Pakistan continues to hunt down and capture high level al Qaeda and Taliban operatives, such as al Qaeda operations director Faraj al Libi and Taliban chief spokesman Abdul Latif Hakimi. Continued operations against al Qaeda and Taliban safe havens in Pakistan are in both of our countries' interests. We will continue to support these important efforts by Pakistan with intelligence sharing, security assistance, and military coordination.

In October 2005, we signed a Communications Interoperability and Security Memorandum of Agreement which will enhance the interoperability of our forces. We continue to hold regular meetings with Pakistan's military leaders and are working to establish a core network of U.S. and Pakistani liaison officers among our different headquarters and more robust communications among our units operating along the Afghanistan-Pakistan border. American forces have worked very closely with the Pakistan military at all levels, as we assisted it in conducting and coordinating massive earthquake relief efforts in Northern Pakistan. Rapid and effective cooperation between Pakistan, the United States, and other coalition members in this endeavor led to thousands of lives being saved.

CENTCOM will continue to work to deepen our engagement with Pakistan in order to defeat a common enemy. A long-term strategic partnership between the United States and Pakistan is central to defeating al Qaeda and other extremists groups which threaten the citizens of both of our countries.

B. Kingdom of Saudi Arabia

The Kingdom of Saudi Arabia remains an important friend and has become a key battleground in the war against al Qaeda terrorists. Spurred by a series of al Qaeda attacks on Saudi and Western targets in the Kingdom, the Saudi Government is now mobilized to hunt down and kill extremists within its borders. Saudi security forces have conducted numerous effective operations against al Qaeda cells and operatives. Many of the top al Qaeda leaders in Saudi Arabia have been killed in the past year. The organization of al Qaeda in Saudi Arabia, however, is down but not out. Saudi leaders are committed and have had excellent tactical success against our common enemy.

CENTCOM will continue our close cooperation with Saudi security forces in the coming year and will continue to assist the government of Saudi Arabia in its battle against al Qaeda. In this regard, both the U.S. Military Training Mission and the

Office of the Program Manager-Saudi Arabian National Guards (OPM–SANG) are adding counterterrorism training to their traditional programs of conventional military preparedness. Future military exercise programs will also include more counterterrorism efforts. We are also looking to expand conventional force interoperability through land force exercises between Saudi military forces and Army Forces Central Command (ARCENT), and through continued training opportunities such as the Royal Saudi Air Force participation in the U.S. Air Force's annual "Red Flag" exercise at Nellis Air Force Base. At higher levels of government, cooperation between the U.S. and Saudi Arabia is likely to be enhanced by the November 2005 launching of a U.S.-Saudi Strategic Dialogue by Secretary of State Rice and Saudi Foreign Minster Saud.

C. Arabian Gulf States

The Arabian Gulf states of Kuwait, Bahrain, Qatar, UAE, and Oman are important partners in our effort to maintain stability in the Gulf and in our ability to conduct operations across the region. Kuwait remains host to the Combined Forces Land Component Command and serves as the primary staging point for our forces and equipment rotating in and out of Iraq. Kuwait's steady support for coalition efforts in Iraq has been essential.

Bahrain serves as the home to U.S. Naval Forces CENTCOM and the United States Fifth Fleet. The continuing development of its Counter-Terrorism Operations and Intelligence Center has helped several agencies of the Bahraini Government focus on and plan for responding to potential terrorist attacks. Qatar provides excellent host nation support to CENTCOM's Forward Headquarters and the Combined Forces Air Component Command's Combined Air Operations Center. They also hosted Eagle Resolve 05, a Gulf regional disaster management exercise, which proved to be an effective way to deepen regional cooperation.

The UAE promotes regional cooperation and combat effectiveness by hosting air exercises at its Gulf Air Warfare Center (AWC). The AWC is building multilateral cohesion and air warfare interoperability among the Gulf countries. The Unites Arab Emirates is a valued partner in regional security and aggressively supports our efforts against global terrorist networks. Oman, perhaps the most strategically located state in the region, partners with U.S. forces in exercises and other activities that help keep global commerce flowing. We work with Oman to develop forces capable of controlling its extensive coastline and borders.

The terrorist threat throughout the Gulf remains high. We have worked closely with governments and security forces in the region to disrupt al Qaeda's stated desire to attack the region's oil infrastructure. Continued investment in security cooperation programs and assistance improves the capabilities of allied Gulf nations, enables them to provide for their own security, and allows them to continue to provide critical contributions to Coalition activities throughout CENTCOM's AOR. As always, our Arabian Gulf partners and the United States cooperate out of mutual interest, regional stability, and a desire to disrupt and prevent terrorist activity.

D. Egypt

Egypt remains the traditional leader of the Arab world and a key coalition ally in the fight against extremism in the region. In 2005, Egypt hosted a reconciliation conference for Iraqis who sought to overcome ethnic and sectarian differences. Egypt continues to provide critical support to the Palestinian-Israeli peace process. On the border with Gaza, Egyptian forces have helped to preserve stability in the aftermath of Israel's withdrawal from the Gaza strip.

U.S. military assistance to Egypt continues to produce positive results. The $1.3 billion we annually provide to Egypt for the procurement of U.S. equipment, together with an additional $1.2 million annually in IMET funding, have helped Egypt modernize and professionalize its armed forces and serve as a model for regional security and stability. In 2005, Egypt hosted the Bright Star exercise, the largest military exercise in the CENTCOM AOR, in which 12 nations and over 30,000 troops participated. Egyptian support for this important exercise, which emphasized interoperability, was significant. The Egyptian military also continued its contribution to the coalition effort in Afghanistan, providing an Egyptian field hospital and donating 16,000 AK–47s to the Afghan National Army.

Egypt's position as protector of the Suez Canal and gateway to the Middle East has contributed greatly to the coalition efforts in both Iraq and Afghanistan. Hundreds of Suez Canal transits and thousands of overflights have expedited our military operations in the AOR. We look forward to continuing cooperation with Egypt on ways to bring stability to the region and continuing our strong relationship with the Egyptian security services. Like other nations in the region, Egypt experienced

a series of damaging terrorist attacks in 2005. Egyptian counterterrorist and other security forces remain vital in working to defeat this common enemy.

E. Jordan

Jordan remains an invaluable and increasingly influential regional partner in the fight against extremism and in the achievement of regional stability. King Abdullah II is a leading voice for moderation and tolerance in the Arab world. The country's strategic location, influence, and well-developed security establishment give Jordan a regional voice of proportions much greater than its size would indicate. Jordan's highly trained and professional armed forces represent a positive example for other regional militaries. As economic reforms made in the late 1990s continue to generate respectable growth rates, Jordan's regional influence will increase.

Jordan has contributed significantly to our efforts throughout the region. For example, Jordan hosts important training schools for Iraqi military forces, air traffic controllers, and aviation inspectors. These programs are major elements of our strategy to build competent and capable ISFs and may provide opportunities for broader training to help professionalize other regional security services.

The November 9, 2005, Amman suicide bombings by al Qaeda that murdered scores of Jordanians have had a deep effect on their views of terrorism and al Qaeda. It is clear that our programs of military and economic assistance remain vital. Jordan uses our assistance to strengthen its economy, modernize its armed forces, and improve regional efforts to defeat extremism. We will continue to focus our security assistance with Jordan to develop its peacekeeping and Special Forces capabilities, and to build intelligence sharing and personnel exchange programs in support of CT efforts.

F. Lebanon

With the departure of Syria's forces from Lebanon, the country has an opportunity to move in the direction of greater security and stability. The Lebanese and international outrage over the assassination of Prime Minister Rafik Hariri sparked a series of dramatic events: massive street protests, the withdrawal of Syrian forces, and the election of a parliament that is no longer beholden to Syria. Despite these positive developments, the situation in Lebanon remains tense, with Syrian intelligence activity continuing. There is continued concern about the delays in disarming militias, such as Hezbollah, as called for by U.N. Security Council Resolution (UNSCR) 1559, and the tacit acceptance by some elements of the Lebanese Government of Hezbollah's retention of its weapons, even as it participates in the political process. The continued existence of sectarian militias means that Lebanon remains at risk of internal conflict.

It is in the interest of the United States that Lebanon be stable and free of Syrian influence, and that its security forces are able to control its borders and maintain domestic order. We have planned a growing security assistance program with Lebanon that can help in fulfilling these goals. Our IMET program trains Lebanese officers at U.S. military schools. In 2006, we will work to further develop our support for and relationship with Lebanon's security forces.

G. Central Asian States

The Central Asia region is undergoing significant change, with Kyrgyzstan and Kazakhstan completing elections this past year, Tajikistan and Turkmenistan remaining stable, and Uzbekistan isolating itself from broader engagement. In a region at the crossroads between Europe and Asia, the stability and further development of transportation and energy networks is increasingly important for global economic health. CENTCOM continues to work to deepen our engagement with the states of Central Asia, assisting the security forces in the region to improve border security, CT and counter-narcotics capabilities, as well as enhance military professionalism.

Tajikistan, Kyrgyzstan, Kazakhstan, and Turkmenistan remain important partners, while our cooperation with Uzbekistan has waned in light of our departure from Karshi-Khanabad Airfield (K2). Kyrgyzstan's continued support for U.S. basing at Manas is an important part of sustaining operations in Afghanistan, as have been the overflight rights allowed by the other countries of Central Asia. Tajikistan's excellent support of ISAF logistics efforts has also been instrumental in stabilizing Afghanistan.

Radical Islamic extremism and terrorism, the drug trade, and corruption threaten regional stability and challenge the governments in the region. CENTCOM stands ready to help these governments address these transnational challenges through increased training and regional cooperation. Organized crime and extremism from groups such as al Qaeda and the Islamic Movement of Uzbekistan make threats of violence and intimidation a real concern for many. U.S. troop presence in the region,

whether through training exercises or at supporting bases for Afghanistan, helps give the people of the region confidence to resist such intimidation.

With a rapidly growing economy and increasingly professional military, Kazakhstan continues to emerge as a leader in the region. The pace and scale of its military reforms have been impressive. Kazakhstan's engineering troops continue to perform with distinction in support of Operation Iraqi Freedom (OIF). CENTCOM is assisting other countries, such as Kyrgyzstan and Tajikistan, in undertaking programs of military reform designed to increase the professionalism of their armed forces.

Despite its challenges, Central Asia is a region with much promise. The potential for significant economic growth throughout the region, to include Afghanistan, is substantial if the governments of the region maintain a focus on constructive economic and political reforms and stamping out corruption. Through military-to-military engagement, exercises, and training, we will continue to emphasize regional cooperation to help these countries take advantage of the growing opportunities in the region, and address the transnational threats that can undermine them. It remains important for the larger powers in the region to work cooperatively in Central Asia to achieve security goals. Nineteenth Century Great Power Games do nothing to enhance regional security.

IX. IRAN AND SYRIA

While the United States cooperates as a partner with the vast majority of the countries in the CENTCOM AOR to combat terrorism and extremism and provide essential stability, Iran and Syria stand out for their lack of cooperation. The actions of these repressive regimes have consistently been contrary to achieving stability in the broader region.

A. Iran

The situation with Iran is tense, and the possibility for miscalculation with U.S. forces remains high. CENTCOM forces in the region continue to watch Iran carefully to prevent any destabilizing activities that contribute to internal Iraqi or Afghan frictions, or threaten regional stability. Iran's quest for nuclear weapons capability is particularly troubling. Iran seeks "creeping normalcy" that will permit international acceptance of its nuclear fuel cycle, while buying time for potential covert nuclear activities. We believe that Iran's declared objective of self-sufficient nuclear fuel production is coupled with the ulterior goal of weapons production. Iran's withdrawal from the International Atomic Energy Agency's (IAEA) additional protocol or the NPT could decrease the timeline necessary to produce a weapon. A nuclear-armed Iran would dramatically increase instability in the region and could pressure other countries in the CENTCOM AOR to consider acquiring such weapons.

Iranian-sponsored activities in Iraq continue to be unhelpful. Iran is pursuing a multi-track policy in Iraq, consisting of overtly supporting the formation of a stable, Shia Islamist-led central government while covertly working to diminish popular and military support for U.S. and coalition operations there. Additionally, sophisticated bomb making material from Iran has been found in IEDs in Iraq.

While generally thought to be for defense, Iran continues to build a credible military capable of regional power projection. It has the largest military capability in the region and a record of aggressive military action in and around the Arabian Gulf. Its power projection capabilities stem primarily from its navy and ballistic missiles. Iran's military consists of over 350,000 personnel with an additional 300,000 trained Reserve/Basij Forces that could be mobilized in times of crisis. The Iranian Armed Forces include two distinct, parallel military organizations—the Islamic Revolutionary Guards Corps (IRGC) and the Regular military forces. Each controls its own ground, naval, air, and air defense forces and equipment.

In addition to defending against external threats, the IRGC also focuses on an internal security mission and is the lead Iranian agency for supporting terrorism. Competition between the IRGC and Regular forces for limited resources and competing chains of command make Iranian military intentions difficult to decipher. This heightens our concern for the potential for miscalculation with U.S. forces in the region.

Iran's ground forces are arrayed across the country with the majority of combat power along the Iran-Iraq border. The Iranian navies continue their rapid growth. The IRGC Navy has been developed primarily for the Strait of Hormuz scenario in which Iran would attempt to "internationalize" a conflict by choking off oil exports through the Strait. To disperse large quantities of recently purchased small boats, high speed missile boats, torpedo fast attack craft, and midget submarines, Iran has embarked upon an expansion project for naval bases throughout its littoral. Asym-

metric military strategies and naval force modernization, a key national priority, enhance Iran's capability for power projection in the region.

The IRGC Air Force maintains control over most of Iran's ballistic missiles and rockets. The accuracy and reliability of its rocket systems vary, but Iran is capable of targeting all Gulf States, the Arabian peninsula, Israel, and U.S. and coalition forces in the region with little warning.

In addition to Iran's conventional and ballistic missile capabilities, another lethal aspect of Iran's power projection is its ties to regional and global terrorism. Iran remains on the U.S. State Department's list of state sponsors of terrorism and provides extensive support to the Lebanese Hezbollah and several Palestinian rejectionist groups. Along with this support comes influence. Additionally, Iran's own intelligence elements are stationed throughout the CENTCOM AOR and beyond and are trained and prepared to execute terrorist attacks at the direction of Tehran.

As the diplomacy surrounding Iran's quest for nuclear weapons plays out, CENTCOM will continue to vigilantly monitor Iran's conventional force posture and maintain a strong naval, air, and ground capability to deter Iran from attempts at further destabilizing the region.

B. Syria

Despite reports of stepped-up activities by Syria's security establishment to interdict foreign fighters moving into Iraq, Syria remains the central transit point for al Qaeda's foreign fighter and suicide bomber network, which is responsible for the deaths of thousands of Iraqi civilians. As a repressive authoritarian state, the Syrian Government has the capacity to do more to pressure the extremist network moving through its country. Moreover, it has done little to suppress the Iraqi Baathist insurgent and financial networks that continue to attack Iraqi Government officials, infrastructure, and military forces. Syrian support for Iranian meddling in Lebanon, and its own intelligence and intimidation activity in Lebanon, show Syria's establishment to be unwilling to play a constructive role in regional security.

During 2005, the international community insisted that Syria fully cooperate in the UN investigation of the assassination of Prime Minister Rafik Hariri in which it appears that Syrian officials were complicit. Syria remains a designated state sponsor of terrorism, providing support to Palestinian terror groups and others. Syria also maintains a chemical weapons and ballistic missile capability that is one of the most lethal in the region. Syria's conventional forces, while much-deteriorated over the past decade, nevertheless represent a capability to interfere overtly with the security of its neighbors. As with Iran, CENTCOM tracks and monitors Syrian capability and retains sufficient combat power to deter aggressive Syrian behavior.

X. CRITICAL MISSION ENABLERS

Several critical mission enablers provide CENTCOM troops ways to enhance operational success. These include a strong coalition of allies, interagency coordination, intelligence, logistics, strategic sealift and inter- and intra-theater airlift, communications, personnel, flexible spending, and strategic communications.

A. A Strong Coalition

Our coalition partners continue to make essential contributions to successes throughout the region. The combined participation, efforts, and coordination of over 90 nations send a clear message about the global importance of operations against extremism and terrorism. We will continue to draw on our allies' substantial strengths as we further develop the capabilities of the Iraqi government and its security forces, while reshaping the coalition as the ability of the Iraqis to provide their own security increases. Similarly, as Afghan security capacity grows and NATO–ISAF's role increases, the OEF coalition will adapt.

To fully optimize coalition operations, we must minimize the operational and informational seams between national forces, while increasing the flexibility of U.S. policies to reflect new and unique information sharing requirements, particularly with regard to intelligence. The United States will continue to explore ways to expand the scope of the coalition, further internationalizing efforts throughout the region while maintaining an adaptive command structure and force posture as international roles change. As America and our partners continue to pressure al Qaeda and associated extremists, it is important to emphasize the global scope and duration of this threat and endeavor to create a coalition with a long-term horizon, supported by U.S. and partner nation interagency organizations.

B. Interageny Coordination

Success against the extremists and terrorists who threaten our Nation requires the integration of all instruments of national power at all levels—tactical, operational, and strategic. At the tactical level, our Joint Interagency Task Forces have successfully leveraged national assets on successful missions to disrupt terrorists' finances and kill and capture terrorists and former regime leaders in Iraq. PRTs in Afghanistan, with representatives from the military, the State Department, United States Agency for International Development (USAID), and United States Department of Agriculture (USDA), have been critical to developing and expanding the capabilities of the Afghan Government, while similar interagency teams are beginning to operate to some extent in Iraq. We will continue to explore new models to better synchronize interagency efforts throughout the region and work to expand the operations and agencies in CENTCOM's Joint Interagency Coordination Group.

Substantially more work, however, is needed for increased interagency coordination at higher levels of government and for insuring unity of effort. We need significantly more non-military personnel in the CENTCOM AOR with expertise in areas such as economic development, civil affairs, agriculture, and law. As the focus of operations in the CENTCOM theater has shifted away from sustained combat to counterinsurgency, security force training, and economic development, individuals with such expertise have become increasingly important. Even a small number of individuals from the State Department, USDA, or USAID on the ground and working closely with CENTCOM forces can have dramatic impacts on operations throughout the region. The long-term commitment of fuller interagency participation in the region is essential.

C. Intelligence

Precise intel-driven action is a central component to defeating insurgents and terrorists. Our "find, fix, finish" targeting equation, while the best in the world, is out of balance. We have plenty of "finish" forces, but insufficient "find and fix" assets to locate an asymmetric, hidden enemy. Intelligence, planning, and operations must be tightly fused together without gaps and seams to enable agile, decentralized friendly action. Close interaction with our partners from the Central Intelligence Agency, National Security Agency, Federal Bureau of Investigation, and other agencies has helped to secure timely and accurate intelligence necessary for successful operations. However, limitations in several of our key capabilities continue to pose challenges.

A common information network that is accessible and available to all of our Coalition and agency partners is critical to battlefield success. Our experiences highlight the importance of an established interoperability standard for all intelligence systems that can function in a joint and combined environment. Solutions for this are hardware, software, and policy based.

Current theater collection capabilities are insufficient to meet our large and growing requirements. There is a need for persistent surveillance which provides actionable intelligence for our forces. Unmanned Aerial Vehicles (UAVs) such as Predator and Global Hawk offer some solutions to persistent surveillance. While UAVs have transformed the battlespace, and the demand for their capabilities at all echelons is significant, we realize the need to develop an integrated architecture of many sensors to support operational units. Intelligence, surveillance, and reconnaissance (ISR) activities support all types of operations, to include developing targets, providing overwatch for convoy patrols, and monitoring main supply routes for IED emplacement.

Manned aircraft are also critical to our gathering of timely and accurate intelligence. The U–2 aircraft has the unique capability of providing flexible, long-dwell coverage over large areas, making it indispensable for CENTCOM. Sustained moving target indicator coverage, primarily contributed by Joint Surveillance Target Attack Radar System (JSTARS), helps to shape border security operations and interdict enemy movements. The P–3 Maritime Patrol and Reconnaissance Aircraft are important in monitoring oil infrastructure security, shaping battlefield operations, and interdicting enemy movements in the maritime battlespace.

Finally, we continue to experience a significant shortage of intelligence specialties such as analysts, translators, interrogators, and interpreters. We are working with the services to develop more of these specialists, but the supply is well short of demand for CENTCOM-identified requirements. Among other things, linguists are needed to fuse collected signals intelligence and HUMINT, particularly in high-demand languages such as Arabic, Farsi, Dari, and Pashtun. Counterintelligence (CI) and HUMINT specialists are needed to fully exploit captured operatives, foreign fighters, and documents. Investing now in these critical intelligence specialties,

many of which take years to mature, will better prepare us for the long conflict ahead.

D. Logistics

Strategic airlift, fast sealift, prepositioned equipment sets, and access to bases with critical infrastructure are the key logistics components to operational flexibility and success for the widely diverse requirements across the CENTCOM AOR. The timely deployment, equipping, and sustainment of units engaged in combat operations remain our primary logistics focus.

We continue to work with the Joint Staff, DOD, the Department of State, and partner nations to ensure continued access to aerial and seaport infrastructure necessary to facilitate the rapid and efficient flow of equipment, troops, and sustainment in support of ongoing and future operations.

The CENTCOM Deployment and Distribution Center continues to mature and provides critical unit deployment and sustainment information that enables timely and effective distribution operations across the AOR. CENTCOM is working to transform and enhance its theater logistics infrastructure and processes to provide seamless end-to-end visibility for all phases of operations. Our intent is to leverage ongoing DOD-wide logistics transformation initiatives in order to "right size" the theater logistics force.

E. Strategic Sealift and Intra-Theater and Inter-Theater Airlift

Strategic airlift and surge sealift capacity are essential to the CENTCOM strategy. Our warfighting partnership with United States Transportation Command (USTC) continues to provide that capability. Ongoing CENTCOM operations and future plans rely heavily on a rapid flow of forces and materiel into the theater to meet an array of challenging contingencies. For example, the immediate and substantial humanitarian response to the earthquake in Pakistan could not have occurred without such capabilities. In every major conflict fought in the AO, large numbers of troops and equipment required substantial airlift, sealift, and time to move.

As of February 2006, over 2.9 million personnel and 149 million square feet of cargo have been transported into the CENTCOM AOR in support of OEF and OIF. Sealift provided by USTC's Military Sealift Command and its commercial partners is the primary means for the transportation of equipment and sustainment supplies into the AOR. C–17 aircraft, together with the air refueling tanker fleet, form the backbone of the strategic airlift supporting CENTCOM operations. The C–17's performance and versatility, in particular, have been outstanding. Current sea and airlift, when linked to forward deployed equipment sets and pre-staged shipping give CENTCOM considerable operational flexibility.

F. Communications

Flexible, high capacity, interoperable communications systems are essential to operations throughout the theater. CENTCOM systems are pushed to their limits daily, and requirements continue to increase dramatically. Many of these requirements are satisfied by costly and vulnerable commercial services.

Our Joint C4 architecture needs to be built from the bottom up. We spend significant time, energy, and money on patching together the different systems from separate Services. This is an inefficient way to leverage what should be a significant comparative advantage in decision making capability over the enemy. Due to a lack of common secure network standards for information assurance, CENTCOM uses many applications and systems that have proprietary standards. These introduce vulnerabilities into our networks. Hackers and malicious code activity pose a constant threat of system exploitation and data-exfiltration. While CENTCOM lacks adequate monitoring tools to manage the theater network, we have implemented numerous processes and procedures to mitigate network risks.

U.S. and coalition forces depend on strategic and tactical satellite communications due to immature terrestrial capabilities in theater. Intra-theater communications are critical for sharing persistent surveillance and intelligence data, and total bandwidth requirements continue to grow at an exponential rate. However, end of life-cycle and ongoing degradation of Military Satellite Communications (MILSATCOM) constellations threaten to limit our capabilities. We need MILSATCOM that provides transformational capabilities to rapidly disseminate time-sensitive instrumented sensor technology data which can provide our deployed forces with reliable "comms-on-the-move" capabilities regardless of location and interoperability between U.S., Coalition, and host nation communication systems.

New technology, to include new counter-IED technology, and a reliance on wireless systems increase the need for comprehensive spectrum management. We must achieve and maintain "spectrum superiority" by denying enemy access and ensuring

that our systems operate in an interference-free environment. Because we lack automated capability to dynamically manage the spectrum at the tactical level, we must focus on training spectrum managers in all Services and equipping them with the right tools.

G. Personnel

The most important weapon in CENTCOM's arsenal is our people. The majority of CENTCOM forces are deployed forward in combat zones. Consequently, quality-of-life enhancements for deployed forces and families such as Combat Zone Tax Relief and Imminent Danger Pay are important and contribute significantly to our servicemembers' quality-of-life and morale. The Rest and Recuperation Leave Program continues to be a major success, serving over 290,000 troops to date. Special Leave Accrual has been important to our long-deployed servicemembers. The increase in the Serviceman's Group Life maximum coverage to $400,000 and the death gratuity increase to $100,000 for combat zone deaths contribute to the well-being of our service families.

We continue to focus on policies that attract talented personnel to our headquarters and reward joint tours. We support full joint credit to qualified officers who serve a 1-year deployment to a CENTCOM joint task force headquarters. Additionally, to provide a more efficient environment for our Headquarters staff, we are working with the U.S. Air Force and DOD to conduct necessary refurbishment and expansion of our Tampa facilities.

CENTCOM is coordinating with force providers to address high demand personnel requirements across the theater. As noted above, in 2006, we will continue to experience a significant shortage in intelligence specialties, linguists, and CI/HUMINT experts. Additional funding for contract support might meet immediate requirements in these areas. However, there is an enduring need for greater service school generation of such specially trained personnel who play a vital role in counterinsurgency and counterterrorist operations throughout the theater.

H. Flexible Spending Authority

CENTCOM relies on continued congressional support in providing the flexible legislative authorities and funding necessary to fight our enemies throughout the AOR. The Commander's Emergency Response Program (CERP) remains the most direct and effective non-kinetic tool available to our commanders in the counterinsurgency fight. Providing a highly agile means to meet immediate needs for civic cleanup, potable water and sanitation, and agricultural projects, CERP builds good-faith relationships with the Iraqi and Afghan people. For fiscal year 2005, $718 million in Iraq and $136 million in Afghanistan was used by U.S. and coalition forces to assist in reconstruction. Additional funding in the supplemental is necessary for this important program. At the same time, funding for the highly-successful DOD Rewards Program remains important. This program has yielded information leading to the capture of many terrorists and insurgents. A 400 percent increase in the number of rewards paid from fiscal year 2004 to fiscal year 2005 demonstrates strong local support for this program. Additionally, Coalition Support Funds (CSF) and the Section 9009 authority allowing DOD to provide transportation and sustainment support to selected Coalition countries remain essential to building and maintaining our Coalition partnerships.

Continued congressional support is also needed to establish and maintain infrastructure and facilities throughout the theater. Additionally, continuation of contingency construction authority is essential to providing the flexibility to meet infrastructure requirements for our commanders.

I. Strategic Communications

The effective communication of CENTCOM's vision of partnership and a stable and secure region to a global audience remains a key mission enabler. Our communications strategy must be closely coordinated with interagency counterparts to effectively convey the United States Government's intentions, accomplishments, and goals. But it is also essential that the USG work to expose the enemy's ruthless tactics and dark vision for the future. Increased interagency coordination and resources will significantly enhance our ability to win the war of ideas.

XI. STRATEGIC ISSUES

The following strategic issues are highlighted because they significantly impact both our current and future ability to fight wars and defeat the terrorists and extremists who threaten our country.

A. Counter-IED and Force Protection

Our enemies understand that they cannot confront us face-to-face and survive, so they increasingly rely on IEDs and suicide bombers to attack our forces, our partners, and civilians. IEDs are the single greatest source of our casualties and remain the enemy's most effective weapon. They are the perfect asymmetric weapon—cheap, effective, and anonymous. The enemy intends to use IEDs and suicide bombers to achieve strategic effect, creating casualties and media impact to promote the perception of insecurity and erode public support for the mission. IEDs have proliferated and become increasingly lethal, with technology and tactics available on the internet. They have been used in Iraq, Afghanistan, Pakistan, Egypt, and Saudi Arabia.

Force protection remains a top priority throughout CENTCOM's area, and American commanders in the region are aggressively engaged in programs to safeguard our forces, their vehicles, their bases, and their living areas. These programs include providing individual body armor to every soldier and civil service employee in Iraq and Afghanistan. We also continue to produce up-armored high-mobility multi-wheeled vehicles through the assistance of supplemental funding; over 10,000 such vehicles have been delivered to the Iraq theater. Further, we have fielded thousands of IED counter-measure devices, employed innovative counter-IED technologies, enhanced training, and focused our intelligence efforts on the IED challenge.

While we have done much to counter the enemy's use of IEDs, especially in Iraq, significant work remains including much that resides beyond the realm of CENTCOM. The Joint IED Defeat Organization headed by retired General Montgomery Meigs is a good beginning to mobilize our country's vast resources to address this problem, but national efforts should build upon, not end, with this office. Government and private sector research and development must be marshaled against this threat. Such an effort is necessary to comprehensively counter this serious threat to our troops that will undoubtedly spread beyond the CENTCOM region.

B. Contesting the Virtual World

Much of this statement has emphasized the need to prevent al Qaeda and associated movements from gaining physical safe havens from which to conduct military training, propaganda operations, and plan future terrorist attacks. Whether with smart bombs or SOFs, the U.S. military has the capability to destroy such safe havens as long as we have target information on them. We and many of our partners have done this in Afghanistan, Iraq, and other places around the globe. That is why the enemy is much more reluctant to mass in physical safe havens for very long. Al Qaeda knows that they are vulnerable in such areas.

But there are other safe havens used by the enemy that are truly safe. These are places where al Qaeda also conducts military training, propaganda operations, and plans for future terrorist attacks. It is also where they do most of their fundraising. It is the virtual world. This safe haven of Web sites and the internet is proliferating rapidly, spreading al Qaeda's hateful ideology well beyond its birthplace in the Middle East. Parts of Europe, for example, have now become intellectual hubs of extremist Islamic thought, largely because of the internet and lax government policies regarding extremist activities. Yet we have done little to contest these safe havens, even though they are at least as dangerous to our security as the enemy's physical sanctuaries have been.

We recognize that this is a contentious matter with a variety of important issues at stake. CENTCOM does not advocate "shutting down the internet," but we must recognize that failing to contest these virtual safe havens entails significant risk to our Nation's security and the security of our troops in the field. Should internet servers based in America be allowed to enable terrorists to show the bloody decapitation of an innocent American citizen to tens of thousands of extremists worldwide? As a government, we need to come to terms with the issues raised by such a question.

C. Detainees

An essential part of our combat operations in both Iraq and Afghanistan entails the need to detain enemy combatants and terrorists. Ultimately, detainees are best handled by host governments, but at the current time neither Iraq nor Afghanistan has the institutional capacity to accomplish such tasks. Military resources continue to be heavily taxed by guarding, caring for, and processing detainees.

By following up on cases of suspected, alleged, or actual detainee abuse, most notable at Abu Ghraib, we continue to make improvements regarding detainee operations. We have expanded senior leader oversight across the theater, intensified training of personnel, and conducted frequent inspection visits. But the military has less control over the next steps, which involve getting key states of the region to

take responsibility for the arrest, detention, trial, and incarceration of terrorists and criminals. The biggest impediment to making progress on the detainee issue is the lack of an institutional capacity—prisons and adequate justice systems based on the rule of law—to process and confine criminals and violent terrorists. A coordinated approach among United States Government and international agencies with the relevant expertise to accelerate efforts to help Iraq and Afghanistan build the legal and judicial institutions is needed. The rule of law must be applied in both Iraq and Afghanistan in order for successful counterinsurgency activities to bear fruit.

XII. JOINT WARFIGHTING

The essence of CENTCOM's mission is joint warfighting. All operations are enabled by joint capabilities, as are our major headquarters. It is difficult to imagine fighting other than as a joint team. It is important that the Services increasingly train their soldiers, sailors, airmen, coastguardsmen, and marines in the same way they will fight—jointly. As CENTCOM heads toward its sixth year of sustained combat operations, we have had successes and setbacks, and have tried to learn from them. A few are worth emphasizing.

- *Precision Warfare.* Precision in timing and location are more important than firepower, mass, and maneuver. All our forces operate today with a degree of precision that was the hallmark of only our SOFs just a few years ago. Especially in counterinsurgency and counterterrorism campaigns, precision operations conducted by agile, flexible forces that can adapt while in contact are a key to success.
- *Fusion of Intelligence and Operations.* Precision operations are intelligence-driven. As noted above, we need to rebalance our "find, fix, finish" targeting cycle. We need to improve our intelligence capabilities across the spectrum, including ISR platforms, linguists, analysts, and CI/HUMINT specialists. Although we have made dramatic strides in ops-intel fusion, we need to continue to make advances in this critical area, particularly at the conventional force level.
- *Joint Command and Control.* We have learned that establishing early the appropriate command and control structures across the theater is a key to effective operations. The three Joint Task Forces in CENTCOM's theater and our five component commands provide the expertise for planning, executing, and integrating the diverse array of complex joint and multinational operations we conduct.
- *Asymmetric Warfare and the Lack of Neutrality on the Battlefield.* We are in an era of asymmetric warfare. What is less understood is that the historical idea of neutrality on the battlefield does not exist in the mind of the ruthless enemy we fight. Al Qaeda extremists target U.N., nongovernmental organizations (NGOs), and aid workers, as well as contractors, and anyone else who does not accept their fanaticism. This new reality on the battlefield may require deeper cooperation between the NGO community and coalition forces. NGOs do not have to give up their neutrality, but they need to be mindful of the increased risks they face on the battlefield.
- *Respect and Knowledge.* Much of the broader struggle in the region is about respect. The vast majority of the people in the region want the same things that most Americans do—an opportunity for a better life for their families and children. Compared with the overall population, the number of extremists in the region is small, the number of terrorists even smaller. As emphasized throughout this statement, we are developing strong partnerships with the peoples and governments of the region to together defeat al Qaeda and associated movements. To bolster this strategy, we should undertake many more cultural and educational exchanges between Americans and citizens from the Middle East. The more we understand and respect each other, the better. We must also mobilize our country's resources, both military and civilian, to better understand the region and the extremist enemies we face. During the Cold War, the U.S. military had tens of thousands of experts on the Soviet Union, the Warsaw Pact, Russian language, and the ideology of communism. Today, those who know about Islam, the Middle East, speak Arabic, and understand al Qaeda's perverted ideology are far fewer in number.
- *Adapting Our Cold War Structures.* The essential ingredient for all our battlefield success is the quality of our young servicemembers and leaders. We must retain this force that enables the joint team with their flexibility, adaptability, and professionalism. Beyond this, however, we need to adapt our authorities, organizational structures, doctrine, training, and equipment

to confront the 21st Century battlefield. In CENTCOM we say "it takes a network to defeat a network," meaning that defeating al Qaeda requires us to rethink how we operate in Joint, interagency, and coalition teams. We have only begun this adaptation and it remains a priority for prosecuting this war effectively.

XIII. CONCLUSION

In 2006, the United States and its allies will seek to help the people of the CENTCOM region build upon the positive strategic developments that occurred in the theater during 2005. CENTCOM will remain fully committed to defeating extremist-inspired terrorism across the region. We will remain focused on helping the people and armed forces of Iraq and Afghanistan stabilize their countries, and providing assistance to Pakistan and Saudi Arabia that enables them to help themselves against their extremist threats. With our significant military capabilities throughout the region, we will work to deter Iran from threatening regional stability and security, and set conditions to continue the free flow of energy resources from the region. As always, we are mindful that it is the exceptional performance and courage of our troops in the field who make achieving these goals possible.

With our numerous allies in the region, we are implementing a strategy based on partnership and shared interests to defeat al Qaeda and associated extremists throughout the region. Victory in this long war will come slowly and subtly, but we are winning. We will prevail, in the same way our country mobilized its vast resources, talented citizens, and global allies to face down the fascist and communist threats of the last century. The patience and support of the American people and Congress will be critical in bringing about this victory.

Senator INHOFE. Thank you, General Abizaid.

General Brown.

STATEMENT OF GEN BRYAN D. BROWN, USA, COMMANDER, UNITED STATES SPECIAL OPERATIONS COMMAND

General BROWN. Mr. Chairman, Senator Levin, distinguished members of the committee: It is an honor to appear before the committee today to report on our Nation's Special Operations Forces (SOFs). With your permission, Mr. Chairman, I will make some remarks and I have included a written posture statement for the record.

It is an honor to be here with my good friend and fellow combatant commander General John Abizaid. I would also like to introduce the new SOCOM Senior Enlisted Adviser, a career Special Forces noncommissioned officer (NCO), Command Sergeant Major Tom Smith.

This is the most dynamic and successful time in the history of SOFs across the spectrum of our missions. The nature of the enemy has changed significantly and so has United States SOCOM. The bottom line is SOFs are far more capable than at any time in their history, but not as capable as they will be as we continue to grow and focus on the global war on terrorism.

Today we continue our increasingly important role of training, organizing, and equipping our forces as directed by Congress in the Nunn-Cohen Amendment and we are continuing to do it very well. But in addition we are also effectively accomplishing our global warfighting role. In the 2004 unified command plan, signed in March 2005, the President directed United States SOCOM to be the Department of Defense (DOD) lead combatant commander for planning, synchronizing, and, as directed, executing global operations against terrorist networks. These dual roles make SOCOM unique in the DOD.

Simultaneously, we are managing the biggest deployment of SOFs in history—over 7,000 forces deployed today, with nearly 90 percent of them in the CENTCOM AOR. For the United States SOCOM, that is big. The people of SOCOM are doing it all and they are doing it well. The proof is the great success we have had in CENTCOM and around the world.

Terrorists find sanctuary in seams of societies and exploit ungoverned regions where nations are either unwilling or unable to stop terrorist activities. They are masters of information and are able to coordinate their efforts globally through a decentralized network. SOFs will continue to play an important role addressing security concerns in these ungoverned spaces and help build the capacity of our partner nations to defeat terrorism within their own borders.

As this capacity builds, our partner nations will have a greater role in the war on terror. SOFs will work with our partner nations to find terrorists, disrupt and destroy their networks, deny them sanctuary and new recruits, and finally eliminate terrorism within their own borders. One area where this is evident is Iraq, where SOFs have selected and trained the Iraqi counterterrorist force (ICTF). In a little over a year, this force has become one of the best counterterrorist forces in the region. Just this month, the ICTF conducted their first brigade-level full mission profile hostage rescue of a captured Iraqi general. As in other nations, establishing and training effective counterterrorism forces will be critical to their future security.

Since 2001 U.S. SOCOM has been the focus of at least five major studies, most recently the Downing Report, and have been mentioned in many, many more. The bottom line is they all say SOCOM is on the right track, supporting our troops and our future, that we have made impressive gains since 2001, that we have built the right processes, written the plans, and are synchronizing the DOD's global war on terrorism.

But let me highlight: No combatant commander is waiting on a plan. They are all fighting al Qaeda and the terrorist networks around the world every day and having success. Our planning efforts will make it better.

The 21st century has changed the battlefield on which we operate. Even the word "battlefield" does not necessarily apply. To meet the demands of the global war on terrorism, SOCOM, prior to the QDR, identified key areas for future growth in personnel and capabilities. Subsequently, the QDR validated our growth strategy, directed SOCOM to grow by nearly 13,000 people, and we think in all the right areas.

This includes five SOFs battalions, who are the key to our unconventional warfare capability. As highlighted in the Downing Report, our unconventional warfare capabilities have improved dramatically and we have a renewed emphasis on developing unconventional warfare skills for what we believe will in fact be a long war.

The QDR increases also include growth in our Army Rangers, our Naval Special Warfare Command, significant increase in intelligence, surveillance, and reconnaissance capabilities, including signals intelligence, and the addition of a new Predator squadron in

our Air Force Special Operations Command. Growth in our Theater Special Operations Commands, and dramatic growth in our civil affairs and psychological operations units, two forces that we see as critical enablers in the most important areas of our strategy in the global war on terror as they provide unique capabilities disseminating truthful information, helping to eliminate the underlying conditions that lead to terrorism.

Three weeks ago we activated SOCOM's newest component, the Marine Corps Special Operations Command (MARSOC), which will eventually add 2,600 marines and key capabilities to SOCOM for the long-term global fight.

To ensure we continue to grow well-qualified forces, keep the Special Operations standard, and get special operators to the battlefield rapidly, we have dramatically enhanced our training institutions. For example, prior to September 11 the John F. Kennedy Special Warfare Center had an average production of 350 Active-Duty enlisted students per year. To meet the critical need for SOFs in the global war on terrorism, Army SOCOM completely restructured the course in 2004. We added significant resources, increased the language requirement for graduation, and set a new goal of 750 students by 2006, an ambitious goal and one that we surpassed in 2005, graduating 791 enlisted Green Berets, all at a higher standard of excellence than any previous graduates.

This growth is vital. For the near future, aggressors would be foolish to take on our world-class Army, Navy, Air Force, and Marine Corps. Therefore they will use asymmetric warfare, and SOFs are your asymmetric capability. SOF-unique skills will be critical for the long-term fight.

Today United States SOCOM is partnering with the unified combatant commanders, our allies, and the interagency to build a foundation for a world that will be inhospitable to terrorism. Our responsibilities to train, organize, and equip SOFs, when combined with our authorities to lead the plan for the global war on terrorism, make SOCOM unique.

I want to thank you, the members of the Senate Armed Services Committee, for your continued support of our soldiers, sailors, airmen, and now marines, and our great DOD civilians and our SOCOM families. The support of this committee, including your field visits and those of your staffers, and the support of the Secretary of Defense help ensure United States SOCOM remains the world's most capable special operations force. I look forward to answering your questions. Thank you.

[The prepared statement of General Brown follows:]

USSOCOM Vision Statement

"**To be the premier team of special warriors,** thoroughly prepared, properly equipped, and highly motivated: **at the right place, at the right time, facing the right adversary,** leading the Global War on Terrorism, accomplishing the strategic objectives of the United States."

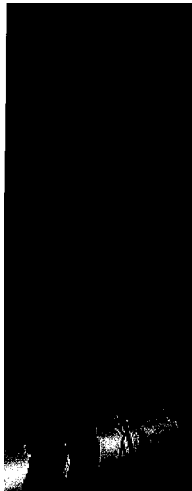
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EXECUTIVE SUMMARY

United States Special Operations Command (USSOCOM) has undergone an unprecedented transformation in the last three years: from a force provider to a combatant command with global responsibilities leading the War on Terrorism. Enabled by Congressional and Department of Defense support, USSOCOM has increased resources, manning, training, and capability. These increases, coupled with four years of combat experience and an imaginative vision, have created the most lethal and agile Special Operations force in history. Focused on developing the specific skills required for the Global War on Terrorism, USSOCOM shifted funding from large programs to enhanced training and equipment for the **SOF Warrior**: Global scouts with specialized skills to locate, identify, and defeat our adversaries. This remarkable transformation shaped the Command into a Combatant Headquarters uniquely capable and postured to lead the Department of Defense in the Global War on Terrorism, while producing the most capable Special Operations Forces ever.

Special Operations Forces (SOF) are in Afghanistan and Iraq defending our Nation against terrorism on a daily basis. However, it is Special Operation's unique, but less visible, ability to help establish the conditions to counter and defeat terrorism through **Unconventional Warfare**, **Psychological Operations**, **Foreign Internal Defense**, **Special Reconnaissance**, and **Civil Affairs** that will become increasingly vital to our long-term success in the Global War on Terrorism (GWOT). USSOCOM recognizes that the United States is engaged in an extended, global campaign that requires the unique skills of special operations, as well as the strengths of our conventional military forces, government agencies, and our international partners. As a combatant command with a worldwide mission, USSOCOM's perspective is not constrained by geography. The Command's strategic campaign plan incorporates all Department of Defense (DoD) capabilities and recognizes the need for extensive interagency and partner nation participation to achieve final victory.

The **SOF Warrior** is the key to Special Operations' tremendous success both now and in the future. The human being is SOF's primary weapons system and the focus of USSOCOM's resources. Specially assessed and selected, mature, innovative, regionally oriented, and culturally attuned special operators are the best force to take on the Global War on Terrorism across the full spectrum of conflict. Enabled by unparalleled training and a dynamic acquisitions process that provides world class equipment, the **SOF Warrior** is a dominant force on today's battlefield.

To understand special operations it is imperative to start with its tenets: the four **SOF Truths**. These truths provide the guiding principles for the Command.❖

- Humans are more important than hardware
- Quality is better than quantity
- Special operations forces cannot be mass produced
- Competent special operations forces cannot be created after emergencies occur

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LEADING THE GLOBAL WAR ON TERRORISM

In 1986, Congress created the United States Special Operations Command, a uniquely qualified, joint force, to deal with emerging terrorist threats. In doing so Congress established a command with the specialized skills and global perspective the United States would need 15 years later to defeat a threat on a global battlefield on a scale unimaginable at the time. Today, USSOCOM is a leader in DoD's efforts in the Global War on Terrorism, defending our freedom and way of life far forward, and helping to ensure the security of the United States and its allies.

Global War on Terrorism
Readiness
Building SOF's Future

A Global Enemy

Organizations, and in some cases individuals, with global reach have established diverse, worldwide networks, with links to other terrorist groups, state sponsors, criminal enterprises, and organizations willing to provide support. These networks are self organizing and dispersed, comprising formal, informal, family, and cultural associations tied by varied and sometimes near-invisible links. They exploit the vulnerabilities of free, open, and democratic societies and find safe haven by taking advantage of seams in nation states' policies and infrastructures. Networked cells are led by motivated, well-trained, yet easily replaced, leadership and operatives. They rely on robust communications through cellular phones, the internet, and courier networks and receive financing through legitimate and illicit businesses and charities.

However, terrorist groups are not invincible; they have vulnerabilities that can be used to defeat them. Their ability to move undetected around the globe is decreasing as they leave "trails" that can be tracked. Terrorist financial and communications networks can be disrupted and exploited. Their power to motivate and recruit new zealots can be reduced or eradicated by addressing the underlying conditions that make individuals susceptible to terrorist recruitment.

Critical to the United States' success in the GWOT is the ability to find, fix, and finish terrorists, disrupt or destroy their networks, and deny them sanctuary and new recruits. To do this, all facets of the terrorist threat must be understood: their ideologies, their leaders, their organizations, their methods of communication, their supporters and those who finance terrorist activities, and the emerging terrorist organizations of

tomorrow. Within DoD, SOF have the unique skills and cultural understanding to effectively engage today's primary and most dangerous terrorist threat—transnational terrorism, particularly the al-Qaida network. USSOCOM has developed a list of high priority and priority countries to precisely employ limited SOF assets and focus regional intelligence, planning, and DoD operations to most effectively defeat this threat.

Taking the Lead

After the terrorists attacks of September 11, 2001 USSOCOM took the lead for DoD in defeating the Taliban in Afghanistan. In 2004, the President and Secretary of Defense gave USSOCOM the lead in the Global War on Terrorism. Today, al-Qaida is significantly weaker with its key leaders captured or killed, and its remaining leadership physically isolated as a result of the integration of DoD and interagency efforts and the might of the U.S. military, including SOF's unique skills.

To meet the challenge of leading DoD's efforts, USSOCOM transformed the headquarters' focus from primarily resourcing into a combatant command with a strategic global perspective. Within the structure of the National Counterterrorism Center's National Implementation Plan, and the National Military Strategic Plan for the War on Terrorism, the Command developed a comprehensive plan addressing terrorism on a global scale, which today serves as the foundation for DoD's effort in the GWOT. In addition, USSOCOM developed new organizations such as the Joint Psychological Operations Support Element, the Joint Intelligence Operations Center, and a robust exercise program to promote interoperability, coordination, and communication between all levels of government. USSOCOM's leadership, vision, and initiative in prosecuting the GWOT was validated most recently by retired General Wayne Downing's November 2005 Special Operations Assessment as well as by five other major studies since September 11, 2001.



After 9/11 the President and the Secretary of Defense directed significant expansion of USSOCOM's authorities to enhance the Command's ability to employ its forces. In order to implement these new responsibilities, USSOCOM established the **Center for Special Operations** (CSO) which blends the functions of intelligence, operations, and long-range planning and strategy into a single directorate to eliminate stove pipes and capitalize on the natural synergy created when these functions are collocated under a single director. The CSO's joint staff, augmented with interagency liaisons, was designed to exercise command and control of USSOCOM's war on terrorism operations.

The President further expanded USSOCOM's responsibilities in the 2004 Unified Command Plan (UCP), to "serving as the **lead combatant commander** for planning, **synchronizing**, and as directed, executing global operations against terrorist networks in coordination with other combatant commanders." The addition of **synchronization** responsibility enables USSOCOM to arrange military actions to ensure the optimum employment of force. This authority

> The arrangement of military actions in time, space, and purpose to produce maximum relative combat power at a decisive place and time.
>
> *Joint Publication 1-02*

combined with USSOCOM's global mission makes USSOCOM a combatant command able to affect military action on a global scale, across all geographic boundaries. USSOCOM then redirected its Center for Special Operations to develop a global perspective on terrorism, serve as the Command's link to other government agencies, coordinate USSOCOM's efforts with the overall U.S. strategy. Its crowning achievement is the creation of a DoD global campaign plan to defeat terrorism with significant interagency involvement. This plan is being used as the overall U.S. military strategy to combat terrorism and has the potential to serve as the framework for assigning resources (people, equipment, and money) for the long-term fight to defeat terrorism globally.

In this new GWOT role, USSOCOM's specific responsibilities include:

- Integrating Department of Defense strategy, plans, intelligence priorities, and operations against terrorist networks designated by the Secretary of Defense
- Planning campaigns against designated terrorist networks
- Prioritizing and synchronizing theater security cooperation activities, deployments, and capabilities supporting campaigns against designated terrorist networks in coordination with the Geographic Combatant Commanders (GCCs)

USSOCOM leads, plans, synchronizes, and, as directed, executes global operations against terrorist networks.

USSOCOM trains, organizes, equips, and deploys combat-ready special operations forces to combatant commands.

- Exercising command and control of operations in support of selected campaigns, as directed
- Providing military representation to U.S. national and international agencies for matters related to U.S. and multinational campaigns against designated terrorist networks, as directed by the Secretary of Defense
- Planning Operational Preparation of the Environment (OPE); executing OPE or synchronizing the execution of OPE in coordination with the Geographic Combatant Commanders

These new responsibilities for **synchronizing the Department of Defense's effort** for the Global War on Terrorism are in addition to USSOCOM's unique legislated responsibilities as a combatant command to train, organize, equip, and provide combat-ready SOF to the Geographic Combatant Commands. Consequently, USSOCOM is the only combatant command that can directly adjust its training, reorganize its units, and directly provide the **SOF Warrior** with the necessary equipment to be successful in response to changing world events. This unique combination of authorities allows USSOCOM the flexibility to tailor its force to meet emerging threats **whether** emphasizing **Unconventional Warfare** today or shifting emphasis to provide specialized skills in support of conventional forces in the future.

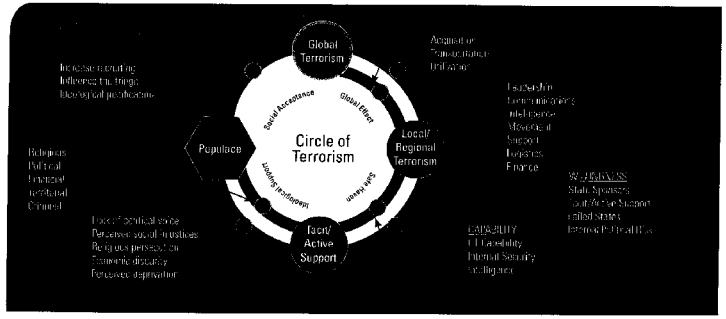
The Campaign Strategy

It is no longer the Command's intent to deploy, fight, and win "any place, any time." This concept did not reflect the need to judiciously use limited assets in a global conflict. Rather, the new vision expresses a need for low density, high demand SOF assets to be postured with a **"presence for purpose"**, to be at the "right place, at the right time, facing the right adversary." To achieve this posture, USSOCOM is developing a strategy to position SOF for an extended campaign.

Forward engagement with foreign governments and their militaries remains crucial to accomplishing this vision. Transnational terrorist organizations plan globally, resource regionally, and act locally. USSOCOM has enhanced SOF presence forward at key locations around the globe to work in unison with **Partner** and **Host Nation** militaries and their security forces to locate, identify, and defeat threats to their and our homelands. When terrorists attempt to exploit a seam and find sanctuary, SOF and their partners will be poised to act. This does not mean SOF need to be permanently forward deployed or based, but only that there is "presence for purpose": SOF engaged in key locations, for the right amount of time, to accomplish the desired mission.

Incorporating the **"presence for purpose"** concept, the Command crafted a campaign strategy as part of an integrated national strategy that, in coordination with other government agencies and coalition partners, provides the framework for the DoD's GWOT strategy. This plan is the foundation of the DoD's synchronized, comprehensive, and continuous global campaign that contributes to both the defeat of violent extremist organizations as well as the establishment and maintenance of a global environment inhospitable to violent extremism. This includes marginalizing extremist thought, providing a vision of hope, and creating conditions favorable to peaceful and just societies. USSOCOM's strategy has four guiding principles:

- Preventing the emergence of new terrorist threats
- Isolating terrorist threats from their support bases
- Defeating or destroying terrorist threats
- Preventing the reconstitution of threats once they are defeated



Training and Education

Assessment and Selection is the critical initial process by which candidates with the necessary aptitude and attitude are identified for entry into the Special Operations community. It is Basic Underwater Demolition/SEAL (BUD/S) training for Navy SEALs, the Special Forces Qualification Course (SFQC) for Army Green Berets, the initial selection phase for Air Force Combat Controllers and Pararescuemen, the special selection for the Army's Special Operations Aviators, and initial training teams—the "Green Team"—for many other units. It is the common starting point for all SOF warriors, including most support personnel. A relative few possess the essential combination of maturity, unfailing character, mental agility, physical strength, and an endless internal drive necessary for selection and future success as a **SOF Warrior** on the battlefield. Consequently, attrition rates are high, making growth a challenge.

In order to meet authorized future growth, USSOCOM and its components completely overhauled SOF accession schools, significantly increasing throughput capacity while maintaining the same high standards. In the case of the SFQC, a phased plan to increase Special Forces graduates was initiated in 2002 to grow from a 10-year average of 350 active duty enlisted graduates per year to 750 for FY 2006. However, in FY 2005 the SFQC produced 790 new Green Berets—exceeding the goal a year early. For the first few years, most of these additional Green Berets will go to fill vacant billets, returning Army Special Forces units to full strength. However, USSOCOM is now postured for additional future growth.



Special operations training takes mature SOF students and teaches them the unique skills to become regionally oriented, culturally attuned, and uniquely capable of operating in denied or sensitive

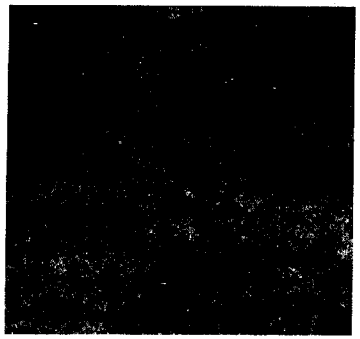


SEAL TRAINING

Unique to Special Operations is an assessment and selection process. It identifies those with the physical capacity and mental toughness, innovation, and character necessary to be successful while conducting a night-time direct action raid or meeting with the head of a foreign military while training his forces. For Naval Special Warfare, candidates are assessed during Basic Underwater Demolition / SEAL (BUD/S) training. A SEAL candidate will experience the ultimate physical and mental stresses during this 6-month course and will:

- Run 1,310 miles in sand wearing boots
- Swim 150 miles in the ocean
- Complete a 1/2 mile obstacle course 39 times
- Spend 57 hours submerged in cold water
- His class will fire 850,000 rounds and detonate 5,500 pounds of explosives
- Of the 166 men who start, only 35 will graduate

Only after completing these grueling phases will he earn the privilege of joining his team. Success comes from character — now he will have to employ these skills in combat.



The Long-Term Fight

USSOCOM is aggressively preparing for the future while fighting on today's battlefields and maintaining a presence and access in many places where there is no sound of guns. Realizing this is a long, global campaign, USSOCOM is looking beyond the immediate conflicts in Iraq and Afghanistan, posturing the Command for the long-term, to help ensure the continued security of the United States. Simply killing terrorists and repeatedly disrupting an ever-changing network poses a perpetual challenge and ultimately will not win the war. As we have seen over the last few years, new individuals fill vacant leadership positions and, even more troubling, new terrorist organizations continue to form and exploit conditions that are tolerant of extremism. In conjunction with conventional forces, SOF's actions on the battlefield today are keeping terrorism at bay and provide the room the U.S. Government needs to focus **all instruments of national power** on eliminating the underlying conditions which allow terrorism to prosper.

Long-term success rests on the ability of the United States and our allies to deny terrorist organizations the sources of power that enable them to sustain their efforts. **Unconventional Warfare** and **Foreign Internal Defense** are SOF capabilities critical to defeating terrorism today and, even more importantly, to eliminating it in the future. Also important to eliminating support for terrorists is improving key foreign infrastructures through robust **Civil Affairs** work and using **Psychological Operations** to promote truthful information and erode extremist ideologies. Our international partners have the cultural and historical understanding that—when coupled with U.S. technology, intelligence, and training—will allow them to defeat and prevent terrorism within their borders. SOF's key role in the long-term fight will be conducting UW and FID to build foreign capabilities that deny terrorist organizations the ability to sustain their efforts.

In addition to training partner nation forces overseas, the U.S. Army Special Operations Command has created the **International Special Forces Training Course**, a specialized training program tailored to the requirements of foreign special operations personnel. However,

BEYOND AFGHANISTAN AND IRAQ

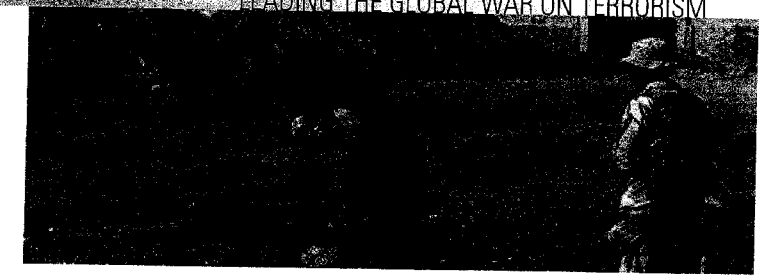
SOF Warriors are active around the globe conducting missions that are essential to winning the Global War on Terrorism over the long term. For example in Pacific Command's theater, SOF are working closely with the Filipinos to train their forces to provide better security in the southern islands. In addition, special operators conducted the first ever medical civic action program at an elementary school in Siiawi, Philippines. Some 1,030 patients were treated for both medical and dental needs. Also in the Pacific, Civil Affairs troops with Special Operations Command-Pacific worked closely with Indonesian forces to rebuild two schools and a bridge on Nias Island that were destroyed in a March earthquake. These projects are the first military-to-military cooperation since the U.S. Government lifted restrictions on defense cooperation with Indonesia.



building partner nation capability extends beyond just training and includes creating international networks to improve communication. In light of this, USSOCOM hosted special operators and military representatives from 58 countries at its first-ever international SOF week in June 2005. The theme of the event was "Partners in International Security." The conference focused on local and regional security issues with a proactive stance to identify real solutions to growing security threats. A second initiative was the first-ever counterterrorism workshop in October 2005, hosting 80 foreign military representatives from 50 countries. The intent of the workshop was to define communication strategies for partner nations to inform their public on known terrorists with the ultimate goal of building an integrated global anti-terrorist campaign to delegitimize terrorism. The success of these programs rests on the total integration of our partner nations' capabilities to build a global environment where terrorism cannot thrive.

Equally important in the long-term fight is USSOCOM's ability to coordinate and integrate efforts with other agencies within the U.S. Government. Terrorists rely on freedom of action defined in large part by their ability to garner active or tacit support from the population in which they live and the states from which they operate. Over the long term, USSOCOM, in support of the larger U.S. Government and international effort, will undertake operations designed to deny or restrict the enemy's freedom of action, whether physical or virtual.

USSOCOM, as the supported combatant command for planning and synchronizing the military effort in the GWOT, is engaged in a war that will take many years to win. It will require patience, persistence, and a comprehensive strategy. Military force alone will not be sufficient to achieve victory.



Although USSOCOM can synchronize DoD efforts in the GWOT, the U.S. Government, utilizing all facets of national power, must continue efforts to erode the attraction of the extremist ideology that inspires our most dangerous enemies. Success will rely heavily on close cooperation and integration of all instruments of national power and the combined efforts of the international community.

Pushing Forward

Recognizing the need for integrated U.S. government and coalition coordination, the Center for Special Operations broadened its organization to include allies and other members of the interagency as full partners in the effort. USSOCOM built the foundation for a Collaborative Planning Environment (CPE) which provides the processes and technical tools to rapidly synchronize plans and operations among the combatant commands, DoD agencies, other government agencies, and partners. The CSO continues to expand the CPE into a global planning network to stay ahead of the terrorist threat. Additionally, USSOCOM led a series of annual SOF Deployment Conferences to prioritize employment of limited SOF assets and



provide a "presence for purpose"; global targeting conferences to focus planning and intelligence collection on our high priority and priority GWOT countries; and Time-Sensitive Planning exercises to rehearse rapid planning and execution processes. The net effect has been to lay the foundation for a cooperative architecture necessary to establish and maintain the U.S. Government's desired end state in the GWOT: an environment inhospitable to terrorism.

The CSO is developing strong interagency relationships with more than 100 interagency representatives

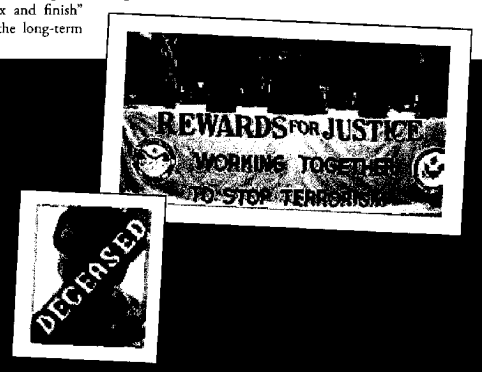


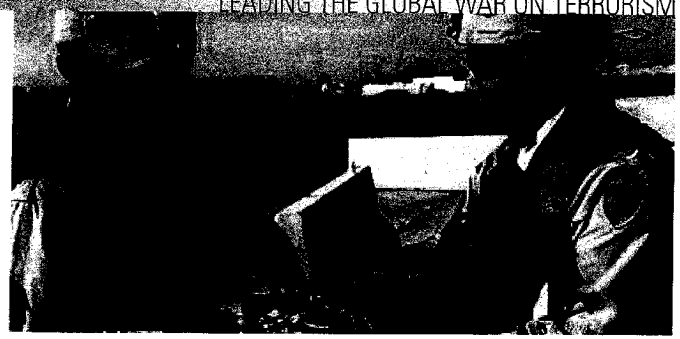
tightly incorporated into USSOCOM's GWOT efforts. Additionally, the Command works very closely with the national agencies to foster new initiatives that better support the war fighters. For example, to enhance USSOCOM's interaction with the National Security Agency, the two organizations entered into a partnership which will significantly enhance USSOCOM's access to signals intelligence, aiding SOF's ability to execute global missions. Another successful interagency initiative is the officer exchange program with the U.S. Agency for International Development (USAID) to begin in 2006. USSOCOM has been coordinating and conducting conferences with USAID in recognition of the clear link between the two agencies' emphasis on diminishing the underlying conditions that foster recruitment and support of terrorism. Increased interagency collaboration significantly supports the goal to "find, fix and finish" the terrorist threat today as well as the long-term objective to prevent the re-emergence of terrorists and to counter ideological support for terrorism.

Additionally, USSOCOM has encouraged the collaboration crucial to winning the Global War on Terror through the global integration of SOF operations with the Geographic Combatant Commanders, other governmental agencies, and our partner nations. USSOCOM's initiatives include developing the first exercise to evaluate the Command's integration into the government's counterterrorist response plan which the National Counterterrorism Center has adopted as the Nation's plan to further develop and refine their processes. USSOCOM, through a robust exercise series, continues to refine interoperability, coordination, and communications to fulfill its UCP-directed role to "**synchronize**" global operations against terrorist networks. USSOCOM also uses the

INTERAGENCY

The Department of State's "Rewards for Justice" program is a successful interagency initiative which led to the capture or killing of several terrorist leaders through essential information obtained from the local populace. USSOCOM advertises all U.S. government Rewards Programs through the Rewards Information Program which works like an international version of "America's Most Wanted." Working closely with the FBI, the Rewards Information Program passes information to the public through the mass media about terrorists in the hopes someone will have relevant information which would lead to their capture. This program is particularly successful in areas where Special Operations Forces attained the trust of the local population. This is most evident in the Philippines, where over the past four years the program has directly contributed to the removal of nine senior terrorist leaders in the Philippines including paying $1 million for the capture of Hamsiraji Sali, a top Abu Sayyaf Group leader. Again in January 2006, Ioting Hanno, another Abu Sayyaf terrorist involved in the 2001 kidnapping of 20 tourists–three of whom were American–was captured using a tip from a local informant.





Joint National Training Capability (JNTC) program to facilitate SOF and conventional force integration through key joint training and JNTC exercise venues, especially mission rehearsal exercises. Ultimately, this training and exercise profile significantly improves DoD's ability to defeat terrorists at all levels.

A key USSOCOM contribution to creating a global antiterrorist environment involves the use of its **Psychological Operations** (PSYOP) capabilities. PSYOP forces disseminate truth and facts to influence behavior and to erode the attraction of extremist ideologies to foreign audiences, counter propaganda that inspires our most dangerous enemies, and help to influence allied, friendly, and neutral audiences to support the GWOT. The cultural acuity and linguistic skills of SOF PSYOP personnel enhance their ability to influence target audiences by gaining their trust and confidence. The Command's ability to conduct small-footprint, flexible, and adaptive activities offers a unique means for gaining access to otherwise denied information and geographical areas. As part of this effort USSOCOM established the **Joint Psychological Operations Support Element** (JPSE) within the CSO. The JPSE plans, coordinates, integrates, and, under the command of the Geographic Combatant Commander, executes trans-regional PSYOP to promote U.S. goals and objectives. These units develop their strategy in close collaboration with the local U.S. Ambassadors' priorities to advance mission goals and objectives by nurturing democracy, promoting tolerance, and targeting the military, youth, and other groups vulnerable to extremist messages. In building their campaign, the JPSE works with an array of U.S. Government and host nation agencies and develops solid links for future collaboration in the Global War on Terrorism.

The Secretary of Defense directed the Combatant Commanders to organize, train and equip a standing **Joint Task Forces Headquarters**. USSOCOM established, exercised and validated a Joint Task Force that allows for seamless planning and execution of operations that span the spectrum of crisis and conflict.

The Geographic Combatant Commanders continue to execute operations, including SOF-unique missions, as the **supported commanders** in their theaters, with USSOCOM in a **supporting role**. The GCCs maintain the best regional focus and knowledge of their areas of operation and have conducted numerous successful operations since the war on terrorism began. USSOCOM provides each GCC a Theater Special Operations Command (TSOC), a sub-unified command, primarily manned and principally funded by USSOCOM. The TSOCs ensure SOF are fully integrated into GCC collective security plans and contingency operations. Due to the increased demand for SOF since 9/11, TSOCs have grown considerably and in most cases are now commanded by two-star general officers. The TSOC commanders plan and conduct joint special operations, ensuring SOF capabilities are matched to mission requirements and advise their GCC on the proper employment of SOF. Additionally, the TSOCs provide the core element for establishing a Joint Special Operations Task Force, a SOF organization that can respond immediately to regional emergencies for the GCC.

Creating Success on the Battlefield

Throughout 2005, SOF remained at the forefront of the GWOT through extensive combat operations, security cooperation events and joint training with partner nations, and continued development of GWOT plans and interagency relationships. Much of SOF's success has been side-by-side with conventional forces, sharing information and assets to capitalize on the strengths of both forces. Whether working together in the Trans Sahara area of Africa or

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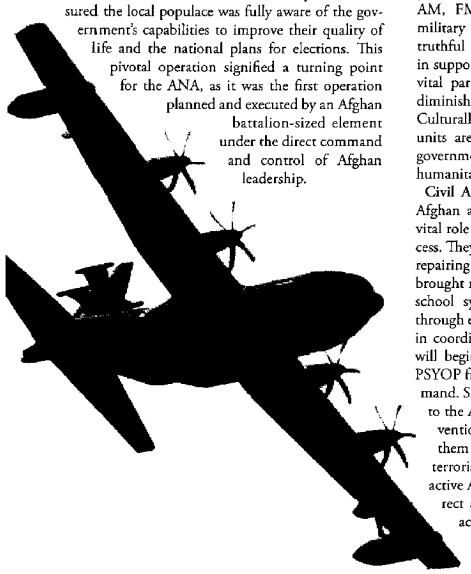
training the new forces in Iraq, the relationship between conventional forces and SOF is better than it has ever been, and continues to mature and improve every day. Like our conventional counterparts, today's SOF operator conducts more combat operations in a week than many of his pre-9/11 predecessors would have done in a career.

Illustrative of the change in complexity and tempo are the missions of 160th Special Operations Aviation Regiment (SOAR) in Afghanistan. The 160th SOAR provided helicopters to insert and extract Special Operations Forces, and when necessary, provide fire support for numerous objectives in a single mission. Due to their extensive training, familiarity with the high altitudes and extreme terrain, as well as immersion in a joint environment, the crews were able to seamlessly conduct multiple operations in a single night, any one of which would have been the highpoint of a career. These operations were complete successes and have led to discovering significant links to additional al-Qaida members.

In Iraq, Army Special Forces teams and Navy SEALs (SEa, Air, and Land forces) have trained and advised Iraqi Special Operations Forces (ISOF) since late 2003. The focus in 2005 was on building a brigade headquarters over the already successful 36th Commando Battalion and the Iraqi Counterterrorist Force. The ultimate goal is for the ISOF to have a stand-alone capability for counterterrorist operations. Special Forces Soldiers also recruited, trained, and built the foundation of a Support Battalion for the ISOF with communicators, mechanics, medical personnel and general support services. Special Forces Soldiers and the SEALs advised several ISOF-led brigade-level operations against insurgent forces incorporating Air Force Special Operations Close Air Support, Combat Controllers, rotary wing aircraft; DoD Intelligence, Surveillance, and Reconnaissance platforms; Iraqi Special Operations teams; and Regular Iraqi Army units. In one operation, some 900 Iraqi soldiers conducted reconnaissance missions and raids, all at night, including heliborne and ground assault operations. These operations resulted in hundreds of insurgents captured or killed, but more importantly demonstrated the ISOF's ability to operate successfully in battalion- and brigade-sized operations, leading the way for the Iraqi armed forces to secure safe elections and take responsibility within their borders.

In Afghanistan, Special Forces units conducted extensive FID training and operations with the Afghanistan National Army (ANA) to project combat power into a known al-Qaida sanctuary, the

Cahar Cineh Valley. This operation enhanced ANA collective capabilities, discredited the al-Qaida influence over the local population, and promoted Afghanistan's government and the army's capabilities prior to the parliamentary elections. By combining offensive and information operations, the ANA and Special Forces units were able to set the conditions for a continued Afghan Army presence in this hotly contested area. Successful information operations ensured the local populace was fully aware of the government's capabilities to improve their quality of life and the national plans for elections. This pivotal operation signified a turning point for the ANA, as it was the first operation planned and executed by an Afghan battalion-sized element under the direct command and control of Afghan leadership.



Psychological Operations were essential in facilitating the democratic elections in both Afghanistan and Iraq during 2005 and will continue to play critical roles in the stabilization of both countries by disseminating critical information to affected populations. The **193rd Special Operations Wing**, a Pennsylvania Air National Guard unit that flies the specially modified EC-130E/J **Commando Solo** aircraft, provided airborne PSYOP broadcasts on commercial AM, FM, short-wave, worldwide television, and military communication bands. Dissemination of truthful information to approved foreign audiences in support of U.S. policy and national objectives is a vital part of the SOF effort to secure peace and diminish radical extremism around the globe. Culturally oriented and linguistically capable PSYOP units are supporting commanders and other U.S. government agencies in operations ranging from humanitarian assistance to combat operations.

Civil Affairs (CA) teams were also critical to the Afghan and Iraqi elections and continue to play a vital role in the stabilization and reconstruction process. They developed, coordinated, and facilitated the repairing of wells, provided food to hungry children, brought medical care to families, and helped rebuild school systems that will counter radical thought through education. Beginning in 2006, USSOCOM, in coordination with the Department of the Army, will begin reassignment of Army Reserve CA and PSYOP from USSOCOM to U.S. Joint Forces Command. Shifting Army Reserve CA and PSYOP forces to the Army better aligns the requirements of conventional forces with the units that will provide them direct support in the long-term fight against terrorism. Similarly, USSOCOM will retain the active Army CA and PSYOP units that provide direct support for SOF units. In addition to the active units, USSOCOM will continue to



have responsibility for proponency and training standards for all Army CA and PSYOP units.

Beyond Iraq and Afghanistan, USSOCOM kept focused "**presence for purpose**" in dozens of high priority countries across the globe that are key to winning the long-term GWOT. SOF engaged with host-nation forces in several critical countries through UW and FID, improving their capacities and enhancing their abilities to address national, regional, and global security threats. In the Philippines and the Pacific Rim, SOF are working closely with and training partner nations' military forces to locate, track, and neutralize terrorist threats within their borders. In South America, SOF is helping key friends and allies bring order to areas long infected by illicit drug activities and narco-terrorism, breeding grounds for our adversaries in the GWOT. Furthermore, in the Trans Sahara region of Africa, SOF work alongside

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conventional forces to train and assist our partners to deny terrorists freedom of movement and sanctuary.

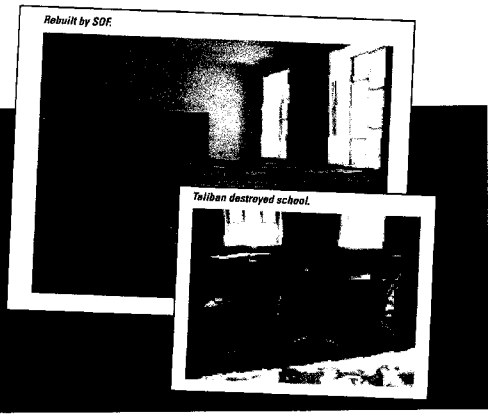
Special Forces teams and **Navy SEALs** are conducting extensive FID in the Philippines and Pacific Rim countries to support and train local militaries as they fight a localized war on terrorism. SOF operators instruct Philippine soldiers on small unit tactics, weapons skills, communications, and medical training designed to help them defeat the enemy. Additionally, USSOCOM continues to support GCC regional engagements and humanitarian efforts by incorporating CA construction initiatives, medical and dental care for small villages, and veterinary services. The USSOCOM-funded High Speed Vessel (HSV), leased from the U.S. Army, has significantly improved access to expansive and remote areas with few basing opportunities and has proven highly effective in the GWOT. The HSV will return to commercial service at the end of FY 2006, however, the requirement for a SOF-controlled, high-speed afloat forward staging base remains.

Civil Affairs forces were also engaged in Colombia. The training and support provided by USSOCOM CA Soldiers to the Colombian military enabled them to execute numerous medical and veterinary civic-action events, expanding the Columbian government's legitimacy and influence in previously ungoverned areas. By increasing the professionalism of the Colombian military and specifically their special operations capabilities, USSOCOM built a stronger democratic partner in the U.S. Southern Command area of responsibilities.

The **6th Special Operations Squadron** of Air Force **Special Operations Command** (AFSOC), deployed

CIVIL AFFAIRS

To defeat terrorism in the long term, it is necessary to erode extremist ideologies and strengthen local environments to eliminate tacit support for terrorists and their illegal activities. Civil Affairs units are helping to create this environment through a variety of projects including digging wells for fresh water, building roads and bridges, and providing medical, dental, and veterinary support to vulnerable populations. In Afghanistan, a team from the 96th Civil Affairs Battalion took to the mountains where they discovered a school destroyed by the Taliban. With the approval of the village leadership, the CA team rebuilt the school and in the process, formed a positive relationship with these locally influential people. The village children, tomorrow's leaders, are continuing their education with a new perspective on Americans. The goal of Civil Affairs is to impact peoples lives and leave a strong, positive message for the future.



to the Trans Sahara region of North Africa, conducted training with several high priority countries focused on specialized flight operations, air base defense, and medical support. SOF worked with security forces from several African countries to enhance their counterterrorist capabilities by training with indigenous forces, focused on weapons, communications, and logistics. These critical efforts significantly bolstered the host-nation's ability to defend against terrorist threats and ultimately assist in the GWOT. The Sahara and Trans Sahara regions span an area as large as the continental United States, making this initiative vital in denying the region as a haven for al-Qaida linked terrorist groups.

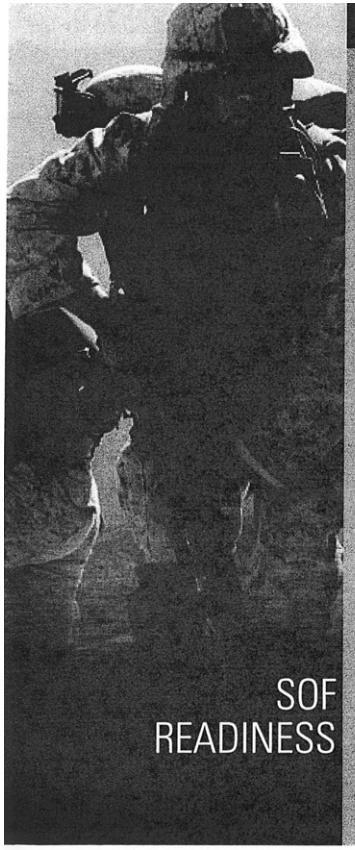
Support at Home

In response to Hurricanes Katrina and Rita, SOF provided critical support to victims and first responders. **U.S. Army National Guard Special Forces Soldiers** provided command and control, search and rescue, and mission support to Alabama, Florida, Louisiana, and Mississippi. An **Air Force Reserve Special Operations Wing and AFSOC Special Tactics teams**, comprised of aircrews, Combat Controllers, SOF weathermen, and Pararescuemen, provided direct support by flying Helicopter Airborne Refueling, air-land supply/resupply, and rescue operations. Special Tactics operators were instrumental in the opening and initial operations of the New Orleans International Airport, allowing thousands of tons of cargo and relief workers to deliver aid to where it was most needed. **Naval Special Warfare teams** led an entire task group to support the rescue efforts, including combatant-craft crewman employing the Special Operations Craft-Riverine specifically designed for shallow waterways—going house-to-house along the river, checking on residents whose homes were only accessible by boat. USSOCOM's **Reserve PSYOP Soldiers** also provided public information dissemination support to the relief efforts. These Soldiers broadcast much-needed information to the population as civilian media organizations rebounded from the disaster. The face-to-face communications, loudspeaker broadcasts, and various print media provided by SOF Soldiers were invaluable to the hurricane victims and their families throughout the United States.❖





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SOF READINESS

The **SOF Warrior** is USSOCOM's number one resourcing priority. SOF's core philosophy centers on the human as the most critical capability in special operations and as the foundation of USSOCOM's success in meeting the daunting challenges of defeating global terrorist networks. Specially assessed and selected individuals receive world class training and education before joining their team on the global battlefield. The success of the **SOF Warrior** is underpinned by three critical pillars of support: Training and Education, SOF-unique Equipment, and Experience through Retention.

People

In 2005, USSOCOM grew by nearly 1,600 military and civilian positions, most in direct support of the Command's new role as the DoD lead in the GWOT. USSOCOM will continue to strengthen its ability to shape the environment and carry out operations around the world by growing another 1,400 personnel in 2006. The formation of the **Marine Corps Special Operations Command (MARSOC)** will add almost 2,600 personnel to USSOCOM's end strength, with initial billet resourcing starting in FY 2006. The MARSOC adds to USSOCOM a Foreign Military Training Unit, increased direct action and special reconnaissance capacity, and the necessary support personnel to form a highly capable team.

USSOCOM's total authorized manpower for 2006 is 52,846 personnel. Roughly one-third of SOF military personnel are from the Reserve or National Guard (see Table 1).

	ACTIVE	RESERVE	NATIONAL GUARD	MILITARY TOTAL	CIVILIANS
ARMY	18,079	9,754	2,904	30,737	1,844
NAVY	5,636	1,013	0	6,649	481
AIR FORCE	9,660	996	825	11,681	1,575
MARINE CORPS	79	0	0	79	0
SUBTOTALS	33,654	11,763	3,729	49,136	3,700
	FY 2006 USSOCOM TOTAL 52,846				

Table 1

Training and Education

Assessment and Selection is the critical initial process by which candidates with the necessary aptitude and attitude are identified for entry into the Special Operations community. It is Basic Underwater Demolition/SEAL (BUD/S) training for Navy SEALs, the Special Forces Qualification Course (SFQC) for Army Green Berets, the initial selection phase for Air Force Combat Controllers and Pararescuemen, the special selection for the Army's Special Operations Aviators, and initial training teams—the "Green Team"—for many other units. It is the common starting point for all SOF warriors, including most support personnel. A relative few possess the essential combination of maturity, unfailing character, mental agility, physical strength, and an endless internal drive necessary for selection and future success as a SOF Warrior on the battlefield. Consequently, attrition rates are high, making growth a challenge.

In order to meet authorized future growth, USSOCOM and its components completely overhauled SOF accession schools, significantly increasing throughput capacity while maintaining the same high standards. In the case of the SFQC, a phased plan to increase Special Forces graduates was initiated in 2002 to grow from a 10-year average of 350 active duty enlisted graduates per year to 750 for FY 2006. However, in FY 2005 the SFQC produced 790 new Green Berets—exceeding the goal a year early. For the first few years, most of these additional Green Berets will go to fill vacant billets, returning Army Special Forces units to full strength. However, USSOCOM is now postured for additional future growth.



Special operations training takes mature SOF students and teaches them the unique skills to become regionally oriented, culturally attuned, and uniquely capable of operating in denied or sensitive

SEAL TRAINING



Unique to Special Operations is an assessment and selection process. It identifies those with the physical capacity and mental toughness, innovation, and character necessary to be successful while conducting a night-time direct action raid or meeting with the head of a foreign military while training his forces. For Naval Special Warfare, candidates are assessed during Basic Underwater Demolition / SEAL (BUD/S) training. A SEAL candidate will experience the ultimate physical and mental stresses during this 6-month course and will:

- Run 1,310 miles in sand wearing boots
- Swim 150 miles in the ocean
- Complete a 1/2 mile obstacle course 39 times
- Spend 57 hours submerged in cold water
- His class will fire 850,000 rounds and detonate 5,500 pounds of explosives
- Of the 166 men who start, only 35 will graduate

Only after completing these grueling phases will he earn the privilege of joining his team. Success comes from character — now he will have to employ these skills in combat.

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areas as well as by, through, and with foreign militaries. Today's special operations successes can be attributed directly to the quality of the SOF operator and his nearly two years of initial training. Programs center on modular training that builds core skills with particular emphasis on foreign-language and cultural training. This innovative modular design leverages technology to improve the quality and effectiveness of the instruction while enabling more efficient use of time and resources.

Language capability remains essential to the successful and timely accomplishment of many SOF missions. The U.S. Army Special Operations Command (USASOC) recently raised language graduation standards, restructured the training methodology and reduced the number of languages taught. The tighter focus and use of new technology resulted in a 98 percent graduation rate at the higher standard and a throughput of 974 students, an increase of 50 percent since 2002. Naval Special Warfare Command (NAVSPECWARCOM), USSOCOM's naval component, added a language program to SEAL Qualification Training, ensuring each new SEAL is language qualified before reporting to their first operational command.

To bring critical language instruction to geographically dispersed SOF personnel, USSOCOM is experimenting with technology such as PC-based teleconferencing. Initial success in using the PC-based teleconferencing as a training conduit produced results comparable to those at USASOC in the same amount of time. USSOCOM is also partnered with the Defense Advanced Research Projects Agency (DARPA) in developing the **Tactical Iraqi Trainer**, which uses voice recognition and PC game technology to train language and culture. The Command is moving towards providing institutional language training to all operators before they arrive at their unit and then following with sustainment and enhancement training that seamlessly fits the operator's schedule, location, and training needs.

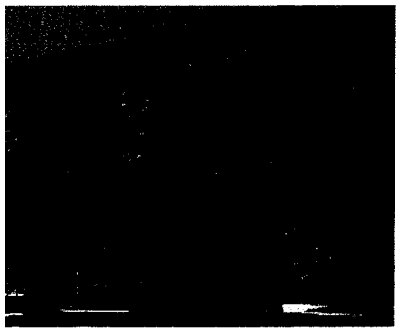


Another force multiplier for SOF has been the increased emphasis on advanced SOF skills. USSOCOM increased Advanced Special Operations Technique (ASOT) training capacity 67 percent since FY03, increasing the Army SF and Navy SEAL ASOT graduates by 83 percent in the last two years. This training investment nearly doubled a critical, yet unique, SOF capability essential on today's global asymmetric battlefield. Refined focus on training requirements, higher and tiered standards, transformed training, and smarter use of technology continue to multiply the success of our SOF warriors around the globe.

Beyond training, **Professional Military Education** at all ranks is vitally important to the continued success of SOF. **The Joint Special Operations University** provides a wide range of tailored educational services to the joint SOF community. In 2005, the Command completed its first comprehensive study of SOF educational requirements and developed a strategic plan for continued improvement over the next decade. The Command has direct links at every service school to ensure there is an accurate and complete special operations curriculum so that future leaders across the spectrum will understand the capabilities and limitations of SOF. The **SOF Education Strategic Plan** focuses on the development of joint SOF leaders at every level and their continued improvement through a broad array of intellectual engagement and research initiatives.

SOF Warrior Systems

Once a **SOF Warrior** is assessed, selected, trained, and ready to engage in the GWOT, individual equipment is central to accomplishing his mission and achieving success. In 2004, USSOCOM placed critical personal equipment under a single resource area, **SOF Warrior Systems**, and gave it resourcing priority. SOF Warrior Systems aggregate over 90 individual systems and pieces of equipment to ensure important, but relatively low-cost items, are not overlooked or under funded. Equipment that provides enhanced capabilities for the individual **SOF warrior** includes: night vision and optical devices, individual weapons, body armor, targeting systems, GPS, and environmental clothing. In October 2005, USSOCOM established the SOF Warrior Systems program office to allow single point oversight and improve equipment development and acquisition timelines. This ensures operators will receive the best equipment available to them in a timely manner.



Retention

The sustained high operational tempo of the past four years has put a strain on SOF. Adding to the strain is a healthy economy and a high demand by corporate America for people with the same skills, character, and abilities as the **SOF Warrior**. As USSOCOM continues to grow in support of the long-term GWOT campaign, it is imperative that we retain our highly qualified and experienced operators.

However, **SOF personnel management** has always presented unique challenges. Under Title 10 USC, Section 167, USSOCOM is responsible for the readiness of SOF and for monitoring SOF personnel management. The Command worked separately with each Armed Service, the Joint Staff, and the Office of the Secretary of Defense (OSD) to get the U.S. Special Operations Forces Retention Incentive Initiative for SOF operators approved in December 2004. Excellent support from the Services on this initiative was fundamental to its implementation. However, each of the Services have separate policies for retention including different metrics, different mandatory retirement dates, different re-enlistment bonus programs, different special pays, and separate data bases. This complicated and delayed this initiative, creating inequities between SOF operators. Personnel retention remains an essential element to SOF operational readiness.

Last year was the first full year of the **Special Operations Forces Retention Incentive Initiative** for SOF operators with 19 or more years of service and it has proven to be successful, exceeding the projected acceptance rate. It was a great first step. To continue this momentum, USSOCOM is working to identify additional specialties and key periods of service for future Retention Incentive Initiatives. Additionally, we will continue to identify non-monetary incentives including education, family quality of life, career profiles, and post-career benefits to encourage the SOF operator to remain "SOF for life."

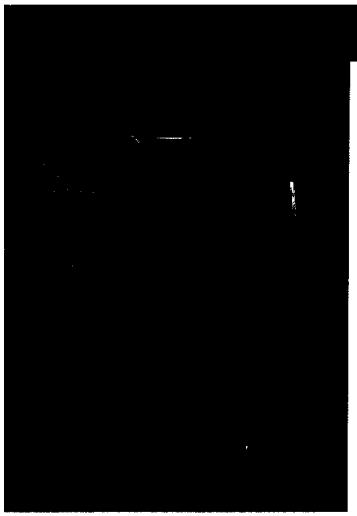
USSOCOM, along with the Services, must take care of America's injured SOF warriors, fallen comrades, and their families. The **USSOCOM Care Coalition** was established to help SOF casualties and their families identify and receive a full spectrum of support by coordinating with DoD, government, and non-government organizations. From its inception,

A force that can be relied upon to operate to the highest moral standards, protect the Nation's values and conduct its most sensitive missions

Uncompromising moral and physical courage under all conditions

Maintaining the highest levels of tactical and technical competence—continuous improvement is our trademark

Using innovative, imaginative solutions to accomplish complex, demanding challenges



Provide Special Operations Warriors and their families a model advocacy program in order to enhance their quality of life and strengthen special operations readiness.

the Care Coalition worked directly with the Services to ensure each SOF component has a robust family support and readiness program at each unit to help with day-to-day issues. If a **SOF Warrior** is injured, USSOCOM Care Coalition representatives contact the SOF member and his or her family to provide immediate assistance and offer advocacy if required. With great support, many injured SOF return to active duty and even combat. For SOF leaving the military, the Care Coalition remains engaged for as long as their needs exist. In the unfortunate event that a **SOF Warrior** is seriously injured or killed, the Care Coalition is there for the family to advocate to the Service for their entitlements and reach beyond the government to help families, with their concurrence, identify those non-profit organizations that provide additional support, such as scholarships for surviving children. The Care Coalition, by improving total force quality of life, significantly contributes to operational readiness and ultimately, mission success.

Budget, Acquisition, Technology, and Logistics

When Congress created USSOCOM in 1986 they provided the Commander, under U.S. Code Title 10, Section 167, budget and acquisition authority for special operations-peculiar equipment. This authority is analogous to that of the Secretaries of the Military Departments. Using this authority, USSOCOM has fielded numerous special operations-peculiar systems instrumental in today's fight and is executing programs to rapidly address the emergent needs of SOF in combat.

The individual **Special Operations Warrior** is at the core of special operations capabilities, a fact made clear in USSOCOM's budget and acquisition strategies. USSOCOM's Strategic Planning Process (SPP), the best in DoD, is capabilities-based and designed to focus on the needs of the **SOF Warrior** to accomplish the mission, rather than being platform-centric. USSOCOM's current budget and pending requests reflect this unique philosophy. Tied to the SPP is the Long Range Planning Process that looks at future threats and emerging technologies to ensure SOF remains ahead of its adversaries.

Budget

Prior to September 11, 2001, the USSOCOM budget remained constant at just under $4 billion per year. The events of that fateful day dramatically increased the requirement for special operations as witnessed in Operations Enduring Freedom and Iraqi Freedom. The Command's budget has grown to $6.4 billion in FY 2005 allowing modest growth and improving USSOCOM's ability to acquire SOF-specific equipment and support. Supplemental appropriations to support ongoing military operations in Iraq, Afghanistan, and other regions worldwide added another $1.6 billion to the overall total. The Operation and Maintenance (O&M) account was funded at more than $3.1 billion to support numerous overseas deployments, expand training capabilities, and sustain warrior systems such as body armor, lightweight protective uniforms, night vision devices, and protective helmets. As USSOCOM assumes greater responsibility in planning and executing the GWOT, its overall budget authority has increased proportionately.

- The FY 2006 budget request of approximately $7.4 billion is balanced to meet USSOCOM's top three priorities: GWOT; Readiness; and the Future. However, supplemental funding remains vital to sufficiently support SOF operating on the battlefield. USSOCOM's FY 2006 budget



is divided into five major categories: Military Personnel; Operation and Maintenance (O&M); Procurement; Research, Development, Testing and Evaluation (RDT&E); and Military Construction.

- Nearly $2.6 billion is earmarked for our largest account, Military Personnel. This account is programmed by USSOCOM, but executed by the Services.
- The O&M account of $2.7 billion maintains SOF operational readiness and provides for maintenance of equipment, fuel, consumable supplies, civilian salaries, spare parts, and repair of weapons and equipment.
- The budget also includes $1.3 billion for Procurement, which allows USSOCOM to fund vital SOF-unique modernization and recapitalization in mobility, weapons and munitions, communications, and intelligence equipment.
- Nearly $630 million is allotted to RDT&E, which provides for technological advances and modernization for Special Operations Forces.
- Completing the portfolio, USSOCOM programs just under $200 million in Military Construction to build unique operational facilities necessary for SOF training and deployment.

Service contributions are critical and significantly augment USSOCOM's budget and acquisitions. For example, the Air Force acquires "slick" (i.e., unmodified) C-130s for delivery to USSOCOM, which then receive USSOCOM-funded SOF-unique modifications. Similarly, the Command does not pay for "HumVees" (HMMWVs, High Mobility Multipurpose Wheeled Vehicles) or "slick" helicopters that are acquired by the Army for USSOCOM modification and SOF use. However, USSOCOM does procure all of its own maritime mobility platforms, such as the MK V, the Special Operations Craft–Riverine, and the USSOCOM funded High Speed Vessel supporting GWOT operations in the Pacific Command's area of responsibility.

The FY 2007 President's Budget request for USSOCOM is $8.0 billion and includes specific additions directed by the Quadrennial Defense Review process. This request will continue the effort of investing in capabilities to improve SOF warrior systems, advance force operations, promote specialized and institutional training, explore and exploit leap-ahead technology, and refine force structure and manpower to support the Command's most important asset: the SOF Warrior.

Quadrennial Defense Review

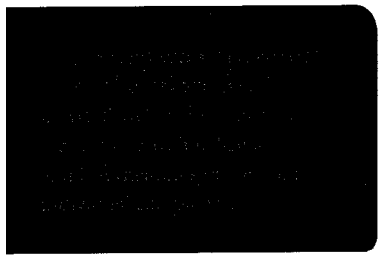
USSOCOM, with its service-like responsibilities to train, organize, and equip forces, participated fully in this year's Quadrennial Defense Review (QDR). The results of the QDR recognize USSOCOM's new authorities, judicious growth, significant contributions on the battlefield, and SOF's unique skills that will be necessary for the Global War on Terrorism in the future.

USSOCOM's strategic approach to the 2005 QDR process was to focus on SOF-peculiar capabilities, not on platform-centric resource solutions. The QDR provided the resources to ensure future SOF will be **rapidly deployable, agile, flexible and tailorable** to successfully perform the most demanding and



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sensitive missions worldwide. SOF will continue to be the Nation's premier team to conduct tailored raids and assaults against the most challenging targets, but will increasingly conduct UW and FID activities on a global scale. Increasing regional language and cultural proficiency skills in key GWOT operational areas (Africa, Latin America, the Middle East, and Asia) remains a top priority. Longer duration operations in support of the GWOT will emphasize building personal relationships with foreign military and security forces and other indigenous assets to achieve common objectives. The QDR specifically facilitates the following SOF initiatives:

- Increase SOF capability and capacity to conduct low-visibility, persistent presence missions and a global Unconventional Warfare campaign.
- Increase (starting in FY 2008) active-duty Special Forces Battalions by one-third.
- Grow active and reserve Psychological Operations and Civil Affairs units by about 3,600 personnel to provide Active Component support to SOF operations and Reserve Component support to the Army's modular forces.
- Establish a Marine Corps Special Operations Command (MARSOC) composed of about 2,600 Marines and Navy personnel to train foreign military units and conduct direct action and special reconnaissance.
- Increase SEAL Team force levels.
- Establish a SOF Unmanned Aerial Systems Squadron to provide an organic capability and capacity to locate and track high value targets.
- Enhance capabilities to support SOF insertion and extraction into denied areas.

Equipment Advances and Initiatives

USSOCOM is the only combatant command that manages the entire materiel acquisition life-cycle process for special operations-peculiar equipment employed by its forces. USSOCOM processes are similar to those used by the Joint Staff, OSD, and the Services, but with the unique advantage of defining the missions its forces conduct as a supported Commander. USSOCOM has its own **acquisition workforce** with embedded contracting, legal, and oversight staffs, all in one location. Subject to the same overarching statutes and policies that apply across DoD, the Command's Program Executive Officers utilize the inherent freedom and flexibility of the 5,000 series directives and instructions to streamline acquisition processes and documentation, while benefiting from a proximate decision chain. This team, with exceptional support from Congress, the Secretary of Defense, the Joint Chiefs of Staff, the Military Departments, and industry partners, has built a superb capability to provide rapid and focused technology, acquisition, and logistics support to SOF Warriors. As a result, today's special operators are well equipped and confident in their aircraft, maritime craft, intelligence and information systems, and individual equipment.

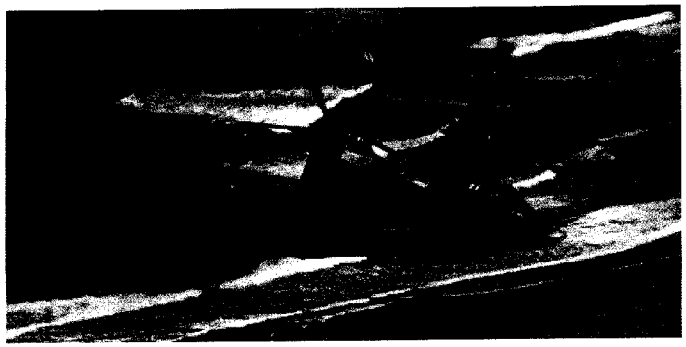
The Command's **Urgent Deployment Acquisition** (UDA) process provides rapid acquisition and logistics support in response to emergent requirements submitted through **Combat Mission Needs Statements** (CMNS) from SOF deployed on the global battlefield. Advanced technology systems are acquired and fielded in as little as seven days from CMNS approval, with most capabilities delivered to

combat forces in less than six months. Recent UDAs include: target video downlink capability from AC-130, A-10, and AV-8B close air support aircraft; mobile electronic-warfare jammers; anti-structural grenades; MH-53 helicopter ballistic protection; and various unmanned aerial systems. In 2006, Congress established a separate CMNS budget line, allowing USSOCOM to meet urgent battlefield requirements without disrupting existing programs, significantly improving responsiveness while minimizing impact on future systems.

To effectively employ SOF's unique skills in the future of GWOT, USSOCOM requires a family of Unmanned Aerial Systems (UAS) that range from the very small or micro UAS to long-endurance Predator class systems. Platforms fielded in Afghanistan and Iraq provide critical security to small SOF units and aid in the identification and tracking of terrorist leadership. USSOCOM recently created a UAS roadmap designed to consolidate ten limited UAS's into five robust platforms, reducing costs and improving capability. The rucksack portable UAS is being developed jointly by USSOCOM and the Army as a service-common solution to a joint requirement. Additionally, USSOCOM, working with the Air Force, has established a Predator Squadron within the AFSOC that will significantly improve SOF access to timely information on a global scale

Increasing the inventory and capabilities of USSOCOM specialized aircraft remains a priority. The **CV-22 SOF Osprey** will transform the Command's ability to project SOF capabilities worldwide in the GWOT. The CV-22 will provide leap-ahead capability in speed and range, allowing long-range vertical lift missions to be performed in a single period of darkness. Additionally, limited growth of the AC-130 gunship and MC-130H Combat Talon platforms started in FY 2005, improving fire support and SOF access to denied areas. Procurement of additional MH-47G Chinook helicopters combined with the ongoing modernization of the fleet to the G-model configuration adds needed rotary wing capability and capacity, while streamlining logistics and maintenance. Overall, USSOCOM continues to modernize and extend the service life of the C-130 and rotary wing fleets with a focus on survivability modifications to protect SOF aircraft and warriors. Examples include the Joint Terrain Following/Terrain Avoidance Radar, a suite of infrared countermeasures, the EC-130 Commando Solo and MH-60L Blackhawk modernization programs, and the C-130 center wing box replacement program.

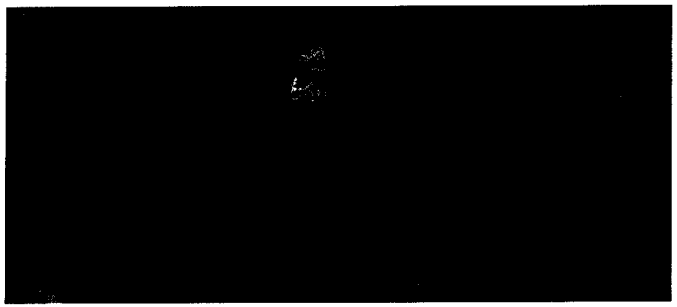
USSOCOM continues to sustain and enhance maritime mobility systems including the MK V





Special Operations Craft, the Rigid-hulled Inflatable Boat, the Special Operations Craft–Riverine, the SEAL Delivery Vehicle, and the Advanced SEAL Delivery System. Among several initiatives, USSOCOM upgraded the MK V crew seats with improved shock mitigation to protect boat crews and SOF operators from the pounding induced by high-speed travel on rough seas; developed and fielded a common forward-looking infrared sensor for combatant craft; and improved survivability of the Special Operations Craft–Riverine with advanced armor protection and smoke generators. As these platforms near the end of their service lives, USSOCOM is utilizing the joint process to analyze future SOF maritime mobility requirements to identify the next generation of surface and subsurface platforms needed to support the SOF Warrior. Incremental in the process is the USSOCOM-funded Afloat Forward Staging Base Proof of Concept utilizing the High Speed Vessel (HSV) to test emerging strategies and technology to fight the GWOT. The HSV is proving very effective in the littorals, enabling SOF access to key GWOT nations and geographically remote areas. This vessel will return to commercial service at the end of FY 2006, however, the requirement for a SOF-controlled, high-speed afloat forward staging base remains.

USSOCOM continues to ensure SOF Warriors are equipped with effective and interoperable intelligence and information systems. Communications, global and local network service, and improved sensors provide persistent intelligence and situational awareness to SOF Warriors engaged in the GWOT. Ongoing enhancements to SOF radio systems; the Joint Threat Warning System; Tactical Local Area Networks; Special Reconnaissance Capabilities; and Tagging, Tracking, and Locating systems remain critical to interoperability with interagency and partner nations, as well as finding and fixing terrorist threats.



Science and Technology

The ability to stay ahead of a technologically adept and rapidly adapting enemy depends upon our SOF operators becoming faster, stealthier, more lethal, more survivable, more precise and synchronized, and easier to sustain. The focus for USSOCOM's Science and Technology investment strategy is to effectively apply and invest available resources to maximize SOF warfighting capabilities with an eye towards the future. Our technology development activities are focused on a number of capability areas. These areas include: command and control; tagging, tracking and locating; SOF Warrior lethality, survivability, and sustainability; power and energy; and psychological operations. Specific science and technology programs at USSOCOM include: an airborne tactical laser, small unmanned aerial system payloads and networking; signature reduction; advanced night vision devices; night vision windshields; psychological operations products and broadcasting mechanisms; unattended sensors and sensor networks; and advanced mobility concepts. Moreover, our science and technology programs leverage advances made in the Military Departments and other government laboratories by using experimentation and advanced concept technology demonstrations to evaluate the utility of emerging technologies prior to transitioning these technologies into USSOCOM acquisition programs of record.

Technology development is especially important in SOF communications and networks as DoD pursues the expansion of the Global Information Grid (GIG) and refines concepts and architectures for Net-Centric Warfare (NCW). The Command is fielding numerous communication systems and network services providing SOF with a variety

of adaptive capabilities. These range from inter-team communications to network applications and services for collaborative planning and information management. The overarching objective is to enable USSOCOM to synchronize mission planning and mission execution among SOF, conventional forces, and coalition partners. In 2005, the Command developed an evolutionary software-defined radio that meets most of the Joint Tactical Radio System specifications and is becoming standard across DoD. To meet SOF requirements for increasingly smaller devices with greater performance, the Command is deploying the **SOF Deployable Node–Medium**, an integrated, Internet Protocol (IP)-based, man-portable satellite terminal. This system extends broadband command, control, communications, computer, intelligence, surveillance, and reconnaissance (C4ISR) services down to the deployed tactical SOF unit.

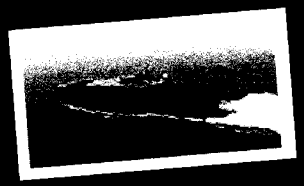
USSOCOM will continue to pursue emerging technologies that demonstrate a potential benefit to the **SOF Warrior** and his unique skills and missions. However, SOF will rely on the Services to develop the next generation of basic aircraft, helicopters, and vehicles which USSOCOM will then tailor to SOF-unique missions. The CV-22, procured by the Air Force and modified by USSOCOM, is an example of this critical process.

Acquisition Logistics

In the logistics support and sustainment area, USSOCOM established the **Special Operations Forces Support Activity** (SOFSA) and is leading efforts to establish a SOF Logistics Data Warehouse for special operations-peculiar equipment. SOFSA is a contractor-operated facility that functions as the Command's Logistics Center of Excellence. Maintenance and modification of SOF rotary wing assets are two examples of the many essential logistics capabilities this depot-like activity provides for SOF.

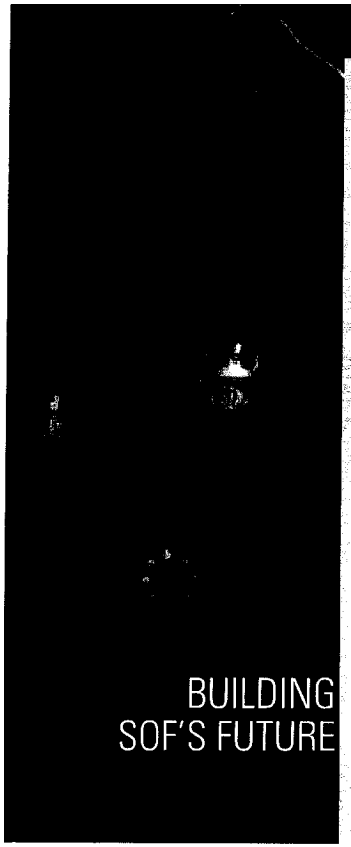
Ongoing efforts to expand SOFSA's joint Contractor-Inventory Control Point capabilities will ensure SOF receives priority supply support for special operations-peculiar equipment while using standard supply automation systems. SOFSA in-theater logistics support to SOF for operations in Afghanistan and Iraqi enables USSOCOM to rapidly support the fielding, supply, maintenance, refurbishment, and reset of SOF equipment in direct support of combat operations. The data warehouse initiative will enable end item visibility for special operations-peculiar equipment and will be directly linked to Service common supply and accountability systems, providing a real-time view of this equipment worldwide.❖





HSV: HIGH SPEED VESSEL

The 313-foot USSOCOM-modified High Speed Vessel (HSV) Joint Venture is a revolutionary concept developed to effectively employ Special Operations in the full spectrum of War on Terrorism missions. Operating in the Asia-Pacific region in support of Special Operations since July 2005, the HSV's shallow draft and non-military appearance allows it access to most of this expansive and remote littoral region. The vessel can support a Task Group of Navy SEALs, including boats, mini-submarines, helicopters, unmanned aerial vehicles, and HMMWV's, and spends over 30 percent of its time cruising at over 30 knots to provide rapid mobility and forward basing in an area that covers millions of square miles of ocean. Conducting port visits to Malasyia, Indonesia, and the Philippines in support of regional engagement and humanitarian efforts, the Joint Venture is successfully demonstrating what can be accomplished with long-term sea-based SOF mobility.



BUILDING SOF'S FUTURE

Over the next 10-20 years, Special Operations Forces (SOF) will continue to operate against non-traditional, non-state, unconventional, and trans-national enemies in complex, uncertain, and dynamic environments. Anti-access and area denial will proliferate. Failed states, friendly states, and our own homeland are potential havens for hostile, non-state threats. USSOCOM is likely to face major international challenges that differ significantly from those encountered by SOF in Iraq today. The magnitude and speed of change resulting from a globalizing world, the changing geopolitical landscape, emerging powers, and the potential for catastrophic terrorism will be defining features of the world over the next two decades.

In support of the Global War on Terror, situational awareness and stability operations will become more significant as increased actions in non-combat areas require the need to address partner nation capability and surrogate operations. As we move into more low-visibility, non-combat area operations and activities, there will be an increasing demand for special operations UW and FID capabilities.

USSOCOM's transformation goals identify and develop those capabilities SOF will need to ensure the highest level of current readiness while providing the resources for long-term force recapitalization. SOF will remain a **full-spectrum, multi-mission force,** capable of conducting **tactical operations with strategic impact,** while continuing to operate effectively in **joint, combined, and interagency environments.** Transformation is not just about equipment, but is a holistic approach to solving tomorrow's, and in some cases today's, problems through doctrine, training, organizational structure, and technology. Transformation will require USSOCOM to remain focused on people and their unique skills.

The Way Ahead

USSOCOM will continue transforming to meet the demands of the GWOT, while simultaneously conducting SOF missions as a supported command for planning, synchronizing, and executing global operations against terrorist networks. As Afghanistan and Iraq are able to provide their own stability and security, conventional U.S. military operations will decrease. For SOF, it will mean refocusing assets towards a different commitment, but the same high operational tempo. A majority of Special Operations will remain involved in the GWOT, but with less visible combat operations and reduced emphasis on the Central Command's area of responsibility

as focus shifts to finding and defeating a dangerous global enemy.

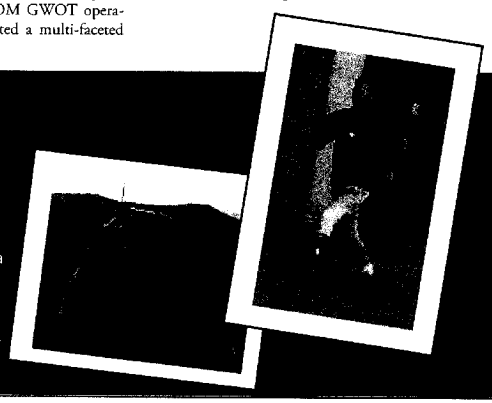
The individual **SOF Warrior** will remain at the core of special operations. In keeping with the first SOF Truth, "humans are more important than hardware," USSOCOM will ensure the **SOF Warrior** remains the centerpiece of the 21st-Century special operations capability. To meet increasing requirements for SOF capabilities, USSOCOM needs to **grow forces**, but will do so carefully, ensuring we retain quality in our accessions and training. USSOCOM will continue to develop agile and adaptive leaders through specialized training and a robust special operations professional military education program to enable success in all areas. USSOCOM will retain experienced operators by employing the force in appropriate roles, by applying incentives to retain their critical skills and experience, and by improving management of our personnel.

USSOCOM will continually improve **SOF Warrior** capabilities through more efficient training, better education, increased experience, and focused equipment acquisition. The commander of USSOCOM put into effect the first **Mission Training and Preparation Systems** (MTPS) roadmap in July 2005, which centralized the management and execution of SOF simulation, mission rehearsal, and mission planning capabilities. This "system-of-systems" approach integrates all SOF simulators into a common environment to provide a seamless architecture to conduct all SOF training and mission rehearsals. The MTPS roadmap will significantly improve training efficiency while enhancing SOF aircrew and operator capabilities and extending platform lifetimes.

USSOCOM's resourcing focus is to invest in those capabilities that further improve the SOF Warriors' ability to find, fix, and finish the enemy. Improved **Intelligence, Surveillance, and Reconnaissance (ISR)** capabilities provide critical information for the planning and execution of USSOCOM GWOT operations. The Command has initiated a multi-faceted strategy for improving these capabilities and achieving persistence surveillance. Key elements of this strategy are the development of an overarching global sensor network; establishment of a USSOCOM Unmanned Aerial Systems Squadron; and the continual upgrade of intelligence collection, reporting, and analysis systems. USSOCOM is partnering with multiple national agencies to develop specific technologies to fill identified ISR requirements and enhanced interoperability with National ISR architectures. The Command's intelligence center has collaborated with the other combatant commands and specific DoD and non-DoD agencies to create a comprehensive Joint Capabilities Document that lays the foundation for future ISR developments and procurements. These initiatives will ensure that SOF warfighters have the most robust and responsive ISR architecture possible to meet the challenges of the future.

CHARACTER

U.S. Army Special Forces Captain Robert Eldridge is a true example of the character and drive of a Special Forces Operator. After enlisting in the Army, he successfully completed Special Forces training and spent 11 years as a team medic. An avid runner and leader looking for additional responsibility, he was selected for officer training and later returned to Special Forces. While on patrol in Iraq with the 7th Special Forces Group, his HMMWV was hit by an Improvised Explosive Device and he was severely injured, requiring the amputation of his leg. However, Captain Eldridge was a survivor and vowed to recover. With SOF support and through unyielding determination, Eldridge recovered through surgeries and physical therapy, finally being fitted with an artificial leg. Just nine months after the injury, he was back in uniform as he took command of the Headquarters support company of the 7th Special Forces Group. Today he continues to run, often far ahead of his younger peers at a 6:30 minute pace.



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Additionally, the way ahead must include two key elements: building foreign capability to defeat terrorism and highly integrated application of all instruments of national power. USSOCOM's focus on UW, FID, and interagency cooperation will continue to increase to win the long-term fight against terrorists. An increasing global presence and focus, enhanced SOF Warrior capabilities, and growing international and interagency coordination all combine to form SOF's direction for the future.

Conclusion

United States Special Operations Command is the lead combatant command for planning, synchronizing, and, as directed, executing global operations against terrorist networks. As such, USSOCOM created the Center for Special Operations which developed the first strategic campaign plan for countering terrorism. This plan forms the foundation of DoD's effort and is being considered as the long-term framework for assigning resources to the GWOT. The CSO breaks down traditional barriers by bringing operations, intelligence and planning together under a single director, capitalizing on the natural synergy to push beyond traditional ways of thinking. At the same time, USSOCOM capitalized on its unique role among combatant commands as a force provider to efficiently tailor its organization, training, and equipping to meet the demands of the war on terrorism.

In conjunction with the Geographic Combatant Commanders, allies, and our interagency partners SOF will continue to protect U.S. citizens and interests as well as those of our allies by attacking terrorist networks, eliminating their capability, and capturing or killing their leaders. At the same time USSOCOM understands that this is a long, global campaign and is posturing the Command for the long-term fight to help ensure the continued security of the United States. Unconventional Warfare, Foreign Internal Defense, Civil Affairs, and Psychological Operations are all capabilities that SOF brings to the battlefield that directly impact the underlying conditions that support terrorism.

Beyond just implementing SOF's capabilities, USSOCOM is in a unique position to further international cooperation and to strengthen interagency relationships within the U.S. Government. Realizing GWOT requires international engagement, USSOCOM is leveraging SOF's capabilities to help partner nations defeat terrorism within their own borders through targeted PSYOP and CA projects as well as using FID to build critical counterterrorism capabilities. UW and FID, now and in the future, will remain the keys to building environments inhospitable to terrorists. An interagency and international endeavor, USSOCOM will ensure its efforts are coordinated and synchronized with all partners in the GWOT.

USSOCOM is encouraging the interagency to expand and improve relationships that enhance information sharing to better focus all instruments of national power against terrorists. Creation of Military Liaison Elements, a Collaborative Planning Environment, and the Joint Psychological Support Element are examples of USSOCOM's ongoing efforts to improve SOF, DoD, and interagency coordination, cooperation, and collaboration. Recent agreements with U.S. government agencies, and focused events with partner nations such as International SOF Week are important first steps in developing a fully integrated and interoperable world-wide antiterrorist network. USSOCOM will continue to identify and create new partnerships to enhance the SOF Warrior's ability to locate and eliminate terrorist threats before they can act.

USSOCOM will enhance the individual and collective skills, abilities and talents of the SOF Warrior.

USSOCOM will harness a global network where collaboration and synchronization across command lines will play a dramatically larger role.

USSOCOM will develop and integrate the capabilities needed to find and fix terrorists anywhere on earth.

USSOCOM will develop leaders with the education, experience and aptitude to apply SOF capabilities at the operational and strategic levels.

The SOF Warrior, specially assessed and selected with world-class training and equipment, supported by a quality civilian workforce and an outstanding acquisition process, are instrumental to success on the battlefields of Iraq and Afghanistan. Through tailored growth, creation of specialized skill sets, enhanced training, and development of advanced equipment, USSOCOM is aggressively preparing special operations to skillfully engage in the long-term global campaign to defeat terrorism in the future. USSOCOM will ensure SOF remains manned, equipped, and trained to conduct operations...at the right place...at the right time...with the right force in the Global War on Terrorism. With the continued exceptional support of the U.S. Government and the American people, the SOF Warrior will continue to apply innovative thinking, energy, focus, skill, courage, and determination to defeat worldwide terrorism and prepare for the future.❖

Senator INHOFE. Thank you, General Brown and General Abizaid, for your excellent opening statements.

Since we only have four people here—I think we probably will have more—we will start our rounds at 8 minutes, and perhaps when the chairman gets here he might want to adjust that.

General Abizaid, I try to listen to criticisms here and then go back to my own experiences in my trips to Iraq and to the AOR.

It seems as if I have ended up in Fallujah more than anyplace else. During the last election I was there with the ISFs a day before the scheduled election and they were voting so we got a lot of testimonials. I talked to a very large number of them and along with the marines that were responsible for training them.

What I keep hearing about, not just from the marines there but also from the Army, is the high quality of training that they are able to absorb. One of them told me it is almost like training Americans. Of course, you do not hear that here. But the quality of the trained and equipped ISF seems to be really good, and they have a great sense of pride about their accomplishments and their level of training.

Would either of you care to talk about, very briefly, the quality of training that they are able to assume?

General ABIZAID. Thank you, Senator Inhofe. I believe that the quality of the ISFs and the armed forces in particular is good. By regional standards it is very good. In the aftermath of the Samarah bombings, the Iraqi army in particular performed its mission in an admirable way. It gave General Casey and General Dempsey a lot of confidence that even under the greatest sense of provocation they could perform their duties well. They are certainly progressing. They are certainly stronger than they were last year, and we believe that they will continue to move forward.

Currently, Senator Inhofe, that is what we call battle space, the area in which a commander has freedom of action, we have 2 Iraqi divisions, 13 brigades, and 49 battalions in charge of their own battle space, which is double what it was last year, and it did not even exist several years ago.

That our commanders and Iraqi commanders are confident enough to be doing that, shows that our transitional strategy to shift the focus of counterinsurgency operations lead to the Iraqis is being successful. Now, having said that, I think it is very important that people understand that the confidence of the ISFs is derived from their confidence in their own government. It is so important that, as we go through this period of the formation of a government of national unity, they continue to have confidence that a legitimate government will emerge and move Iraq towards the stability and the prosperity that they know can be achieved.

Senator INHOFE. General, I will be leaving tonight for my 11th trip over to the AOR. When I first met this General Madhi, he was the brigade commander in Fallujah. He had, however, been a brigade commander for Saddam Hussein at one time. He hated Americans but then turned around and, after embedded training, he became one of the big fans of our troops and our abilities.

It is my understanding that he was transferred to the eastern part of Baghdad and is in charge of security there. When I was there last, the entire eastern third of Baghdad was under their command in terms of providing the security. Is that fairly accurate today?

General ABIZAID. Parts of it are. I cannot be specific about where he was, compared to this time last year, but I think about 40 percent of Baghdad is in the hands of Iraqi commanders.

Senator INHOFE. That is the point I am trying to get, not necessarily just that particular general.

The other thing I would not ask you to respond to, but it is just an observation I got from talking to the people in the field over there, is that we need to get to the point where they have what would be equal to about 10 divisions of trained and equipped ISFs for them to assume their own security, which would be about 325,000 trained and equipped Iraqis. Right now we are somewhere around 200,000 as I understand.

I will not ask you if you agree with these officers and enlisted people in the field, but do you think they may be fairly close to pretty accurate in their assessment of at what point they will be able to provide their own security?

General ABIZAID. The ISFs are pretty much developing along the time line that General Dempsey has laid out. There will certainly continue to be more and more Iraqi forces that secure more and more battle space. Obviously, we want to go from where Multi-National Force Iraq was in the lead for counterinsurgency, to Iraqi military forces and then to Iraqi police forces.

Now, General Casey has emphasized the need this year to really concentrate on police training. Ultimately, the insurgency is best fought by police forces over time and it is our view that we have a lot of work to do in the police forces. That having been said, our embedded training teams with the Iraqis, I agree with their assessments, and I agree with General Dempsey's assessments, that the force has a high quality, a high dedication, and they have performed well. There are always pockets in which you have to look for improvement and we still need to further develop the logistics capability and the command and control capability of the ISFs, and certainly we need to help the Iraqis develop capacity within the Ministry of Defense and Interior in order to have effective command and control.

While we have made great progress, there is still a lot of work to be done. I am confident that General Casey and General Dempsey are on the right track to turn over more and more counterinsurgency responsibilities to the Iraqis this year.

Senator INHOFE. I remember General Chiarelli talking about the advantages of the Commanders' Emergency Response Program (CERP) and the fact that they can do so much more for the same dollar if they are able to respond immediately to the needs that they see in the field. Do you feel that is coming along? Do you think we are a little short on our funding of that program? Where do you think we are with that?

General ABIZAID. Sir, I looked at where we are from what was in the budget and the supplemental and I think it is sufficient to meet the needs of commanders. The commanders in the field use that money. It helps to reduce frictions in the local areas that they operate in and it gets to some of the tougher areas. The CERP money has been essential. We appreciate your funding it.

Senator INHOFE. I wanted to talk about training and equipping in the Horn of Africa, but I am running out of time. General Brown, could you tell us where the direct entry program for recruits is right now?

General BROWN. Sir, it is doing well. As we continue to grow, we have limited it to 1,500 applicants per year. We are getting absolutely tremendous applicants. We fill that up every year. We grad-

uate about 20 percent of those people that start. It is called the "18 X-Ray" program. We have about 445 18 X-Rays in the field today. They are a little younger, but as part of bringing them in they are assessed for their age maturity and capabilities before they come in. Some will have college degrees and, quite frankly, just want to contribute to their Nation and want to do it through Special Forces.

That program has been extremely successful for us. I think that added to some of the bonus things we are working on to keep the top end guys in, continuing to work the 18 X-Ray program, and recruiting from the field, are going to help us get to the numbers as we grow these SF battalions. The 18 X-Ray program has been very successful.

Senator INHOFE. That is good. Specifically, the need for the Marine unit in there; would you please briefly tell us what that is and what their functions will be?

General BROWN. Sir, the Marine Corps component brings some capabilities that we did not have in our force structure or that we did not have sufficient capacity. There are three major components to the Marine Corps component, brigade-size units. The first one brings in some human intelligence (HUMINT) teams, and some signals intelligence (SIGINT), or radio reconnaissance people. It also brings in additional logistics and communications. It is an enabler brigade, and those capabilities will be available to all of Special Operations and to our Marine Corps component.

It also has foreign military training teams that have a basic language capability. Right now it is French. The first one of those will deploy next month under SOCOM. They will go into the Pan-Sahel of Africa. They have the capacity to do basic training as a foreign internal defense mission, allowing us to focus the Green Berets and the SEALs, on more counterterrorism force type training. They will go in and run basic training for foreign militaries.

Senator INHOFE. That is good.

My time has expired. General Abizaid, you said "In the Horn of Africa, we will continue to work to enable regional nations to strengthen their ability to resist extremist activity." I was going to talk about the train and equip provision and also the five African brigades. I have had an opportunity to talk to some of the people who will be training those, and that will be preparing for that time. So I will have some questions to submit to you for the record.

Senator Levin.

Senator LEVIN. Senator Reed has to be on the floor, so I will yield to him.

Senator REED. Thank you very much, Senator Levin.

General Brown, General Abizaid, welcome, and also welcome to Command Sergeant Major Smith and the extraordinary NCOs that you exemplify. I will see General Brown down in Tampa on Monday. So let me concentrate on General Abizaid.

General BROWN. Yes, sir, I look forward to it.

Senator REED. General Abizaid, again thank you for your extraordinary service to the country. Both you and General Brown have done a remarkable job.

We have been hearing for more than 2 years now about the need to vamp up our civilian complement to military forces—the Agency for International Development and the State Department—and

frankly, nothing has happened. I am beginning to question whether this administration is serious about winning the fight, because a military posture can buy time, but truly establishing the capacity for the Government of Iraq, truly improving the economy and creating a stable country requires more than just military force. So what do we do to get more than three Provincial Reconstruction Teams (PRTs) deployed in that country? What do we do to create a situation where the civilian complement to your efforts will be as robust and as effective as your military forces?

General ABIZAID. Senator Reed, the situation has improved since you and I traveled around the region together about a year ago. It is still not sufficient to meet the needs. I do not have an answer about how other agencies of the U.S. Government need to conduct their business, but I can tell you that the Department of Agriculture people, for example, in the field in Afghanistan, are invaluable. Every time that they have shown up at a PRT, they have made more gains than 20 or 30 soldiers, just by their presence and their expertise.

The Department of Homeland Security is sending border experts to give advice on how to organize the borders of a country like Iraq or Afghanistan, and are trying to figure out how to control the inflow of foreign terrorists, is absolutely essential and there are way too few of those people. State Department professionals at low levels in the PRTs are worth a battalion in the field. We need more of them. We welcome them. When they are there they do a tremendous amount of work and bring great capability.

However, I think we have still not figured out how to get the right people in the field and we need to figure that out.

Senator REED. General, it was a year ago that we traveled together. I was there last January and just visited again about 7 or 8 weeks ago two out of three PRTs. The progress has been inadequate, frankly. As I have heard yourself and others describe, this could be the most decisive factor at the moment. We have secured the terrain, and we are aggressively trying to preempt these insurgent groups. But unless we add the complement, we are just going to be presiding over chronic violence and chronic instability and, frankly, the American people are not going to tolerate that indefinitely.

I do not know how we send this message. I appreciate the fact that it is out of your lane since it is State Department, it is National Security Council, and it is the President. We could lose this battle, not because we do not have military forces on the ground, but because we have not summoned the national purpose and the national forces to do that.

There is another issue, though, that goes to PRTs that is more tactically oriented. There is a debate now about who is going to protect these forces in the field. When I was out in Al-Hilla, and Mosul, they are trying to get, and prefer frankly, American military forces. In some cases they are being protected by private contractors like Blackwater.

There are reports of a debate going on in the DOD about whether you are going to protect these PRTs. This debate becomes more sensitive as the announced goal of the government is to turn over

more territory to ISFs, which presumes of course taking out our military forces.

Can you shed some light on who is going to protect these teams in the field?

General ABIZAID. I think it was just yesterday, we formally stood up the Baghdad PRT which is under the protection of U.S. forces. I would also say, in fairness to our colleagues that are in the field and are risking their lives every day, that when they are out there they do a great job, and that all of the discussions I have had with people in the other agencies of the U.S. Government is that they fully understand the need to get people out there, and I believe they are committed to doing that.

That having been said, the protection of the PRTs in Iraq—and we are moving from the Baghdad one and then we will establish others as the need arises—will primarily fall initially to coalition forces in the numbers that seem to be appropriate.

Senator REED. When you say "coalition," do you mean ISFs or private security guards or a combination of both?

General ABIZAID. I think it is yet to be determined, Senator. I know that in Baghdad, we will take a good look at it and make sure we understand the dynamic there. In Mosul, it has certainly been protected by coalition forces and a combination of some contractors. But the security of those PRTs needs to be looked at carefully and we are trying to figure it out.

Senator REED. Thank you. I am not trying to suggest that these teams are not doing great work and at risk to their lives. They are doing remarkable work. But we have to have more teams. We have to have a plan to protect them.

We have witnessed over the last several weeks, retaliation and recrimination on both sides. Is it your view, that there is a conscious effort while this government is being formed on both sides to eliminate potential rivals? We witnessed last week 50 Sunni security people who were kidnapped by people in police uniforms. Is this a broad-based effort to basically kill everyone's opponents before they get to forming the government?

General ABIZAID. Senator Reed, I believe it is clearly a strategy of al Qaeda in Iraq in particular, and other groups associated with it, and undoubtedly some of the Shia splinter groups, to do everything they can to make this government fail; to put a wedge between Sunnis and Shias, in particular those who are trying to work together to form a government of national unity and cause that wedge to deepen the divide and create more violence, in the hope of propelling the country into civil war.

It is very interesting to me that the attack on the Samarah mosque attacked a symbol and seemed to gain greater traction in local communities than the killings of hundreds of people that have been perpetrated by suicide bombers. I think there is clearly an assassination campaign. There is clearly an attempt to drive a wedge between Sunnis and Shia. There is clearly an attempt to drive Iraq slowly but surely into civil war, and this group of people, especially al Qaeda in Iraq, but also others on the Shia side, are starting to find some of the levers. In a culture where revenge takes on its own life, it is a difficult and dangerous course of action of which they have arrived.

It is very important, and I think the Iraqis understand this better than anybody, that they understand what is happening, that they are being manipulated, and the government of national unity that needs to form has to recognize what the enemy is trying to do to them. They have to avoid it.

The good news is the security forces held together, and government leaders came together. I still think we are at the point, clearly, where more people are trying to hold Iraq together than tear it apart.

Senator REED. Thank you very much, General. My time has expired.

Thank you, Senator Levin.

Senator INHOFE. Thank you, Senator Reed.

Senator Dole.

Senator DOLE. Thank you, Senator Reed.

General Abizaid, General Brown, welcome. I have great admiration and profound respect for your leadership, for the men and women who are serving under your command, who are making sacrifices every day for the security and the safety of this country. Thank you for joining us.

General Abizaid, the drug trade in Afghanistan remains a serious concern, as we all know. Heroin trafficking makes up a large proportion of the gross domestic product of the country. Money is falling into the hands of the Taliban and illicit funding to the warlords. Of course, this can definitely threaten the survival of this young democracy.

Would you review what CENTCOM is currently doing to help combat the drug trade in Afghanistan, and would you support making counternarcotics a higher priority for CENTCOM?

General ABIZAID. Senator Dole, I am of the opinion that counternarcotics operations are a high priority for CENTCOM. I personally talked to President Karzai about this on numerous occasions. But there are restrictions by law about the use of military forces in this area, and I would characterize our activities as being in support of robust actions by the Afghan national government, and other international agencies, in particular the British, that are in the lead in counternarcotics assistance to the Afghan Government.

As a matter of fact, it is very interesting that you asked this question today because there is an eradication effort that is taking place in the Helmand Province by Afghan security forces with British civilian agency support, with a lot of support from President Karzai.

The drug problem is a long-term problem, as we have seen in Colombia and other places in Central and South America in particular. It goes without saying that you have to have an eradication campaign that targets areas where people have had the opportunity to switch, that have had the opportunity to move towards an alternative livelihood. At this point still, the writ of the Afghan national government has not really extended deeply into all of the provinces. Helmand Province in particular is an area that we have not expended a lot of military effort. Now we have ISAF expansion going on down there. A British battalion task force will be moving into that area, and just by having coalition forces in that area on patrol will have a lot to do with interdicting some of that activity.

The other thing that obviously has to be done is to get better control over the borders. CENTCOM works very hard on border security, and in training Afghan security forces to be more capable. So we clearly recognize that, besides the Taliban and al Qaeda, drugs represent a mortal danger to Afghanistan's development, as does President Karzai, by the way.

Senator Dole, I want to emphasize that, like anything in this region, if you attack it in one country you are doomed to failure. You have to have a regional strategy that talks to the Pakistanis, that talks even to the Iranians, that talks to the countries to the north such as Tajikistan, Kyrgystan, Turkmenistan, Uzbekistan, so that you are dealing with the growing zone, but you are also dealing with the source and the transit zones. I think we have a long way to go in getting the regional strategy defined, aligned, and effective.

Senator DOLE. Thank you.

Now, knowing the progress and accomplishments that have been made, and that continue to be made in Iraq, it has to be frustrating to hear accounts from our media that offer sometimes nothing but negativity and pessimism. To quote a veteran that I have a great deal of respect for, Bob Dole said: "Saddam Hussein is in jail, the Taliban has been overthrown, 50 million people in Iraq and Afghanistan now are getting a little taste of freedom, and other rogue leaders like Qadafi of Libya now know that the United States means business."

I just want to make sure that our servicemen and women know how very proud we are of them and that we fully support the cause of freedom and democracy. How damaging to our troops' morale has this often negative focus been, and what more can we do to ensure that the positive achievements of our troops are given the credit they deserve?

General ABIZAID. Senator Dole, it is very interesting to me. Both General Brown and I are out there a lot. I am out there certainly more than I am in the United States. I talk to the troops all the time. The troops are so focused on their missions, and they also hear from folks back home that are not the media filters, that are just people they know, that they feel like what they are doing is very important, that it is supported by the people they know and love and care about back home, and that they are making a historic statement about changing the world, and they appreciate and know that.

I do not think they are distracted by bad news. I do not sense that the morale is adversely affected by it as long as they know that people such as yourself and people that are on the committee, are the leaders of our country, whatever the political debate may be, will support the troops in the field. The good news, General Brown and I were talking about it earlier, is you go into an airport today and a soldier in uniform is still thanked by our citizens. That sort of support is worth more to us and will counteract whatever bad news that may be out there in the media. They do not spend a lot of time watching the media. They have tough things to do and they do it very well.

Senator DOLE. Our military forces are without question the best trained in the world in traditional warfare. At the same time, in both Iraq and Afghanistan our men and women in uniform contin-

ually find themselves preoccupied with concerns like settling civil disputes or mediating local politics or supporting public utilities. Succeeding in these nontraditional activities is crucial, of course, to winning this global war on terrorism and promoting global stability.

Beyond programs like foreign language training, and cultural sensitivity training, what is being done to equip our military personnel with the tools that they need for this multitasking noncombat role that they find themselves playing on a regular basis?

General BROWN. Thank you, Senator. First of all, for SOF, a lot of our forces have a language capability and that is a requirement, and of course we do work very hard on the cultural piece. I was just at the Joint Readiness Training Center 2 nights ago, where I watched one of our units go and do some training. I was very impressed with the briefing I got about the number of Iraqi-Americans that come there to help contribute to the training to ensure that the troops going through our training centers at every level, the National Training Center, and the Joint Readiness Training Center, do get a chance to really interface with those type of problem sets that they will meet on the battlefield. It is so authentic that the Iraqi-Americans are down there to help with this cultural understanding. It is a very powerful program, and it is all based on lessons learned coming out of the field.

Senator DOLE. Thank you very much.

Thank you.

Senator INHOFE. Thank you, Senator Dole.

Senator Levin.

Senator LEVIN. Thank you, Mr. Chairman.

General Abizaid, the other day our Ambassador Khalilzad made a statement that the problems facing Iraq are increasing because of the existence of sectarian and national polarizations and lack of trust. He said that: "Iraq is in a crisis. The country is bleeding and moving toward civil war."

I am wondering if you agree with those sentiments.

General ABIZAID. Senator Levin, I am not going to comment on anything that Ambassador Khalilzad said. I will give you my impression about where we stand with regard to moving toward civil war. I think that Iraq remains a long way from civil war. I think that the sectarian tensions in the country are higher than I have seen since we started this endeavor. I believe they are dangerous if they cannot put zero sum politics behind them and move towards a government of national unity.

Daily, General Casey and I discuss indicators about what would lead us to believe militarily that the country is moving towards a civil war and, while we see very high tensions, it is still not to the point where we see it moving toward civil war. Do we think that the situation is one that needs to be rectified soon? The answer is absolutely; it needs to be rectified by the formation of a government of national unity that is regarded as being legitimate by the people of Iraq.

It is a hurdle that we have to get over relatively soon in order to continue moving with confidence in the building of the rest of the institutions of the country.

Senator LEVIN. General, it was reported that after your meeting with Iraqi President Talabani that Talabani told the press that you had assured him that U.S. forces, "are ready to stay as long as they ask us, no matter what the period is." Now, you and I have talked about this, but what is your take on that conversation? Was Talibani correct in his report, if that is what he said to the press?

General ABIZAID. Senator Levin, I have great respect and admiration for Talabani. I will keep our conversation that we had private. He characterized it in a way that I would not characterize it. But I think it is clear to President Talabani, to most Iraqis, and certainly to this committee that the United States CENTCOM intends to work itself out of a job in Iraq, and that has been an important part of our strategy all along. You can see that we have gone from U.S. forces being in the lead in counterinsurgency to U.S. forces now concentrating very heavily on the training and equipping and institution-building of ISFs, to turn over more and more of the security tasks to Iraqis.

It is very clear to us that Iraq will succeed best when Iraq is fully sovereign, in the hands of its own people, with reliable security forces, a building economy, and a legitimate government. I do not believe that we are an occupation force, nor do I believe that we will stay there forever, or that our long-term interests will necessarily cause U.S. bases to be there, as was mistakenly reported in some characterizations of a previous hearing.

I think that we will have to maintain, over the long-term, a robust training and institutional relationship with the Iraqi armed forces in order for them to succeed, because the institution needs a lot of work. In terms of combat forces, I do not believe that there is a need for a long-term large U.S. presence over time, provided the government of national unity comes together and the security forces continue to move towards the effectiveness that we have seen them display so far.

Senator LEVIN. If the leaders of Iraq have the impression that we are there without limit, without condition, and that it is an open-ended commitment, I think they are getting a false impression. That is not where the American people are. The American people clearly want the Iraqis to do what they need to do politically in order to have a chance of defeating the insurgency and avoid a sectarian civil war.

That impression that Talabani has is a false impression. We are going to be visiting with him in the next few days and each of us will express our own view as to what the correct impression is. But that clearly is, in my judgment at least, not only a false impression, but it is a dangerous impression, because it takes the pressure off the Iraqis to put their political house in order.

As the letter that Senator Reed, Senator Collins, and I wrote to the President said, we cannot make the Iraqis form a unity government. We cannot do that. We cannot decide who fills what positions in that government. We cannot write the amendments to their constitution for them. But it was our judgment, and we expressed it in the letter, that an Iraqi political settlement is not going to happen without pressure from the United States. That is our view.

Do you share the view that we have to keep the pressure on the Iraqis to reach a political settlement; that it should be enough that

they face a civil war; and that should be enough for them to try to do everything they can to avoid it? Would you agree that it is useful for us to keep the heat on them to form a government of national unity and to make the constitutional changes that are necessary for all the groups to feel that they are participants in an Iraqi nation?

General ABIZAID. It is my view that a government of national unity needs to emerge in order for Iraq to be successful.

Senator LEVIN. What leverage do you see that the United States can apply to push the Iraqi leaders towards a national unity government and down the road to amend their constitution? How can we realistically apply leverage?

General ABIZAID. Again, Senator Levin, it is really a question best sent to Ambassador Khalilzad than to me. Clearly there is a lot that the United States does for Iraq in these formative periods, that the Iraqis will continue to have to rely upon, such as the training and building of the institutions of the armed forces and the people of the armed forces, the continued work that we are doing in the economic sector, the continued work that we are doing in the security sector, and indeed the continued work that we are doing in the political sector to help them work through these very difficult times.

I think it is clear that the United States being the lead diplomatic, political, and economic organizer to help the Iraqis be successful is certainly recognized by them, and all of those represent leverage.

Senator LEVIN. Do you think all of the leaders of all the groups recognize that?

General ABIZAID. I think they do, except for the most extreme groups, of course.

Senator LEVIN. Ambassador Khalilzad also said recently that "We cannot invest billions of dollars in security forces if those forces are not trusted by the Iraqi people." Would you agree with that?

General ABIZAID. The security forces must be trusted by the Iraqi people.

Senator LEVIN. Do you agree, though, with the first half of that, that we cannot invest billions of dollars in security forces if they are not trusted?

General ABIZAID. I think that the security forces are the most trusted institution in Iraq now and that the investment in them is a good investment.

Senator LEVIN. So in other words, you think that they are trusted now by all the Iraqi people? You think the police are trusted?

General ABIZAID. I think they are the most trusted—the army in particular I believe is the most trusted institution in the country. I think the police have a long way to go.

Senator LEVIN. Where are we in terms of the Iraqi army battalions' readiness status? What is the number currently of Iraqi army battalions that are capable of planning, executing, and sustaining counterinsurgency operations with coalition support, at level 2?

General ABIZAID. I would have to take that question for the record to give you the exact number of battalions as of today. I would like to point out that the number that I have in my head

is 2 divisions, 13 brigades, and 49 battalions in charge of their own battle space, is very significant and actually represents a level 2 level of capability, but also an independent operational capability that is starting to form. I think that metric is very significant. It is double what it was last year and it will continue to increase, provided units are confident that a national unity government will form.

I will get you the numbers for the record.

[The information referred to follows:]

[Deleted.]

Senator LEVIN. Will you submit for the record that level 2? I would also ask the chair that the letter that I referred to that I wrote with Senators Collins and Reed, be inserted in the record.

Chairman WARNER [presiding]. Without objection.

[The information referred to follows:]

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United States Senate
COMMITTEE ON ARMED SERVICES
WASHINGTON, DC 20510–6050

March 10, 2006

The President
The White House
Washington, D.C. 20500

Dear Mr. President:

There is a consensus among our senior military commanders that a political settlement involving the three main Iraqi groups is essential for defeating the insurgency and that the Iraqis need to agree on a government of national unity and make significant compromises to amend their Constitution to achieve such a political settlement. A political settlement is also essential to prevent all-out civil war and is a critical element of our exit strategy for our troops.

In the midst of the spiral of violence, it is clear to us that we must act to change the current dynamic in Iraq and that the only thing that can produce that change is a political settlement that is accepted by all the major groups.

But an Iraqi political settlement won't happen without pressure from the United States. We can't make them form a unity government, we can't decide who fills what positions in that government, and we can't write the amendments to their Constitution for them.

By a 79-19 vote last year, the Senate said that:

> "The Administration should tell the leaders of all groups and political parties in Iraq that they need to make the compromises necessary to achieve the broad-based and sustainable political settlement that is essential for defeating the insurgency in Iraq, within the timetable they set for themselves."

We urge you to make it clear to the Iraqis how important it is to us that they achieve a political settlement, form a unity government, and make the necessary amendments to their Constitution. We believe it is essential that the Iraqi leaders understand that our continued presence is not unconditional, and that whether they avoid all-out civil war and have a future as a nation is in their hands. If they don't seize that opportunity, we can't protect them or save them from themselves.

The bottom line is this: The U.S. needs to make it clear to Iraqi leaders that a prompt political settlement is not only essential to them, it is a condition of our continued presence.

Sincerely,

Carl Levin Susan M. Collins Jack Reed

Senator LEVIN. Thank you.

Thank you very much, both of you. I'm sorry we have not had a chance to talk, General Brown. We will get to you, if there is a second round.

General BROWN. Yes, sir. Thank you.

General ABIZAID. I am sorry you have not had a chance to get to him too, Senator. [Laughter.]

STATEMENT OF SENATOR JOHN WARNER, CHAIRMAN

Chairman WARNER. Shortly I will recognize our colleague, Senator Bayh. But I think Senator Levin's colloquy was a very important one and was carefully prepared, as he always is.

Senator LEVIN. Thank you, Mr. Chairman.

Chairman WARNER. My good friend and longstanding colleague shared that letter with me and I said I felt at this time I could not join in that letter. We have honest differences of viewpoint. But I view the situation in Iraq as extremely sensitive. It changes from day to day. I think today we had, at least this morning, some very refreshing news about Ambassador Khalilzad and meetings of the leadership. Certainly on the early morning news he was quite positive.

I view the situation over there as one of a balance, and how Congress from time to time exercises its perfect right to comment on this—I just urge colleagues, we all have to look at that balance. Perhaps we interpret it differently.

We have gone through the period of deciding against, the majority voices here in Congress, any deadlines or timetables. We are now recognizing, as Senator Levin said, that a strong message has to be conveyed to the Iraqi people and to the elected leaders that their exercise of sovereignty does not indicate an unlimited time within which to exercise that right.

We in this country are making an enormous sacrifice in life and limb, and it is very expensive. At the same time, they are a sovereign nation. My colleague used the phrase "we cannot dictate," and he is absolutely right, nor should we even attempt to dictate, because if it is perceived in this balance that we are dictating it could begin to provide some encouragement for those elements that want to precipitate a civil war. Sadr comes to mind. He is a questionable person in that checkered history over there.

Consequently, speaking for myself and carefully watching what our Ambassador is doing and watching what you and General Casey and others are doing, I feel that you are keenly aware of that balance and that you are in your actions every day trying to fine-tune just how far our country can go to send that message to the Iraqi elected leaders and at the same time do it in a manner that does not provide any encouragement to those that would want to try and precipitate civil strife.

It is a sovereign nation. We through our sacrifices and that of the coalition forces provided that nation sovereignty. We gave it to them. It is theirs. Yes, I recognize, as my colleague said, we have to keep the heat on. But I believe it has to be done primarily by the executive branch through the President's representative, that is our Ambassador, and you together with your colleagues.

We are not that far apart, Senator Levin. I guess it is just the refinements on how best to do it. But I am ever mindful of the balance.

I just wonder, did I phrase it in a manner that is consistent with your——

General ABIZAID. Yes, sir.

Chairman WARNER. I will accept that "yes, sir" and we will take it right from there.

Senator BAYH.

Senator LEVIN. I never could get an answer that short. I just thank you for that. I am going to try again next round. You have given me incentive. Thank you.

Senator BAYH. Perhaps you have set a good example for the members of our body, General, in your brevity.

Thank you, Mr. Chairman. I appreciate your courtesy.

Gentlemen, I am grateful for your service to our country. I would just like to second something that Senator Dole mentioned and, General Abizaid and General Brown, you both commented on, the morale of the troops. I am sure they are aware that there is some debate in our country about policy matters, but there is no division or debate about supporting our men and women in the field, and I hope you will take every opportunity to let them know that that is a strong bipartisan conviction, a unanimous one as far as I am aware.

I have four quick questions. General Brown, I hope you will not take offense if I continue the pattern that has been established to date. I look forward to talking to you when our schedules will allow.

General Abizaid, let me follow up on something that Senator Levin was getting at. I think one of the things that the American people are troubled by is the following: We have heard now for some time, at least a year or two, that the Iraqis and their security

forces are getting better. They are more numerous, more capable, and they are standing up. Our troops levels are about the same. I think many Americans just intuitively conclude that if they are doing better and we are the same, then the security situation must be getting worse; otherwise we could begin the process of gradually extricating ourselves.

What do you say to that kind of logic?

General ABIZAID. I know where we started. I can remember being on the streets of Baghdad back in April 2003 and it was just us and no Iraqis, and now today General Casey was telling me the story about the sixth Iraqi division commander that was assassinated in Baghdad, a very highly respected Sunni officer that has fought very well. He talked about the huge outpouring of emotion and national pride that was evident at his funeral.

I think that that sacrifice of ISFs, the clear knowledge that the vast majority of the people in that country have that their country has to come together, the fact that they are taking casualties at a much greater rate than our own forces, is a clear indication——

Senator BAYH. Let me summarize this a little bit differently. All of that is I am sure true. If they are really doing better, why can we not begin gradually extricating ourselves? The answer to that in many people's minds is, well, gee, the security posture must be getting worse.

General ABIZAID. Senator, if you look at our security force posture right now, after the elections we brought out around three brigades worth of combat power, and that is not an insignificant change. Now, the numbers do not change quite as much because as combat power comes out we will also increase the power necessary to train the troops, and so we have more trainers relative to combat power than we did before.

When we pass this hurdle of a government of national unity that is effective emerging, we will see that we will be able to continue on that path over time, although I would not want to predict how fast.

Senator BAYH. Let me follow up on that. That is an excellent point. I loved something that you said, "Political compromise between ethnic and religious groups," your quote was, "that have for centuries settled their differences through bloodshed will be difficult." When will we know whether the politics is coming together there or not? It seems to me that we are at a critical juncture here. They are forming a government. They are going to perhaps revisit their constitution. We will see whether they truly include in the security forces and other branches of the government all the ethnic and religious groups in a meaningful, not just a superficial way.

Will we not know in the next few months whether this is trending in the right direction or not?

General ABIZAID. I think we will know.

Senator BAYH. That is my judgment, too.

General ABIZAID. I think it is trending in the right direction, but I think we will definitely know a couple of months from now.

Senator BAYH. We will know whether they are willing to make the tough compromises they have to make to make this thing work or not.

General ABIZAID. Senator Bayh, I know a lot of these people. I have been dealing in this mission a long time. I certainly do not know them as well as General Casey knows them. But these are people that are working very hard to make this thing work. We have put a lot of trust and confidence in them, but ultimately, it is the people of Iraq that have to put trust and confidence in them.

They have elected a government for a 4-year period and it is important for that government to come together now. I think it is a crucial time. It is a sensitive time. The terrorists are trying to exploit it to their advantage. But I am confident that they can come through this with our help.

Senator BAYH. I have two final questions, General. I am going to ask you a variation of a question I get all the time, and that is, knowing what you know today, would you do things differently? I am not going to ask you about the decision to go into Iraq. That is a different question altogether.

But reading in this morning's newspaper that post-September 11 we are adopting a more forward-leaning proactive strategy for dealing with the threats that face this country, it is not inconceivable we might face a similar situation at some point in the future. Looking back on it, force levels, planning for the aftermath, de-Baathification, what have we learned? What would we do differently to try and make perhaps a similar situation in the future have a better trajectory?

I get asked this all the time. It is about the original decision, but in my gut, General, I sense that there are four or five things that if we had handled them differently, perhaps they could have been in some ways transforming. It is too late to go back and do them differently now. That is life. But what have we learned from this that we can use going forward?

General ABIZAID. I certainly think there is a lot that we have learned from this. We have certainly learned—and I will give you military lessons. We have certainly learned a lot about how to put together a big army quickly. I think when history looks on this mission and they see where we went from zero to where we currently are and where we are going to end up, that this effort of training and equipping the ISFs, and getting them stood up, has been breathtaking.

On the other hand, one thing that I take as a clear warning and that is that you can do a lot of the training, equipping, and organizing, but what you also have to do is build the institution. Building the institution and changing the mentality of how the army used to be used under Saddam is a long-term project that is going to require a lot of continued activity. We need to recognize that now. I think the Iraqis need to recognize it. Otherwise you just cannot go down this road of having the army being a danger to the state. It requires a change in thinking and in how officers are trained.

There are, of course, many other lessons. One great military lesson I think General Brown and I have learned is the need in this counterterrorism business to find, fix, and finish, and that we have to do better in the find portion. It is just the way things are today. You have to invest in human intelligence. You have to invest in the human capacity and capital necessary to have people that are com-

fortable in these operating areas. You have to fuse intelligence and operations together and not have them move together in the Cold War model of separate stovepipes reporting to Washington. It has to be fused at the lowest operational level.

We are much better at it now than we have ever been. I think you see some of the results we are having against the al Qaeda cells around the world. This lesson is one we better not lose.

The final lesson I would like to talk about, and I could probably talk about this longer but I will not, has to do with asymmetric warfare. If we think people are going to come at us with planes and tanks and big armies in the next 30 or 40 years or so, so we can destroy them, I think we are mistaken. We need to have conventional deterrence. Do not get me wrong. We must invest in asymmetric warfare, in General Brown's forces, and in the counter-improvised explosive device (IED) effort, not because of Iraq but because of the way warfare has changed and the way that people will react to us.

Senator BAYH. Thank you, General. This is a longer discussion. I am sure you and your colleagues have just learned a tremendous amount that we can all benefit from going forward.

General, there is a body of opinion in our country that would like to leave Iraq as soon as possible. What would happen in your estimation if we were to just leave within, let us say, 3 months, 6 months, or something like that?

General ABIZAID. Certainly the country will not be ready to stand on its own two feet security-wise within 3 months and it will not be able to stand there alone without support from not only the United States but the rest of the international community in 6 months. It will be much improved in 6 months, provided a government of national unity comes forward, and troop levels in 6 months can be addressed, provided that that happens as well.

It is a tough balancing act as we go from us being in the lead to the Iraqis being in the lead. You can imagine that that move has a tremendous amount of friction associated with it. If governance, economy, and security are all going to move together, then we need to get past the governance problem that we currently have.

Senator BAYH. Thank you for your very thoughtful and candid testimony.

Chairman WARNER. Thank you, Senator.

Senator Thune.

Senator THUNE. Thank you, Mr. Chairman. Generals, thank you for your service to our country and for the extraordinary job that you and our soldiers are doing in what is a very important mission in the war on terrorism. Obviously, we are all very interested in what is happening currently in Iraq, what the future holds and what our commitments there will be going forward.

General Abizaid, you note that the enemy in Iraq consists of Sunni Arab rejectionists, Saddamists, terrorists, and foreign fighters. What is the common bond between these groups and what areas do they diverge and pursue their own goals?

General ABIZAID. The common bond is to make the current government fail, especially between the Saddamists that have no hope for reconciliation within the society because of the crimes that they have committed and between al Qaeda, that has absolutely no de-

sire to reconcile anywhere, but just to drive the region into civil war, in the hope that they will be able to exploit their extremist ideology by that.

That having been said, there are a lot of people that have been operating within the Sunni insurgency that are tired of fighting, that want to join the government, that want to join the security forces, and I think there are opportunities for reconciliation ahead once a government of national unity emerges.

The irreconcilable wing has to be fought. They have to be killed and captured. On the other hand, the good people of the country that want to get on with their lives and participate in the future of their country know that they need to be part of both the security forces and the governance, and I think things are tending in that direction and will continue to do that, provided a legitimate government emerges, which I think it will.

Senator THUNE. You mentioned earlier as well that you think the forces that are intent on holding things together are greater than those that are intent on pulling things apart. Do you think that these various groups, the Saddamists, former regime elements, terrorists—what is your view in terms of whether or not they are succeeding in eroding support for a central Iraqi Government with the average Iraqi citizen?

Do you sense that the point of view, the overall attitude of the average Iraqi citizen, is supportive of the government coming together and being formed? Or are these groups, which as you had just noted whose intention it is to keep the government from succeeding, beginning to take hold and win over some of the average Iraqi citizens?

General ABIZAID. Fear is a very powerful motivating factor and after the Samarah bombings a lot of people became very fearful. Before the Samarah bombings there was clear polling data that said people were very unhappy with al Qaeda in Iraq, they were very dismissive of the Saddamists living in Syria and other places in the Arab world sending their money in to pay young Iraqi kids on the streets to emplace IEDs.

That having been said, this attack on the Samarah mosque really exposed some pretty deep wounds and some great fear between the various groups. It is my impression that the people of Iraq are tired of al Qaeda. We see a lot more people coming forward to give information about al Qaeda and we see a lot of people coming forward actually to fight al Qaeda independently in areas such as al-Anbar Province, which is pretty interesting.

But the ruthlessness of these groups, and the fact that they are willing to execute and intimidate on a scale that really cannot be appreciated here in the United States, cannot be underestimated. It is very important that ISFs emerge, take control of the regions where these groups have some strength, and move forward. I think that is happening and I believe it will continue to move in that direction.

Senator THUNE. All of us here hope and pray that these leaders in this country—and I would echo what has been said already by a number of people, and that is that we have to continue to apply pressure on the political leadership in that country to be able to form a national unity government. That is obviously the hope and

prayer of every American, because that is ultimately the only way that we will be able to get our young men and women home.

In a worst case scenario, if the sectarian violence continues unabated and the situation were to devolve there absent the formation of that sort of government—I know you have responded to this before, but I am just interested in getting your perspective as to what role then do our troops on the ground have if these various factions, and ethnic and sectarian, begin firing at each other?

Our guys end up being in the crossfire and obviously not being able to take sides. How do you see our role at that point?

General ABIZAID. I think what we need to do is the hard work that has to be done now in order to prevent the worse case problem from taking place. I think that with the ISFs, especially with the army, continuing to be confident and competent, proactive work being done against militias that are threatening the peace in key areas, whether by coalition lead or by ISFs lead, all these types of actions with regard to security need to continue and I see no reason why they cannot continue.

It is also very important that all of us understand that General Casey's strategy is to turn over more and more of the security lead to Iraqi forces. He is doing that in much of the country and will continue to do that. We actually find that as ISFs take the lead that they become very effective.

So we will back up ISFs when they get in trouble. We have security forces and military transition teams that are embedded with their forces that can help bring the enablers of American military power to bear on a problem. The echelonment of multinational forces and ISFs, of course, it is not even throughout the country. In some areas we are still clearly in the lead and it is a long ways from it changing any time soon. In other areas, the Iraqis are in the lead.

But I am confident that our support of ISFs, and our giving them more and more responsibility for their own future, is exactly what they want and they will move the country in the right direction and we will be able to support them.

Senator THUNE. I am thinking with respect to in places like Sadr City, where you are supposedly seeing the infiltration of some of those security forces with some of the elements of the unsavory and those who are cooperating with, aiding and abetting some of the killing and the violence that is going on. How do we in those areas deal with—we want to turn over more and more, but I think the thinking is that, at least in the Ministry of Interior, that some of these security forces, and police forces in some of those key areas, are being infiltrated. How do we deal with that particular situation?

We are trying to back them up. We are trying to give them a lead role. If these forces that are operating contrary to what is in the best interests of the broader majority continue to be successful in infiltrating some of these security forces, it seems to me it is awfully difficult for us to get this sectarian violence stopped if they have the law on their side too, so to speak.

How do you see us bringing an end to that?

General ABIZAID. I think that the problem of loyalties at the local level in a country like Iraq is a problem that we have to deal with,

especially with police forces where police are recruited locally. If you have local political leaders that, instead of staying within the law, decide that they will exercise their power through armed people or militias, that is certainly a very bad thing. That ultimately will not allow Iraq to come together the way that it needs to as a responsible member of the community of nations in the region.

Moving against militias that represent a threat to stability is very important for the Iraqi Government. They recognize that.

The other point that is so important, Senator, is that we cannot allow any ministry in a government of national unity that emerges, to use that ministry to further sectarian agendas. It is just so critical, especially in the Ministry of Defense, the Ministry of Oil, and the Ministry of the Interior. Clearly, there is a lot of work that needs to be done in the Ministry of Interior. General Casey recognizes this. We generally regard the police as about a year behind in terms of development from what we see in the army. I think that that is not unnatural. We have to learn to train policemen. It is easy for us to train soldiers. It is a different thing to train police.

But we are making progress and I think we will see progress continue in that area. There is no doubt that there are going to be pockets of violence and difficulty in various parts of the country. But it is also wrong to believe that just because we see through the filter of our media here in the United States that there is violence everywhere in Iraq. The truth of the matter is in most of Iraq there is not what I would call sectarian violence. It tends to be local. Commanders are concentrating on those local areas. Iraqi forces are concentrating on those local areas. I think that people in Iraq have studied what happened to Algeria, what happened to Lebanon, and what happened to other countries in the region when they moved toward civil war, and they do not want to go that way.

Senator THUNE. I certainly hope you are right, and thank you again for the things that you are doing. We are closely monitoring what is happening there and are hopeful that the political leaders in that country will come to the correct conclusions. I hope that they continue to have the support of the majority of the Iraqi people.

Thank you for your service and thank you for being here today and sharing with us your views.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you, Senator Thune. I hope that the replies the General gave to your very insightful questions are followed far beyond this hearing, because in those few paragraphs you summarized very clearly that picture and the importance of not just the initial formation of this government, but as it moves on, the selection of people in the administration for the various departments and agencies.

I want to commend you, General. Your testimony is extremely important before us this morning.

I thank you, Senator.

In that context, General Abizaid, I listen very carefully to what you say, not just today but every day, and in the very valued opportunities where I am with others and you are speaking or in some of the one-to-one sessions that we have had. I want to take a quote out of your statement. You said, "We need significantly

more non-military personnel in the CENTCOM AOR with expertise in areas such as economic development, civil affairs, agriculture, and law."

That basic statement, you made before this committee in your last appearance. As a consequence, I have now written to every Cabinet or agency head of our government a letter, posted yesterday, talking about the need for that type of support. I will quote part of my letter:

> "In recent months, General Peter Pace, Chairman of the Joint Chiefs, and General John P. Abizaid, Commander, United States Central Command, have emphasized the importance of interagency coordination in Iraq and Afghanistan. General Abizaid stated in his 2006 posture statement to the Senate Armed Services Committee: 'We need significantly more non-military personnel with expertise in areas such as economic development, civil affairs, agriculture, and law.' "

I further said:

> "I commend the President for the leadership he showed in issuing a directive to our interagency by signing National Security Presidential Directive 44, titled 'Management of Interagency Efforts Concerning Reconstruction and Stabilization,' dated December 2005."

I intend, and I think I am joined by the members of this committee, to begin to try and put a little muscle behind what you said and get that job done. I give you full credit for getting that message to us repeatedly, in 2006 and now again in 2007. Let us hope for the best, because I think the President's directive, which is clearly inspired by what you said—because, as you said this morning, we have made great progress in strengthening the Iraqi's army, and I think that is well documented and accepted by Congress now. The police is another issue, but it is under work.

Even if we structure the army and hopefully eventually the police, the basic infrastructure which a new government has to deal with has to be brought along in parallel with the strengthening of their security forces. Do you agree with that?

General ABIZAID. Senator, I agree. I had the chance to read your letter. I appreciate and agree with what you say in there. I appreciate your support for institutionally trying to shape the effort to be more effective in the war zones.

The rule of law in particular is really what this is all about. Insurgency will not be successful in a country where the rule of law applies. But in both Iraq and Afghanistan, it is true to say that these countries are a long way from having effective court systems, prison systems, and rule of law systems that will choke the insurgency.

People that know how to build systems—legal systems, prison systems, et cetera, et cetera—better than the United States military need to help in this effort, and I think it is an area in which we are woefully behind and we have to move with some speed in order to help them help themselves, which is after all the basis of our strategy.

Chairman WARNER. Well spoken, General. This committee is now going to enlist in your ranks to try and help make that happen.

Why do you not give us just a little status report as you see it from your vantage point of that infrastructure today as it relates to the production of oil. My understanding is it is about level or even having fallen off here and that is a direct consequence of the inability of the Iraqis to provide the proper security for the oil industry, transmission lines, that is the extraction area, the transmission of it, and the inability of contractors who are dealing now with their own security situations in trying to perform the necessary repairs on the energy side, also the electrical situation.

Now, an interesting part of that electrical situation is that the user end of it has increased exponentially with the liberation of Iraq. More and more people are acquiring things that require the use of electrical power.

Would you give us your perspective on how you see that infrastructure moving forward, or not moving forward in some areas?

General ABIZAID. Mr. Chairman, the infrastructure problems certainly exist. I think there is a misappreciation here that it is all centered around security. A lot of it has to do with corruption. Part of it has to do with other forms of criminality and a certain amount of it—this is not to dismiss the security aspect of it, by the way—has to do with the economic structures that are at play inside Iraq.

With gasoline, with an official price of 65 cents a gallon in Iraq, you can imagine that there is a huge market to get some of that product to other places. You can also imagine that the structural problems with changing from a dictator-led demand economy to an economy that can link with the other very sophisticated economies in the region is an effort that has to be moved on here with the new government. I am confident the new government will recognize the problem and it has to be just like the Afghan drug problem, it has to be solved by actions against corruption, actions to improve security, working through some of the tribal issues that take place in transit zones. You name it, but it has to be a concentrated Iraqi interagency effort in order to gain the revenue from their most effective revenue-producing source.

The good news about Iraq, though, is it is not just dependent upon oil for its revenue. It is a state that has great economic agricultural and other potential that needs to come to bear. But a lot of these, what I would call Soviet-style economic policies that have existed, need to be addressed immediately in order to get beyond this.

So there are problems, but the capacity in both the oil arena and the production of electricity has increased. It is really a matter of delivering, and how they do that with our help is very important to the continued success of them being able to fund their own future.

Chairman WARNER. I have often thought that if the Iraqi people had a full appreciation for the potential of their nation and how if they come together and support a government and suppress the insurgency, that they could begin to develop an economy and a lifestyle not unlike that being enjoyed in the moderate Arab nations like the United Arab Emerites (UAE), Qatar, Bahrain, and Kuwait.

To what extent do you feel they have a knowledge of how the rest of the moderate Arab world lives and how, because of their inability to move more swiftly to consolidate the gains that have been given to them in sovereignty, that they are just delaying that opportunity?

General ABIZAID. Mr. Chairman, there are a lot of very sophisticated Iraqis. Saddam put them in a time warp that is essentially a 1950s Soviet-style economy that they will have to work their way out of. They were certainly isolated.

Interestingly enough, when you look at a poll of what government the Iraqis would most like to emulate, they picked as their first choice the UAE.

Chairman WARNER. That is interesting.

General ABIZAID. I found it very interesting, that they had a view on how life worked there, how the system worked, and how the rule of law worked there. I think it is actually a good sign that people would look at that and think that that is a model that could be achieved, in addition to adding the representational aspects of governance that the new democratically-elected government brings to Iraq.

So yes, Mr. Chairman, I really believe that the Iraqis know what their potential is. They know what their future can be. But they also have difficulties getting by some of the sectarian problems and hatreds that have been around for a long time. They know they have to get by them. I am confident that they will. It will take a lot of leadership on their part, but I believe that that leadership exists.

Chairman WARNER. This may be a little out of the box, indeed people might say a crazy idea, but I remember in World War II and to some extent during Vietnam we used to do a lot of what we call leaflet drops. We just covered the skies with leaflets trickling down with pictures of the UAE and say, this could be your home, this could be your school, this could be your hospital; it is just a few miles away and you have the same potential in your country with its natural resources, and so forth.

Maybe a little propaganda along that way might help.

General ABIZAID. Mr. Chairman, I think trying to advertise what is going on in Iraq is something beyond the capacity of the Central Command.

Chairman WARNER. That is right, I do too. But you are a man who has studied that region and you have dramatically said this morning that if they had a choice it is the UAE. Let every person in the street get some pictures. I do not know if it is in their media or television.

General ABIZAID. Mr. Chairman, I think sometimes we forget what really is happening in Iraq and its effect on the region. When I go around to the other Arab countries, they all talk about Iraqi politics. Why do they talk about Iraqi politics?

Chairman WARNER. It is dynamic.

General ABIZAID. There is a lot of it and it is dynamic. It is also setting an example that will infect the rest of the region ultimately.

Chairman WARNER. Lean back a minute, General, and we will get a hold of General Brown here, who has had a chance to be with us this morning.

I always said when I have a few moments with you I am extremely envious of the opportunities that you have to command this most magnificent component of our combined military forces. I well remember on this committee working as a partner with then Senator Bill Cohen and others, and I think my colleague from Michigan was a part of it, to establish this concept and to establish it in the face of enormous resistance from the civilian side of the DOD in that era.

Out of it has come an extraordinary capability and, as General Abizaid said, we have to begin to think about asymmetric warfare, and I believe that responsibility heavily falls upon you. Do you feel that this budget now before Congress fully recognizes what General Abizaid said, namely the shift in emphasis that we must make towards more and more investment in asymmetric warfare? He carefully couched his remarks to reflect that of course we have to maintain the deterrence of conventional warfare. I know Army politics and the armored person and the infantry and all of the politics that go on in the Pentagon, having experienced it myself.

But again, this budget; are we taking a good strong step forward?

General BROWN. Sir, I believe we are and I think this budget is sufficient to take care of our first step forward as we launch out on what QDR changes are taking place down at SOCOM. I think the QDR recognized the importance of irregular warfare and the asymmetric capability that SOCOM brings to the battlefield. So in their analysis, which quite frankly continued some of the initiatives that we had already started, and then grew some of those to even greater level, I think it is a good step as we start to grow the capabilities of SOCOM.

We will grow 13,000 additional personnel up through 2011, and we will add a sizable amount of capability.

Chairman WARNER. Address to the extent you can—much of it is classified, but I think the American people should have an exact understanding of the forces that you have in Afghanistan as well as the very significant contingent in Iraq and their operations and missions, which are in direct support—Afghanistan, the ISAF, that is a multi-nation force to some extent.

General BROWN. Yes, sir.

Chairman WARNER. The force in terms of the zone that will be taken over by the Americans—I think it is called Quadrant 4. Then shift into Iraq.

General BROWN. Sir, SOFs in Iraq and Afghanistan are doing the full spectrum of special operations missions. We have about 7,000 special operators deployed today. That is the biggest deployment in our history. Ninety percent of them are in the CENTCOM AOR, and most of those in the Afghanistan and Iraq AOR.

They are doing the traditional direct action missions that they do, and that is the find, fix, and go after enemy targets as required. They are working with all of the Afghani forces, doing what we call our foreign internal defense mission, which is in fact building a foreign nation's capabilities to defend their own borders and find terrorists on their own, and give their military the capabilities they need to do those kinds of missions.

Additionally, the SOFs have the unique forces of the civil affairs, which is our most deployed force, and our psychological operations forces that are working on the information support team in support of General Eikenberry and the forces in Afghanistan and in Iraq. We also have our Navy component. We have Navy SEALs on the ground doing some of the more direct action missions, and the training of some forces over there. Of course, all of our special operations aviation is supporting all of the SOFs.

In Iraq, we have Special Forces A Team (Green Berets) out on the ground. Many of the battalions that go into a mission will take a Special Forces team as combat advisers with them. They will train with the Iraqi battalions in a support role, as General Abizaid mentioned. Additionally, we are working hard training the Iraqi counterterrorism force over the last year and it has been very successful. So we are doing the counterterrorism training portion of it with the Iraqi counterterrorism force and the 36th Commandos as they stand up and become more capable.

Again on the Iraqi battlefield, our psychological operations forces that are producing all the information capability are doing a great job, and our civil affairs. We are to the point where we have mobilized all of our civil affairs.

Chairman WARNER. Let us talk about the families of the SOFs and particularly the impact on the families of the very high operational tempo and rotation that you have currently as a consequence of the extreme activity you have in both of these areas. Is your retention holding up? Are your families willing to accept these continuing separations from family members for long periods?

General BROWN. Sir, I think they are. Our retention is good. As a matter of fact, our retention is very good right now, thanks in part to the bonuses that folks over here helped us get to keep some of our more senior special operators around. We now have it to a manageable deployment level where we can give people some stability in their schedule of when they deploy and when they will be home. You really know when you are going and when you are coming back.

Chairman WARNER. We are running out of time—that is in your judgment working as best as it possibly can under these severe circumstances?

General BROWN. It is working very well. We still have some pockets that are a problem. I have already mentioned the civil affairs and some of our air crews, but overall it is working, Senator.

Chairman WARNER. I remember joining you that day for the memorial services for that large contingent you lost.

General BROWN. Yes, sir.

Chairman WARNER. I will never forget the expression of the wives for their lost loved ones and their total adherence to the doctrines of SOF as the faithful spouse remains at home.

General BROWN. Yes, sir.

Chairman WARNER. Extraordinary.

Senator Clinton.

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

Thank you, gentlemen. Thank you both for your service. You carry the lion's weight as well as the hope for success in these current operations and I am very grateful to you both.

General Abizaid, there was a recent series of articles, I guess two so far, in the New York Times. One of the bylines was Bernard Trainor. In it the narrative claimed that during the march toward Baghdad the ground commanders wanted to stay and fight and wipe out the Saddam Fedayeen, but they were ordered to keep moving toward Baghdad.

I would like to ask you, first, based on your information, is that a correct statement? Second, in hindsight are we dealing with the remnants of the Saddam Fedayeen in the Baathist part of the insurgency?

General ABIZAID. Senator Clinton, I have heard a lot about it. I really have not read what you are referring to, but I will tell you my take on the movement as the deputy commander up towards Baghdad. I have never regarded it as either/or. There were conventional force commanders that wanted to divert some of their combat power to the lines of communication to deal with the difficulties that were clear down in Nasariyah and other places along there before moving forward. It was a good debate. It was one that was pretty open, and the way that I remember that we solved the problem is we diverted some of our special forces operators along the lines of communication to clean up, and we felt that there was sufficient force to keep logistics flowing and continue the advance at the same time. That is what we did.

Of course, people are always surprised that there is debate within military organizations, but when we are doing our professional activity there certainly is.

The question about whether or not these are the same Saddam Fedayeen, I do not think so. I regard this Sunni insurgency, in particular, as a loose amalgamation of al Qaeda in Iraq, Saddamists, and people that I would call Sunni rejectionists that have taken a long time to get organized over time. I think that there are some indications that some of the old structure of the Iraqi intelligence service continues to exist within Iraq and has linked al Qaeda in Iraq and some Saddamist rejectionists that are operating out of Syria, et cetera.

Some of those structures continue, but I have never regarded it as being a plan that the Iraqis had that is being carried out by structures that existed within the old regime. I think people that had expertise about terrorism from the old regime continue to operate against us, certainly in a much different ideological setting than they did during the Saddam era.

Senator CLINTON. Thank you, General.

General, on March 13 President Bush said, "Some of the most powerful IEDs we are seeing in Iraq today include components that come from Iran." However, at a Pentagon briefing on March 14 Joint Chiefs Chairman General Pace was asked that question: "President Bush said the Revolutionary Guards and IEDs and weapons are moving across the border from Iran. Do you have proof that they are indeed behind this, the government of Iran?" General Pace replied: "I do not, sir."

General Abizaid, do you agree with President Bush? Do you agree with General Pace?

General ABIZAID. Senator Clinton, I know you will forgive me for not agreeing with either, but to give you my own personal opinion about what the situation is in regard to the Iranians. First of all, there is no doubt that there is Iranian intelligence activity throughout Iraq. Also, there is no doubt that there is Iranian intelligence activity in Afghanistan. There is no doubt that components of IEDs that were manufactured in Iran have come across the border and gotten into the hands of Iraqi insurgent groups and been used against coalition forces.

I cannot tell you whether or not that happened with the orders of the Iranian government, but I can tell you that terrorists in northeastern Iraq use the Iranian northwestern border to move back and forth across the border. Is that a lack of capacity of the Iranian government or is that with the complicity of the Iranian government? I cannot answer that question.

I clearly believe that the new government of Ahmadinejad is very ideological, has made a lot of threats, and that we need to look very clearly and effectively with our own intelligence networks to determine how this flow is moving and who has authorized it, if anybody. I think it is a very serious concern. I am not prepared to say that I know one way or the other.

Senator CLINTON. Would you say the same thing about the flow of people and weapons across the Syrian border?

General ABIZAID. I would say that the flow of foreign fighters across the Syrian border has decreased, and that is clear from our intelligence. We know that. We know that the Syrians have moved against the foreign fighters. Why have they? Because the foreign fighters represent a threat to Syria and they certainly do not want to have these organizations and groups operating within their own country that are ultimately going to be a threat to their own government.

So out of self-interest, the Syrians have reacted in a way that has slowed the flow of foreign fighters. We have seen fewer foreign fighters in the country. But unfortunately, the foreign fighters tend to be the most dangerous because they will come in as suicide bombers, they will get employed in al Qaeda in Iraq networks, and they will cause a lot of damage. Of course, al Qaeda in Iraq is trying to foment the civil war that everyone is working so hard to prevent.

Senator CLINTON. I know that before I could get here Senator Levin asked a series of questions about whether or not Iraq was moving toward civil war. Just earlier this week the President announced the goal of having Iraqi forces control more territory than the coalition forces by the end of 2006. How does that goal translate into what percentage of population would be protected by Iraqi forces? How does it translate into the placement of forces, whether the forces are going to be integrated by that time, so that it will be representative of the population of Iraq and certainly not an impediment to stability operations because of difference in sectarian makeup of the population compared to the forces?

Could you give us a little additional information about that, General?

General ABIZAID. Of course, General Casey has a pretty detailed plan that is classified, that talks about where and how we will hand off. I can certainly tell you that right now the two divisions worth, 13 brigades and 49 battalions of ISFs from the army that are controlling their own battle space, are fairly independent in those areas. We intend to increase that over time.

I will have to take for the record and probably provide you with a classified answer on how that progresses in 2006.

[The information referred to follows:]

[Deleted.]

General ABIZAID. It is clearly our intention between now and December to increase that pace of handing over battle space to Iraqi units, and it will happen in those areas that are most ready for that to happen. For example, you look down in the British-controlled sector and the areas where the Australians, Japanese, and Italians have been working and those areas are pretty good. Some of them are ready to go towards police control, not just army control. You look up in the northern areas, in the Kurdish-controlled areas, and they are already in police control.

In the Sunni areas, like al-Anbar Province, it is pretty much Multinational Forces in Iraq. It is hard to give you an answer that would be one size fits all. We clearly intend to turn over cities in particular more and more to Iraqi control, and it is our goal to—I think Baghdad is 30 to 40 percent already in the hands of ISFs. We will accelerate that process.

Our intrusiveness in cities has been a huge complaint that has come from Iraqis for a long time. We look to turn over more and more control of those cities. In many of the cities, you see less American presence on the streets, which is what you would expect and what you would want. As a matter of fact, a lot of reporters that have not been in Iraq for a while who have returned to Baghdad say one of the most striking things they see there is the absence of American forces in big numbers, and that is by design. We intend to continue to do that.

Senator CLINTON. Thank you, Mr. Chairman.

Chairman WARNER. Thank you.

Senator Levin.

Senator LEVIN. Thank you, Mr. Chairman.

General Abizaid, you were asked a question, I believe, about the police commandos, and as to whether or not they have been involved in execution-style killing of Sunnis. My question is a little bit different than that. It is close, but a little different.

To what extent have Iraqi police commando units been infiltrated by the Badr Corps militia and are under their control? Is it a significant or a minor problem?

General ABIZAID. I think there is no doubt that there has been some infiltration in some areas and there may be some Iraqi police commandos who by day follow the orders of the government and by night might be doing the work of some of the various militia groups. We cannot tolerate that. That is not a successful recipe for moving Iraqi security institutions forward.

The Iraqi Government knows that. They are investigating those areas where loyalty problems have shown up. I clearly believe that

in those units, Iraqi security police commando units where General Brown's forces embedded, that we feel pretty confident about what they are doing and how they are doing it, and we intend to increase our visibility with trainers over time in order to help the Iraqis work their way through this problem.

The problem exists. I think it is exaggerated in the media, but it does exist and it is a danger to the state.

Senator LEVIN. Thank you.

Sadr's Madhi Army was blamed for much of the retaliation against Sunni mosques and Sunnis in general after the Samarra mosque bombing. What role is Sadr playing with regard to the increasing sectarian strife?

General ABIZAID. Publicly, his role is pretty interesting. He has been a real international statesman and a statesman within the political process of Iraq. He has apparently turned over a new leaf. Unfortunately, his militia people that are loyal to him have not, in my opinion. They have been violent. They have taken to the streets in some areas and not cooperated well with the ISFs. In some areas they moved the police away from where they were supposed to be doing their duty and it was necessary for army forces to move in there and regain control.

I think his militia is one that needs to be controlled by the Iraqi government. It is a danger to the state.

Senator LEVIN. Is he giving them a signal that they are going in one direction while his public statements are very different? Are they doing this? What they are doing, do you think, with his understanding?

General ABIZAID. I cannot say that I would know that.

Senator LEVIN. What happens if we have major sectarian violence and there are significant defections along sectarian lines? What are our plans then? I know we want to support the Iraqi army—that is what you have told us—should civil war break out. But if there are major defections in that circumstance and they are along sectarian lines, do we get between the major sectarian groups, which have been bolstered then under my hypothesis by the defections of army units, or do we basically stay out of it under those circumstances?

General ABIZAID. Our clear desire is for ISFs to be in the lead on solving sectarian issues and we are in support of those units. The defections that could come are not at all noticeable right now and I think we are a long way away from that.

Senator LEVIN. So if our hopes, though, do not materialize and if that does happen, do we have a plan?

General ABIZAID. Senator, we always have a plan for the worst case, and our plan is to stick with the ISFs. We believe the institution will hold them together, and it is very important that an Iraqi national government that takes their loyalty and holds their loyalty emerges.

Senator LEVIN. Is that the worst case?

General ABIZAID. The worst case is of course civil war.

Senator LEVIN. Do we have a plan, if there is a civil war and if there is defection of units and the army just has so many defections that you basically have the civil war side supported by army units? Do we at least have a plan for what we would do in that

circumstance? I will not ask you for what the plan is, but I just want to know that we have one.

General ABIZAID. General Casey and I talk about the worst case every chance we get.

Senator LEVIN. Is that what you would call the worst case, what I just described?

General ABIZAID. I would say a civil war is the worst case, and I do not think we are near that.

Senator LEVIN. I hope we are not, but my question is if we have a plan in the event that happens, and you assure me that there is such a plan?

General ABIZAID. There is a plan for how we would deal with it.

Senator LEVIN. Good.

Chairman WARNER. Would you yield?

Senator LEVIN. Sure.

Chairman WARNER. That is so important, that line of questions and your responses. Can you also give us assurances you have personally conveyed that through your own channels to the Iraqi government and to the troops, the armed forces of Iraq, as to exactly what they should expect if these various contingencies occur?

General ABIZAID. We have not conveyed exactly anything. We are in discussion militarily and professionally about it and we will continue to be discussing it with our chain of command, the Secretary of Defense and his boss.

Chairman WARNER. You have been very explicit, and this is an open hearing. So that information presumably could work its way back. What you said here is a very important statement.

Do you have anything else?

Senator LEVIN. I just have one question for General Brown, and that is: Are the Special Forces complying fully with the requirements of the Detainee Treatment Act that we recently adopted?

General BROWN. Absolutely.

Senator LEVIN. For the record, can you address some of the questions which have been raised in the last few months regarding the detention of Iraqi women in U.S. custody, allegedly by Special Forces, allegedly being held as leverage to get their husbands to turn themselves in? I do not know if you are familiar with those reports.

General BROWN. I could not address it. We could certainly take it for the record and see what we could find out about it.

[The information referred to follows:]

With regard to your question about allegations of detaining wives as leverage against their husbands, only individuals who are a threat to security or are involved in criminal activity are detained by Special Operations Forces (SOFs). On occasion, females have been detained, to include wives, however their detention was in compliance with the Law of War. Under no circumstances were wives detained for the express purpose of compelling some action by another person.

Let me assure you that SOFs is in complete compliance with the requirements of the Detainee Treatment Act and the Law of War. Additionally, U.S. Special Operations Command has no policies, doctrine, or techniques-tactics-procedures that allow detention of wives as leverage against their husbands. We only detain individuals who are a threat to security or are involved in criminal activity.

Senator LEVIN. Let me give you those.

General BROWN. I do not have the details on it.

Senator LEVIN. Let me give you the reports and if you could tell us for the record whether or not that has occurred. Because if so, that clearly would be, I think, a violation of our manual as well as Geneva Accords.

Thank you both. We really appreciate what you do.

Chairman WARNER. Thank you very much. This hearing is adjourned.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR ELIZABETH DOLE

COUNTERDRUG ACTIVITIES

1. Senator DOLE. General Abizaid, in your written testimony, you stated Central Command's (CENTCOM) roles in counterdrug activities include, among other things, intelligence support. How frequently has CENTCOM provided information concerning high-value drug targets to the Department of Justice (Drug Enforcement Agency), Department of State (International Narcotics and Law), and/or the Afghanistan Minister of Counternarcotics and how often do these targets have ties to or are involved with the Taliban or al Qaeda?

General ABIZAID. Annually, CENTCOM provides information on high-value drug targets via the Joint Staff, to support the Foreign Narcotics Kingpin Act. This nomination of medium and high value targets is utilized in the final designation of placing a narcotics kingpin on the U.S. Treasury Kingpin List, with the eventual goal of interrupting finances and assets associated with the narcotics kingpin. We do know that funding for al Qaeda relies upon donations, madrassas, non-government organizations, non-governmental organization investment opportunities, and criminal enterprises, possibly including narcotics. Al Qaeda relies upon financial banking institutions, hawalas, couriers, material assistance from abroad, and information technology to move funds into certain regions. There has been reporting of insurgents using the same logistical networks such as routes, safehouses, and crossing points as the drug traffickers to facilitate their activities, but there has been no clear-cut definitive link between drug traffickers and insurgent groups being financially linked with each other. This remains one of CENTCOM's key intelligence gaps.

2. Senator DOLE. General Abizaid, in your testimony you stated "there are restrictions, by law, about the use of military forces" in the area of counterdrug activities. The administration in its recent fiscal year 2006 emergency supplemental appropriations request specifically asked Congress to provide drug interdiction and counterdrug authority to the Department of Defense (DOD) to boost its support to the counternarcotics forces of the governments of Afghanistan and neighboring friendly countries. Do the authorities requested for counterdrug activities in Afghanistan provide you the capabilities to more effectively stem the tide of drug production and trafficking in Afghanistan, and how will these authorities be used by CENTCOM?

General ABIZAID. The existing authorities are sufficient to support CENTCOM's counternarcotic role in Afghanistan and the region. Under the current authorities, CENTCOM has effectively assisted the Afghan government in fighting narcotics production and trafficking and providing support to Department of State and lead United States law enforcement agencies for counternarcotic (CN) activities. The DOD requested $192.8 million in the supplemental to support this fiscal year's efforts. Of this, $102.9 million is for Afghanistan and will continue to help the Afghans build a capacity to fight the production and trafficking of illegal narcotics. The remainder, $89.9 million is for regional CN programs. These programs will help countries better secure their borders, provide them with communications equipment, and provided much needed training in detecting, tracking, and interdicting narcotics as they transit from Afghanistan to Europe, Asia, and beyond.

3. Senator DOLE. General Abizaid, in your testimony you pointed out that "you've got to have a regional strategy . . . we've got a long ways to go in getting the regional strategy defined, aligned, and effective." The President in his fiscal year 2006 emergency supplemental appropriations request asked for $192.8 million to fund training, equipment, intelligence, infrastructure, and information operations related to the campaign against narcotics trafficking and narcotics-related terrorist activities. Will a strategy be in place before this funding is obligated and how will this

funding be allocated and used among Afghanistan, Pakistan, Tajikistan, Krygyzstan, Turkmenistan, and Uzbekistan?

General ABIZAID. Current CENTCOM CN strategy is to assist the Afghan Government in fighting narcotics production and trafficking and to provide support to Department of State and lead United States law enforcement agencies for CN activities in Afghanistan within existing authorities and resources as directed by the Chairman, Joint Chiefs of Staff. In fiscal year 2006, Department of Defense CN supplemental funding request for CENTCOM is $192.8 million. Of this, $102.9 million is for Afghanistan and will continue to help the Afghans build a capacity to fight the production and trafficking of illegal narcotics. The remainder, $89.9 million is for regional CN programs. These programs will help countries better secure their borders, provide them with communications equipment, and provided much needed training in detecting, tracking, and interdicting narcotics as they transit from Afghanistan to Europe, Asia, and beyond.

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

FOREIGN MILITARY TRAINING—SHORTAGE OF FORCES

4. Senator LEVIN. General Brown, can you characterize the operational and personnel tempo strain on Special Operations Forces (SOFs), and tell us how the personnel increases will alleviate the strain on them?

General BROWN. Our continuing challenge is that several specific areas of SOFs force structure are in high demand and the deployment tempo for these individuals and units is extremely high. These include SOFs warriors such as joint tactical air controllers; special operations helicopter crews; Army special forces, civil affairs (CA), signals intelligence operators; and Navy SEALs. The personnel increases will provide U.S. Special Operations Command (SOCOM) with the ability to train and field additional SOFs units that can be integrated into future force rotation plans, thus decreasing somewhat the length and/or frequency of unit deployments. Even so, the requirements for SOFs will remain high for some time to come.

5. Senator LEVIN. General Brown, how will the increases bolster global operations, including the foreign training missions, in Colombia and elsewhere?

General BROWN. The programmed force increases will not only help to alleviate our high operations tempo; they will also increase our capability to prosecute the global war on terrorism through combined training and foreign internal defense (FID) activities with partner nations. The expansion of the 6th Special Operations Squadron and the addition of the Marine SOFs Command Foreign Military Training Units greatly increase the number of FID missions we can conduct. With the additional Army, Air Force, Marine, and Navy SOFs, we will be able to conduct more Joint Combined Exercises for Training and FID missions in Columbia and elsewhere.

SPECIAL OPERATIONS AUTHORITIES

6. Senator LEVIN. General Brown, on page 89 of the Quadrennial Defense Review (QDR) is a statement that to prevent terrorist attacks and disrupt terrorist networks "the Department must be prepared to develop a new team of leaders and operators who are comfortable working in remote regions of the world, dealing with local and tribal communities, adapting to foreign languages and cultures and working with local networks to further U.S. and partner interests through personal engagement, persuasion and quiet influence—rather than through military force alone. To support this effort, new authorities are needed."

Is this statement referring to authorities for SOFs?

General BROWN. The statement refers to the entire DOD. Even though SOCOM is not specifically requesting any new authorities this year, the authorities identified within the QDR would certainly be helpful.

7. Senator LEVIN. General Brown, is there any authority that special operators do not currently have that you plan to request in the near future and if so, what is it?

General BROWN. SOCOM will continue to review areas, to include authorities, to improve our capabilities to execute the global war on terrorism. One future authority might include Section 1208 funding authority. This authority, provided by Congress in the fiscal year 2005 legislation, expires at the end of fiscal year 2007 and we will consider requesting the authority be made permanent. Another such area

could be suspension of provisions of law that adversely affect the retention of senior SOFs warriors.

TRAINING AND EQUIPPING INDIGENOUS FORCES FIGHTING WITH SPECIAL OPERATIONS FORCES

8. Senator LEVIN. General Brown, in the National Defense Authorization Act for Fiscal Year 2005, title XII, section 1208, we granted SOCOM authority to train and equip indigenous forces fighting alongside U.S. special operators. How have you used this authority, and to what effect?

General BROWN. We have used this authority primarily to conduct operational preparation of the environment. The Secretary of Defense has approved almost $10 million for this purpose in the CENTCOM area of responsibility (AOR) this year. While it is still too early to make definitive assessments, our initial indications are that 1208 funding is making a positive difference. In addition, the Secretary of Defense has approved $12.5 million to support operational preparation of the environment worldwide, but none of that funding authority has yet been obligated.

SPECIAL OPERATIONS COMMAND—BRIBERY AND ACCOUNTING ALLEGATIONS

9. Senator LEVIN. General Brown, I understand that the Federal Bureau of Investigation (FBI) and the DOD are investigating allegations of bribery by SOCOM personnel, that the DOD Inspector General (IG) is also investigating other allegations of wrongdoing, and conducting an audit of a specific allegation that the SOCOM comptroller "parked" funds for the Office of the Secretary of Defense.

I know you recently conducted ethics training for your staff, but given your rapidly increasing budget [$8 billion request for fiscal year 2007] have you or the Assistant Secretary of Defense for Special Operations and Low Intensity Conflicts (ASD–SOLIC) established any new management procedures and/or new positions in order to strengthen the oversight of SOCOM's procurement accounts? If not, are such changes being considered?

General BROWN. The answer to your questions is two-fold: First, we have not established any new management policies, as we follow DOD procedures established by statute and regulation. Also it should be noted that a recent DOD IG review labeled our procurement program as "phenomenal" and the benchmark for others to follow with regards to maintaining internal controls.

Second, to strengthen our procurement process further, we intend to increase frequency of routine audits; increase the frequency of legal reviews of contracting actions; obtain more independent cost estimates; reduce case load of individual contracting officers; increase oversight of foreign comparative testing program and foreign disclosure process; and ensure appropriate oversight and implementation of acquisition portion of the 1208 authority. These goals will be reached by projected manpower increases in the acquisition and logistics directorate to include hiring; warranted contracting officers; auditors; acquisition attorneys; foreign comparative testing specialists; foreign disclosure specialists; and logistics specialists.

We cannot speak for ASD–SOLIC.

SPECIAL OPERATIONS FORCES—CIVIL AFFAIRS

10. Senator LEVIN. General Brown, it is my understanding that one element of the QDR-based plan for SOCOM is to move Reserve CA components from SOCOM command and put them under the command of regular Army units. Some operators have told my staff that the conventional Army officers commanding these CA components may not understand their special capabilities. This could have a negative impact on Reserve CA professional advancement, as conventional officers would write their fitness reports, and instead of taking advantage of their unique skills, might use them for conventional duties.

Can you confirm that Reserve CA units will be placed under conventional Army commands? If so, how would you prevent the potential negative impacts I mentioned?

General BROWN. The QDR-based plan does call for the reassignment of the Reserve component CA force from SOCOM to the United States Army Reserve Command, one of the Army's major commands. Underneath the USARC, the United States Army CA and Psychological Operations Command continues to serve as the functional headquarters of the Reserve CA force. Under the realignment plan, SOCOM retains proponency for all CA forces. Thus, SOCOM continues to provide

oversight for the Reserve CA force for force design, life cycle management, professional development, and training programs.

Currently, when deployed for operations such as Operations Enduring Freedom and Iraqi Freedom (OEF/OIF), CA forces are placed under the operational control of conventional or SOF commanders, depending upon the mission. That does not change under the realignment plan. My ability to prevent misuse and negative impacts upon CA forces under the operational control of conventional force commanders will continue to depend on my ability to inform and persuade those leaders of optimum CA employment tactics.

TEMPORARY THREE-STAR POSITION

11. Senator LEVIN. General Brown, the Department recently created a new, temporary wartime position of Commander, Joint Special Operations Command (JSOC), U.S, CENTCOM, Forward. The President has designated this as a position of importance and responsibility authorizing the grade of lieutenant general. What is the relationship between this new command and the JSOC?

General BROWN. The "new command" is actually existing elements of the JSOC under the operational control of Commander, CENTCOM. The JSOC Commander is dual-hatted as Commander of JSOC and as Commander of JSOC forces forward.

12. Senator LEVIN. General Brown, what is the relationship between this command and the CENTCOM's theater SOCOM?

General BROWN. Both organizations are under General Abizaid's command, but they have different missions. The Special Operations Command-Central provides command and control for all SOFs in the CENTCOM AOR, less this new command and designated CA units. However, close and constant coordination between these two headquarters happens daily. The two headquarters also share low-density, high-demand SOF assets, such as rotary wing lift.

INFORMATION OPERATIONS

13. Senator LEVIN. General Abizaid and General Brown, who is responsible for coordinating policy regarding DOD information operations in Iraq and Afghanistan?

General ABIZAID and General BROWN. CENTCOM and its subordinate commands are responsible for coordinating policy in Iraq and Afghanistan.

14. Senator LEVIN. General Abizaid and General Brown, who is responsible for coordinating the implementation?

General ABIZAID and General BROWN. CENTCOM and its subordinate commands are responsible for coordinating implementation of DOD information operations in Iraq and Afghanistan.

15. Senator LEVIN. General Abizaid and General Brown, who is responsible for coordinating policy regarding DOD information operations globally, and who is responsible for implementing it?

General ABIZAID. U.S. Strategic Command (STRATCOM) coordinates policy for global information operations. CENTCOM is responsible for implementation of information operations in the CENTCOM AOR and synchronizes, coordinates, and integrates with U.S. STRATCOM on issues of mutual interest.

General BROWN. The U.S. STRATCOM coordinates DOD policy for global information operations. Their Joint Information Operations Center plans, integrates, and synchronizes information operations in support of Joint Force Commanders and serves as the DOD lead enhancing information operations across the Department. The Geographic Combatant Commands implement information operations in their theaters.

16. Senator LEVIN. General Abizaid and General Brown, what is the appropriate role for each of your commands?

General ABIZAID. CENTCOM is responsible for planning and execution of theater strategic, operational, and tactical operations within its geographic AOR. United States SOCOM apportions trained and equipped forces to CENTCOM to participate in these operations under CENTCOM control and authorities.

General BROWN. With respect to Information Operations, the global war on terrorism efforts that involve multiple geographical combatant commands or trans-regional issues, SOCOM's role would focus on synchronizing the information operations of the geographic combatant commands. SOCOM's primary information oper-

ations focus remains with global war on terrorism priority and high-priority countries. Concerning global war on terrorism efforts, SOCOM could take the lead in implementing information operations capabilities in the priority and high-priority countries, but would probably direct the implementation activities of the geographic combatant commands.

COUNTERDRUG—AFGHANISTAN

17. Senator LEVIN. General Abizaid, the March 2006 State Department International Narcotics Control Strategy Report asserts, "The political and economic situation in Afghanistan is improving, but opium production and the resultant trafficking of opium and its derivatives still accounts for roughly one third of Afghanistan's total (combined licit and illicit) gross domestic product. Afghanistan's huge drug trade severely impacts efforts to rebuild the economy, develop a strong democratic government based on rule of law, and threatens regional stability."

Last January, a group of 35 non-governmental organizations wrote to Secretary Rice recommending that coalition forces:

1. focus intelligence collection efforts on identifying major traffickers;
2. cease all payments to traffickers; and
3. assist in the destruction of laboratories and interdiction of imports of precursor chemicals and exports of narcotics.

Are the forces under your command doing any of this?

General ABIZAID. CENTCOM has supported lead nation and lead U.S. Government agencies responsible for counternarcotics with intelligence support and has provided assistance within CENTCOM's existing means and capabilities to lead U.S. agencies in the destruction of laboratories and the export of narcotics. CENTCOM forces are not authorized to make payments to traffickers.

18. Senator LEVIN. General Abizaid, what is the counterdrug role of Combined Forces Command-Alpha forces?

General ABIZAID. In 2004, the Secretary of Defense through the Chairman, Joint Chiefs of Staff, modified CENTCOM's mission execution order in Afghanistan to permit a broader authority for DOD forces to support CN efforts, and defined supporting tasks to the lead drug enforcement agencies and organizations in Afghanistan.

When requested by a law enforcement agency, these supporting tasks include: providing air and ground tactical and administrative mobility support; providing in-extremis defensive support; providing medical and medical evacuation support; assisting in operational planning, coordination, and deconfliction of law enforcement CN missions; supporting CN public information programs through broad-based information operations support; and supporting alternative livelihoods programs through deconfliction, coordination, and Commander's Emergency Relief Program Fund expenditures. Additionally, the modification permits CN forces to capture or destroy drug labs, drugs, and chemicals discovered during the course of routine operations.

19. Senator LEVIN. General Abizaid, my understanding is that the British will continue to have the counterdrug lead, but that the International Security Assistance Force (ISAF) will not take on an explicit counterdrug mission. Is this correct?

General ABIZAID. Under the Bonn Agreement, the British Government agreed to be the lead nation for the CN mission in Afghanistan. This agreement expired last year, but the United Kingdom has maintained the lead for CN security sector reform. ISAFs currently do not have an explicit counterdrug mission in Afghanistan because national caveats of engagement from several North Atlantic Treaty Organization partner nations will not support their forces being used in this manner.

20. Senator LEVIN. General Abizaid, would you recommend a counterdrug mission for ISAF and if so, what would it involve?

General ABIZAID. ISAF should be very concerned with narcotics trafficking in Afghanistan since most of the heroin produced in the region is consumed in Europe. ISAF CN support would be a key enabler in assisting the Afghan Government to stabilize its economy, prevent corruption fueled by drug profits, and enhance overall security in the region.

PAKISTAN—AIRCRAFT PROCUREMENT PRIORITIES: FIGHTERS OR HELICOPTERS?

21. Senator LEVIN. General Abizaid, in the aftermath of the October 8, 2005, earthquake, the need for helicopters to reach the remote areas of Pakistan was highlighted. Helicopter support is also important to the Pakistani military in asserting control over areas where terrorist groups are operating inside Pakistan and over the border into Afghanistan and India. My understanding is that it is still the top priority of the Pakistani military to procure as many as 40 or more F–16 fighter aircraft from the United States via foreign assistance programs to bolster deterrence against the Indian military.

However, given the immediate internal challenges posed by terrorists and the need for a disaster response capability, would it not be more important to obtain additional helicopters than to obtain additional fighter aircraft?

General ABIZAID. If Pakistan pursues the purchase of additional F–16s, CENTCOM would prefer that Pakistan use their national funds to procure the fighter aircraft and use their foreign military financing to purchase helicopters. In general, CENTCOM strongly supports an increased investment by the Pakistanis on items that would directly benefit both them and the United States in the fight against terrorism, such as the procurement of helicopters and associated equipment. Additionally, while Pakistan currently allocates 15 percent of U.S. grant monies ($300 million per year fiscal years 2005–2009) to global war on terrorism-related objectives, it should be noted that India remains their primary conventional concern, and India is currently pursuing the acquisition of up to 126 multi-role fighter aircraft.

QUESTIONS SUBMITTED BY SENATOR EDWARD M. KENNEDY

CIVIL WAR IN IRAQ

22. Senator KENNEDY. General Abizaid, Americans are concerned about Iraq sliding into all-out civil war, but the question is whether civil war has already begun.

In December, President George Bush admitted that some had fears "that Iraq could break apart and fall into a civil war," but said he didn't believe "these fears are justified." Last week, the President twice mentioned the possibility of civil war. He acknowledged the situation in Iraq "is still tense" and that forces in Iraq seek to "provoke a civil war." He added they are attempting "to ignite a civil war" and we can expect them to try again.

Our Ambassador to Iraq, Zalmay Khalilzad, recently said, "the potential is there" for sectarian violence to become full-blown civil war. "We have opened the Pandora's box and the question is, what is the way forward?"

The Chairman of the Joint Chiefs of Staff, General Peter Pace, is no longer saying that the situation in Iraq is "going very, very well." Last week he stated, "Everything is in place if they want to have a civil war," and "everything is also in place if they want to have a united, unified future."

Secretary of Defense Donald Rumsfeld recently revealed that the military has been conducting war games in the event of a civil war in Iraq. While he did not think there was a civil war at the present time, the Intelligence Community has envisioned what a Shiite-Sunni conflict might look like.

What is the definition of civil war used by CENTCOM?

General ABIZAID. [Deleted.]

23. Senator KENNEDY. General Abizaid, is it the same definition as that used by the President, Ambassador Khalilzad, General Pace, and Secretary Rumsfeld? If not, what is their definition?

General ABIZAID. [Deleted.]

24. Senator KENNEDY. General Abizaid, if there is no definition, how do you evaluate whether our troops are engaged in civil war?

General ABIZAID. [Deleted.]

25. Senator KENNEDY. General Abizaid, are our soldiers instructed not to take sides in the event of a civil war?

General ABIZAID. [Deleted.]

ROLE OF MILITIAS IN IRAQ

26. Senator KENNEDY. General Abizaid, there is growing recognition that the continued existence of militias in Iraq undermines stability and the prospect of success. On March 3, General Casey said, "It will take a holistic effort to get at the militia issue. There are several aspects to it, and I do not believe that we will ultimately succeed until the Iraqi security forces—the police and the military—are the only ones in Iraq with guns." The Transitional Administrative Law banned militias, but the Constitution only bans new militias.

Should the U.S. seek a prohibition on militias as a constitutional amendment during the 4-month period when the Iraqi constitution is reviewed?

General ABIZAID. [Deleted.]

27. Senator KENNEDY. General Abizaid, if there is no requirement that militias disband, how can an incentive be established to encourage them to do so?

General ABIZAID. [Deleted.]

SECTARIAN DIVISIONS IN IRAQI SECURITY FORCES

28. Senator KENNEDY. General Abizaid, clearly, America has a strong interest in creating security forces that are representative of all in Iraq. However, the security forces that we are training do not seem to reflect that goal. A recent Congressional Research Service report states, "with a shortage of reliable Sunni soldiers to patrol Sunni provinces, the U.S. and Iraqi Governments have been forced to deploy mostly Shiite units to Sunni towns, which has only exacerbated intercommunal tensions."

How many units of the defense or police forces include a significant percentage of Sunni Arabs, i.e., over 20 percent in their enlisted ranks, and how many are overwhelmingly Shiite or Kurdish?

General ABIZAID. [Deleted.]

29. Senator KENNEDY. General Abizaid, Stephen Biddle from the Council on Foreign Relations has said, "Iraq's Sunnis perceive the 'national' army and police force as a Shiite-Kurdish militia on steroids." He contends that building up the forces this way makes civil war more likely and potentially bloodier by arming and training the Shiites and Kurds while Sunnis are sidelined. How do you respond to these concerns?

General ABIZAID. [Deleted.]

30. Senator KENNEDY. General Abizaid, how concerned are you that Iraqi national defense and police forces will splinter along sectarian lines?

General ABIZAID. [Deleted.]

31. Senator KENNEDY. General Abizaid, can the Iraqi national defense and police forces quell a civil war?

General ABIZAID. [Deleted.]

32. Senator KENNEDY. General Abizaid, how many members of the Iraqi national defense and police forces are also members of militias?

General ABIZAID. [Deleted.]

33. Senator KENNEDY. General Abizaid, by and large, the attacks on U.S. troops in Iraq have been largely by Sunnis to date, with the Shiites patiently waiting for us to leave. What will we do if the Shiites enter the fray and start attacking our troops?

General ABIZAID. [Deleted.]

TRAINING IRAQI SECURITY FORCES

34. Senator KENNEDY. General Abizaid, press reports indicate that the number of Iraqi battalions capable of fighting on their own, without American support, has declined from three, to one, to zero. Who is conducting these evaluations for the American Government?

General ABIZAID. [Deleted.]

35. Senator KENNEDY. General Abizaid, why is there such fluctuation?

General ABIZAID. [Deleted.]

36. Senator KENNEDY. General Abizaid, the administration says that 75 percent of battle space will be under Iraqi control by the end of the year. What percentage of Iraq's population will be in those areas under Iraqi control?

General ABIZAID. [Deleted.]

LESSONS FROM IRAQ

37. Senator KENNEDY. General Abizaid, in a January opinion editorial, Paul Schroeder wrote of the death of his son, Marine Lance Corporal Edward "Augie" Schroeder II, in combat in Haditha, Iraq. Mr. Schroeder wrote: "In our last conversation, Augie complained that the cost in lives to clear insurgents was "less and less worth it," because marines have to keep coming back to clear the same places. Marine commanders in the field say the same thing. Without sufficient troops, they can't hold the towns." Mr. Schroeder noted his son was killed on his fifth mission to clear Haditha.

In your testimony you noted the lessons the military had learned from Iraq. Notably absent was any comment about the need to have the manpower necessary to control territory sufficiently to prevent insurgency.

How do you respond to the assertion that American lives were lost because we failed to have sufficient manpower available to prevent or control the insurgency?

General ABIZAID. In planning a conventional war there are many known and measurable factors that are included in the equation. CENTCOM knows what to expect of U.S. forces and how to employ them to maximize the technological advancements that have been developed. CENTCOM also knows the enemy's capabilities and limitations, his weapons systems, and how he deploys them.

A counterinsurgency operation is different and is described as an asymmetric threat, much more like a terrorist threat or an organized criminal element than a military operation. The battle against insurgency is much like fighting gang violence in the streets of our cities here in the U.S. Lessons learned from the Vietnam conflict indicate that increasing manpower is not a recipe for success. The key is to build Iraqi institutions that are ultimately capable of governing and securing their own nation.

38. Senator KENNEDY. General Abizaid, what have we learned from our experience in Iraq about the type and numbers of military manpower required to conduct a major combat operation and follow-on stabilization and reconstruction operations?

General ABIZAID. After action reviews and lessons learned are keystones of the success of the United States military and after every operation, detailed discussions are held concerning successes and failures from the tactical to the strategic level. At the tactical level, innovations and improvements are made continuously from how to counter the effects of improvised explosive devices (IEDs) to methods for establishment of checkpoints. The manpower required for each operation is reviewed during mission analysis which includes lessons learned from previous operations. One of the most significant lessons learned is the need to have not only the right number of personnel, but the right type of personnel. For example, a few soldiers or civilians who have expertise in public administration are as valuable in the reconstruction of municipal services as an armor battalion would be in conventional armored warfare.

39. Senator KENNEDY. General Abizaid, what lessons from Iraqi operations has the Army incorporated in doctrine?

General ABIZAID. Doctrine acts as a guide, a universal starting point from which we adjust or adapt to meet the current threat or environment and is an ongoing process. U.S. military doctrine is currently being refined to incorporate more decentralized execution of operations concerning counterinsurgency and stability and support operations. Additionally, operations in Iraq have focused attention on refining doctrine associated with interagency operations.

40. Senator KENNEDY. General Abizaid, during your testimony there was considerable discussion of the role of interagency partners in the stabilization and reconstruction of Iraq. Would you detail what interagency actions have been most useful, what you need more of, and what interagency support has been inadequate or does not work?

General ABIZAID. CENTCOM's interagency partners have provided invaluable assistance in the areas of threat finance, high-value individuals, and in countering the threat posed by IEDs. For example, in the area of threat finance, the Department of Treasury provides information that would otherwise not be obtainable by the

DOD. By combining similar data streams from the Department of State (DOS), Department of Justice (DOJ), and Department of Homeland Security (DHS) with data obtained through various intelligence channels, Federal agencies have been able to dislocate and disrupt the enemy's economic resources both inside and outside U.S. borders.

Likewise, CENTCOM's efforts to identify, track, and neutralize high value individuals are greatly enhanced by the connections CENTCOM's interagency partners have with the international law enforcement community. By leveraging this unique community, U.S. collective efforts complicate the enemy's efforts to cross international borders.

In the area of IEDs, the FBI's Terrorist Explosive Device Analysis Center has proven exceptionally helpful. Their expertise and leading-edge laboratory are aiding the development of equipment and tactics, techniques, and procedures to defeat the devices our forces encounter on a daily basis.

CENTCOM would benefit from having greater numbers of experienced interagency officers assigned to the theater for longer periods. The DOS has moved to increase to 1 year the tours of duty for its officers assigned to Iraq and Afghanistan.

41. Senator KENNEDY. General Abizaid, what recommendations would you make to improve interagency participation in stability and reconstruction operations?

General ABIZAID. CENTCOM would benefit from having a greater number of experienced interagency officers assigned to the theater for longer periods. Most agencies do not have a large pool of available, experienced officers to staff positions in difficult posts such as Afghanistan and Iraq. They tend to be spread very thin, trying to cover worldwide commitments with limited human and financial resources.

42. Senator KENNEDY. General Abizaid, when should interagency partners be brought into the planning to ensure effective stability and reconstruction operations?

General ABIZAID. Interagency coordination should begin at the earliest possible opportunity. CENTCOM's Joint Interagency Coordination Group ensures this happens by involving liaison officers at every step of the planning process. CENTCOM enjoys participation from the DOS, DHS, and Department of the Treasury, along with the FBI and the Drug Enforcement Administration.

QUESTIONS SUBMITTED BY SENATOR JACK REED

SPECIAL OPERATIONS COMMAND TECHNOLOGY DEVELOPMENT

43. Senator REED. General Brown, the SOCOM science and technology (S&T) budget request has been decreased by $80 million with respect to the 2006 appropriated level. It is also $60 million below the original 2006 SOCOM budget request. Given that your special operators are facing a wide new variety of threats and developing new capabilities like laser weapon systems and advanced networking and communications systems, why does it make sense to reduce funding for your innovative, research programs?

General BROWN. Based on the SOCOM February 2006 fiscal year 2007 budget estimates, the SOCOM fiscal year 2006 S&T original budget request was for $120.125 million. The fiscal year 2006 appropriated budget was $175.254 million. This figure includes a $12 million congressional reduction to the Advanced Tactical Laser Advanced Concept Technology Demo (ACTD), a $7.5 million congressional reduction due to Special Operations Special Technology Program Growth and $76.073 million in congressional adds.

The U.S. SOCOM fiscal year 2007 S&T budget request was for $95.393 million. This represented a decrease of $24 million from the original fiscal year 2006 request and a difference of $79.860 million from the fiscal year 2006 appropriated budget. The difference between the original fiscal year 2006 budget request and fiscal year 2007 budget request is due primarily to the realignment of Advanced Tactical Laser ACTD funds for higher command priorities as well as planned ramp downs in the Special Operations precision guided munitions and psychological operations modernization programs. The major difference between the fiscal year 2006 appropriated budget and the fiscal year 2007 requested budget is that no congressional adds have yet been applied in fiscal year 2007.

44. Senator REED. General Brown, what role do these programs play in SOCOM's acquisition strategy for the future?

General BROWN. The focus for SOCOM's S&T investment strategy is to effectively apply and invest available resources to maximize SOF warfighting capabilities with an eye towards the future. Our technology development activities are focused on a number of capability areas. These areas include: command and control; tagging, tracking, and locating; SOF Warrior lethality, survivability, and sustainability; power and energy; and psychological operations.

Specific S&T programs at SOCOM include: an airborne tactical laser; small unmanned aerial system payloads and networking; signature reduction; advanced night vision devices; night vision windshields; psychological operations products and broadcasting mechanisms; unattended sensors and sensor networks; and advanced mobility concepts.

45. Senator REED. General Brown, what efforts are you curtailing and what capabilities are you risking not developing with this reduced request?

General BROWN. Given the competing demand across the Department, the fiscal year 2007 President's budget request represents a balance among near-term and long-term priorities. The SOCOM S&T request is properly prioritized and will be effectively implemented through increased leveraging of associated efforts of other agencies. It represents a balanced investment among near-term requirements and planning to meet future threats.

RAPID TECHNOLOGY DEPLOYMENT AND EXPERIMENTATION IN THEATER

46. Senator REED. General Abizaid, a large number of technology development organizations, including the Army Rapid Equipping Force, Defense Advanced Research Projects Agency, the Office of Naval Research, and others are all working very hard to develop new technologies to support warfighters in Iraq and Afghanistan. I support these efforts, but am concerned that technologies are being sent over as prototypes for use by deployed forces without proper testing or even knowledge of higher level officials. I am concerned that deployed forces who receive these technologies are not given sufficient training to always make use of them, or knowledge to understand how they will affect other systems being used in operations (for example, understand how sensor networks or communications gear might interfere with other systems).

Who is responsible for monitoring all of the technology experimentation and prototype testing that is going on in CENTCOM's AOR?

General ABIZAID. These activities are typically done under the service "train and equip" responsibilities. Therefore, CENTCOM does not centrally monitor service specific technology experimentation or prototype testing with the exception of Counter-Improvised Explosive Device (C–IED) related activities. However, the CENTCOM Resources and Assessment Directorate, Science and Technology Division does monitor joint technology experimentation and prototype testing.

For C–IED specific technology and operations, CENTCOM has established a full-time C–IED Task Force under the command's Director of Operations. This task force works in conjunction with both the Joint Improvised Explosive Device Defeat Organization (JIEDDO) and the Office of the Secretary of Defense's Combating Terrorism Technology Task Force.

47. Senator REED. General Abizaid, is there a single inventory or database of all the technological demonstration and experimentation activities going on in theater?

General ABIZAID. There is no centrally managed overarching inventory or database of all technologies demonstrations and experimentations. This lack of a single inventory of the technologies has been recognized as a shortfall and is being developed by Multi-National Forces-Iraq and Multi-National Corps-Iraq as part of an overall technology deployment and insertion process in Iraq.

48. Senator REED. General Abizaid, how are the Services' test and evaluation activities and the Office of the Director of Operational Test and Evaluation involved in these activities?

General ABIZAID. Developmental programs such as ACTD have associated independent operational assessors such as the Army Test and Evaluation Command (ATEC) and the Air Force Operational Test and Evaluation Center. For C–IED technologies CENTCOM and the JIEDDO leverage the service testing organizations. Frequently, stateside testing is supplemented with an in-theater assessment prior to a production or fielding decision being made. A field office of ATEC drawn from their Operational Test Command is in Iraq. They conduct in-theater assessments and produce test reports for decisionmakers.

QUESTIONS SUBMITTED BY SENATOR DANIEL K. AKAKA

SPECIAL OPERATION FORCES

49. Senator AKAKA. General Brown, in your posture statement you contend that the Special Forces soldier is the key to SOCOM's success. Consequently, according to the QDR, the DOD plans to increase SOFs by 15 percent and increase the number of Special Forces Battalions by one-third. I am concerned about your ability to meet these numbers when, even today, many of our most able soldiers are unable to complete the training.

Do you anticipate having to lower the rigorous standard of admittance to the Special Forces? If not, how do you expect to meet your recruitment goals?

General BROWN. The United States Army Special Operations Command (USASOC) will not lower the standards for admittance to Special Forces (SF). USASOC analyzed its requirement for additional force structure and determined that 750 is the number of Active Duty Enlisted (ADE) graduates per year required to fill the current force and grow to meet QDR levels. USASOC has conducted a phased growth to ensure SOF quality and readiness is maintained throughout the force while growing to meet requirements.

The United States Army John F. Kennedy Special Warfare Center and School (USAJFKSWCS) increased ADE graduation from 250 in fiscal year 2001 to 450 in fiscal year 2003. This was due to the increase in numbers and standards for in-service recruits (focusing on higher quality soldiers) and the introduction of the Initial Accession Program (IAP) which allowed limited recruiting of high quality civilians directly into the Army specifically for SF (known as the 18X Program). We increased the school's capacity and instructor base in fiscal year 2004 in order to gradually increase graduation rates from 450 to 750 by fiscal year 2006. That same year USAJFKSWCS refined its Special Forces Assessment and Selection (SFAS) Course. This, as well as the introduction of a "train for success" strategy and mindset among the cadre, led to a reduction in attrition for selected soldiers going through the follow-on Special Forces Qualification Course (SFQC). The increased in-service recruiting standards, IAP, increased resourcing, refined SFAS, and reduced attrition in SFQC allowed USAJFKSWCS to graduate 689 ADE in fiscal year 2004 and 789 in fiscal year 2005—thus reaching the 750 goal 1 year ahead of schedule.

50. Senator AKAKA. General Brown, your posture statement describes the SF soldier as specially assessed and selected, mature, innovative, regionally oriented, and culturally attuned. It seems to me an extensive period of training would be necessary to create a soldier with all of these capabilities.

How long will it take to train each SF soldier including the time spent in specialized instruction, such as language training, and how long do you anticipate it will take before you feel you have the necessary number of SF soldiers to fulfill future operational requirements?

General BROWN. The SFQC is going through the most comprehensive change in its history and is more demanding than ever. The USAJFKSWCS is introducing more live-fire exercises; more SF common skills training; a more robust foreign language program; more cultural training; and more field-craft. The SFQC also has added a significant amount of classified instruction and advanced skills training relevant to today's operational environment. The new course design also includes an enhanced Survival, Evasion, Resistance, and Escape program that students attend earlier in the training pipeline than in the past. We are updating our teaching methods blending live, simulations, and advanced distributed learning for less lecture instruction and more time in practical exercises and in the field. Use of technology is also an important part of being able to add a significant amount of material to the program of instruction while decreasing the average time a soldier is in the training program from 63 to 48 weeks. Students are in training on most weekends; receive homework assignments; and provide instruction to peers. Adaptive Thinking and Leadership (ATL) is a component that prepares our SF students for the ambiguous environments against an asymmetrical threat they will face on the battlefield. ATL scenarios foster critical thinking and creative solutions. Once all elements of the transformed training pipeline are in place formal language training will occur in all phases of training to include the final exercise "Robin Sage" (the only Unconventional Warfare exercise in the DOD) where students work with a surrogate force in 1 of the 10 SF target languages. The SF training pipeline transformation will be complete by June 2006.

Beginning in fiscal year 2006 we expect to have the capability to sustain producing approximately 750 ADE graduates each year. This is the annual number of

ADE graduates required to fill the current force and grow to meet QDR levels through fiscal year 2008.

IRAN

51. Senator AKAKA. General Abizaid, as you well know, President Bush as well as Secretary of State Condoleezza Rice and Secretary of Defense Donald Rumsfeld have recently suggested that Iran is actively stirring up violence in Iraq and advocate taking a tougher stance toward Iran.

How would a potential conflict with Iran impact the DOD's current operations forces and tempo?

General ABIZAID. While any additional conflict would impact the operations tempo of our Armed Forces, CENTCOM is quite confident that DOD retains sufficient forces to respond. CENTCOM currently has up to 200,000 personnel employed in the CENTCOM AOR on any given day. This is less than 9 percent of the 2.26 million total military forces. Since the start of combat in the CENTCOM AOR, at no time has a request for forces been turned down. U.S. military men and women are well trained and highly professional. CENTCOM is confident that they can handle any mission given to them.

52. Senator AKAKA. General Abizaid, if troops were engaged in Iran, would we have forces to meet our homeland security needs in case of a natural disaster or national emergency?

General ABIZAID. All of the U.S. global requirements, to include the needs of the DHS, are taken into account by the Office of the Secretary of Defense when making force structure decisions and when troops are apportioned around the globe. In case of a natural disaster or national emergency, the sourcing and provisioning of U.S. troops to meet U.S. homeland security needs would be determined by the Secretary of Defense, the Joint Staff, and the U.S. Joint Forces Command, based on the determination of the DHS.

CIVIL WAR IN IRAQ

53. Senator AKAKA. General Abizaid, recently, Secretary of Defense Rumsfeld stated that he did not believe that the sectarian violence in Iraq has escalated into a civil war. All the same, there has been a notable increase in violence between Shiites and Sunnis in Iraq during the last few weeks. Do you feel that we should be making preparations for a U.S. response in case of an Iraqi civil war? If yes, what strategic shifts would need to be made by U.S. forces in Iraq?

General ABIZAID. [Deleted.]

[Whereupon, at 10:50 a.m., the committee adjourned.]